

SOYBEAN VARIETY PERFORMANCE TESTS IN TENNESSEE

2006

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

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

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

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2006 County Standard Tests Soybean Plot Cooperators & Agents

Matutrity Group II	Cooperator(s)	Agent
Coffee	L.A. Teal	Dean Northcut
Dyer	Alan Burchfiel	Tim Campbell
Fulton, KY	Major Bros.	Cam Kenimer/Ben Mullins
Giles	J. Tucker	Kevin Rose
Henry	Don Norwood	Ken Goddard
Lake	Keiser Farms	Greg Allen
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Brian Garner	Jeff Lannom
West TN REC	Bob Hayes	Angela Thompson

Matutrity Group III	Cooperator(s)	Agent
Coffee	L.A. Teal	Dean Northcut
Dyer	Alan Burchfiel	Tim Campbell
Fulton, KY	Major Bros.	Cam Kenimer/Ben Mullins
Giles	J. Tucker	Kevin Rose
Hardin	Karl Forsbach	Marcus McLemore
Henry	Don Norwood	Ken Goddard
Lake	Keiser Farms	Greg Allen
Lauderdale	Phillip Smith	Jerry Parker
Madison	Alan Ewell	Bill Wyatt
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Brian Garner	Jeff Lannom
West TN REC	Bob Hayes	Angela Thompson

Maturity Group IV Early (4.0 - 4.5)	Cooperator(s)	Agent
Carlisle, KY	Stermon Farms	Bob Middleton
Coffee	L.A. Teal	Dean Northcutt
Dyer	Mike Underwood	Tim Campbell
Gibson	Lee & Jeff Asbridge	Philip Shelby
Henry	David & Finis Wilson	Ken Goddard
Lake	Ed Sumara	Greg Allen
Lauderdale	Chris Peyton & Scott Mathis	Jerry Parker
Lawrence	Ronnie Benefield	Calvin Bryant
Montgomery	John Allensworth, Jr.	Rusty Evans
Weakley	Kenneth Wynnina	Jeff Lannom

Maturity Group IV Late(4.6-4.9)	Cooperator(s)	Agent
Coffee	L.A. Teal	Dean Northcutt
Crockett	Mac Summerlin	Richard Buntin
Dyer	Mike Underwood	Tim Campbell
Fayette	Harris Armour	Jeff Via
Gibson	Ken & Jason Luckey	Philip Shelby
Haywood	John King	Tracey Sullivan
Lake	Jon Dickey	Greg Allen
Lauderdale	Rob Reviere	Jerry Parker
McCracken, Ky	Lester & Tracy Sullivan	Bob Middleton
Obion	Paul Albright	Tim Smith
Weakley	Bob Grooms	Jeff Lannom

Maturity Group V Early (5.0 – 5.5.)		
Carlisle, Ky	Curtsinger Farms	Bob Middleton
Dyer	Jimmy Hester	Tim Campbell
Gibson	Denton Clay Parkins	Philip Shelby
Hardin	Karl Forsbach	Marcus McLemore
Haywood	John King	Tracey Sullivan
Lauderdale	Leslie Crook	Jerry Parker
Milan REC	Blake Brown, Jimmy McClure, Jason Williams, Angela Thompson	
Obion	William & Bill Thompson	Tim Smith
Weakley	Luke Cochran	Jeff Lannom

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PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

Experimental Procedures

Research & Education Center Tests: All soybean variety trials were conducted in each of the physiographic regions of the state. Tests were conducted at the Ames Plantation (Grand Junction) and at the Highland Rim (Springfield), East Tennessee (Knoxville), Middle TN (Spring Hill), Milan (Milan), and Plateau (Crossville) Research & Education Centers (REC). Duplicate plantings of all six tests [**Maturity Group 3 Roundup Ready (i.e., RR3), RR4 early (relative maturity 4.0– 4.5), RR4 late (RM 4.6-4.9) RR5 early (RM 5.0-5.5), RR5 late (RM 5.6-5.9) and Conventional 5 (RM 5.0-5.9)**] were made at the Milan and Middle Tennessee RECs for performance testing with and without irrigation.

The plot size at most REC locations was two rows, 30 feet in length. The exceptions were RR4 early, RR5 late, and Conventional 5 tests at Knoxville which were 17 feet in length. Also the non-irrigated tests at Milan were all 20 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 Soybean Tests were conducted in 16 counties in Tennessee, and 3 in West Kentucky. The number of counties depended on the test (e.g., 6-11). The County Standard Tests were divided into **RR3, RR4 early (relative maturity 4.0-4.5), RR4 late (RM 4.6-4.9), and RR5 early (RM 5.0-5.5)**. Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Interpretation of Data

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

8 bu/a required for them to be significant. Similarly, if the average yield of Variety C was 43 bu/a then it is significantly higher yielding than both Variety B ($43 - 35 = 8$ bu/a = LSD of 8) and Variety A ($43 - 30 = 13$ bu/a > LSD of 8).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the 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 forty three soybean varieties were evaluated in the 2006 **Research & Education Center (REC)** tests in Tennessee. There were 29 varieties in the RR3, 45 in the RR4E, 81 in the RR4L, 52 in the RR5E, 16 in the RR5L, and 10 in the conventional MG5 test. Additionally, 10 varieties that were treated with *Cruiser or Gaucho* (a systemic insecticide seed treatment) were included in the RR3 (2), RR4E (2), RR4L (2), RR5E (2), and RR5L (2) tests. The **County Standard tests (CST)** involved 89 varieties total, consisting of a RR3 test (22 varieties at 12 locations), a RR4E test (22 varieties at 10 locations), a RR4L test (26 varieties at 11 locations), and a RR5E test (19 varieties at 9 locations). In addition to 15 Tennessee counties, the County Standard Tests involved three counties in Western Kentucky (Carlisle, Fulton, and McCracken). **Tables 2-54** contain data on yield and agronomic traits such as maturity, plant height, lodging, shattering, seed quality, seed protein and oil content. **Table 55** lists the names and the companies descriptive characteristics of the varieties included in the REC tests in 2006.

Growing Season: The 2006 season was characterized by hot, dry conditions through most of the growing period. Several rainfall events during later portions of the growing season benefited later maturity groups in some regions of the state but hampered timely harvest. 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, 4 bu/a below the 2004 record yields.

Weather Data: The 2006 rainfall and temperature data during the growing season for the different experiment station locations are posted on the variety test web site: <http://varietytrials.tennessee.edu/>.

Disease Ratings: Ratings on variety reactions to SDS, frog-eye leaf spot, anthracnose, and brown spot are presented in **Tables 10, 19, 28, 37** (data provided by Dr. Melvin Newman, professor, Dept. of Entomology and Plant Pathology, UT). Soybean cyst nematode (race 2) ratings in these tables provided by Dr. Pat Donald, USDA-ARS, Jackson, TN.

Table 1. Location information from research centers where the soybean variety tests were conducted in 2006.

Research Center	Location	Planting Date	Harvest Date	Seeding Rate	Soil Type
Roundup Ready Maturity Group III					
Highland Rim	Springfield	6/6/2006	10/23/2006	175000	Mountview Silt Loam
Knoxville	Knoxville	5/2/2006	10/3/2006	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/1/2006	10/10/2006	175000	Loring, Memphis Silt Loam
Milan (Non Irrigated)	" "	5/30/2006	10/9/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	9/27/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	9/26/2006	175000	" " "
Plateau	Crossville	5/19/2006	10/2/2006	175000	Lilly Silt Loam
Roundup Ready Maturity Group Early IV (4.0 - 4.5)					
Ames	Grand Junction	4/27/2006	9/28/2006	175000	Lexington Silt Loam
Highland Rim	Springfield	6/5/2006	10/24/2006	175000	Dickson Silt Loam
Knoxville	Knoxville	5/2/2006	10/3/2006	175000	Sequatchie Fine Sandy Loam
Plateau	Crossville	5/19/2006	10/4/2006	175000	Lilly Silt Loam
Milan (Irrigated)	Milan	6/1/2006	10/11/2006	175000	Grenada, Loring, Memphis Silt Loam
Milan (Non Irrigated)	" "	5/30/2006	10/10/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	9/27/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	9/26/2006	175000	" " "
Roundup Ready Maturity Group Late IV (4.6 - 4.9)					
Ames	Grand Junction	4/27/2006	not harvested	175000	Lexington Silt Loam
Highland Rim	Springfield	6/5/2006	10/30/2006	175000	Dickson Silt Loam
Knoxville	Knoxville	5/2/2006	10/10/2006	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/1/2006	10/11/2006	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	5/30/2006	10/13/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	10/4/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	10/4/2006	175000	" " "
Plateau	Crossville	5/19/2006	10/9/2006	175000	Lilly Silt Loam
Roundup Ready Maturity Group Early V (5.0 - 5.5)					
Ames	Grand Junction	4/27/2006	10/23/2006	175000	Lexington Silt Loam
Highland Rim	Springfield	6/6/2006	11/20/2006	175000	Sango Silt Loam
Knoxville	Knoxville	5/2/2006	10/23/2006	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/1/2006	10/24/2006	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	5/31/2006	10/30/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	10/23/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	10/10/2006	175000	" " "
Roundup Ready Maturity Group Late V (5.6 - 5.9)					
Ames	Grand Junction	4/27/2006	10/23/2006	175000	Lexington Silt Loam
Highland Rim	Springfield	6/6/2006	11/21/2006	175000	Sango Silt Loam
Knoxville	Knoxville	5/2/2006	10/30/2006	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	6/1/2006	10/24/2006	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/31/2006	10/30/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	10/23/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	10/23/2006	175000	" " "
Conventional Maturity Groups IV and V					
Highland Rim	Springfield	6/5/2006	11/10/2006	175000	Mountview Silt Loam
Knoxville	Knoxville	5/2/2006	10/30/2006	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	6/1/2006	10/24/2006	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	5/31/2006	10/30/2006	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/15/2006	10/10/2006	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/16/2006	10/10/2006	175000	" " "

Table 2. Yields † of four Maturity Group II Roundup Ready soybean varieties in nine County Standard Tests in Tennessee and Kentucky during 2006.

MS Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	Coffee 5/15 §	Dyer <i>fi</i> 4/18	(KY)			Henry 5/19	Lake <i>fi</i> 5/17	Obion 4/19	Weakley <i>fi</i> 5/17	West TN
					Fulton <i>fi</i> 5/18	Giles <i>f</i> 5/19	REC <i>fi</i> 5/17					
A Gutwein H-2752	47.0	13.0	33.6	44.3	66.6	43.8	45.8	60.5	49.9	45.9	32.8	
A Vigoro V29N6RR	46.9	12.8	30.8	48.1	71.9	44.5	48.8	58.7	45.6	48.1	26.1	
A Crow's C2815R	45.9	13.5	33.0	44.0	70.4	48.3	43.9	53.2	42.0	41.2	36.8	
B AgVenture 6261	40.6	13.1	31.9	38.9	60.9	32.6	40.6	46.8	36.6	41.3	35.8	
Average	45.1	13.1	32.3	43.8	67.4	42.3	44.8	54.8	43.5	44.1	32.9	

† 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).

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 3. Mean yields † of 29 Maturity Group III Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill			Milan			
			Knoxville	Crossville	Irr.	Non-Irr.	Irr.	Non-Irr.	
-----bu/a-----									
Progeny	3906 RR	52 ± 1	60	60	46	38	48	62	52
Delta Grow	3960 RR	52 ± 1	61	63	44	36	46	60	53
Dyna-Gro	31J39 (RR)	51 ± 1	66	65	45	34	42	59	47
Hornbeck	HBK R 3824 (RR)	51 ± 1	69	62	45	34	48	51	48
Gutwein	H-3606 RR	51 ± 1	66	61	43	37	45	57	45
Armor	42-P7	51 ± 1	58	65	44	37	45	58	46
Progeny	3916 RR	50 ± 1	58	62	46	33	47	54	53
Armor	AFX 3907	50 ± 1	59	63	47	30	47	56	46
Excel Brand	8396 RR/STS	49 ± 1	57	62	37	30	46	62	50
Asgrow	AG3906 (RR)	49 ± 1	56	68	42	30	44	55	49
FFR	3990 RR	49 ± 1	58	67	43	30	41	55	48
Delta King	DK XTJ 39T6 (RR)	49 ± 1	60	66	42	31	44	52	46
Delta Grow	3950 RR	49 ± 1	61	63	40	30	45	55	45
Progeny	3900 RR	48 ± 1	53	59	42	33	44	56	46
Delta King	DK 3964 RR	47 ± 1	58	63	35	37	41	52	46
Delta & Pine Land	DP 3861 RR	47 ± 1	54	62	37	28	48	55	44
USG	7384nRS	46 ± 1	56	53	36	31	45	56	49
Vigoro	V39N7RR	46 ± 1	53	64	38	26	42	57	45
Pioneer	93M90 (RR)	46 ± 1	54	56	40	27	44	59	44
TN Exp	TN05-4534 RR	46 ± 1	52	54	38	29	52	54	44
Delta & Pine Land	DPX 3994 RR	46 ± 1	54	66	40	28	41	53	41
Vigoro	V39N4RR	46 ± 1	53	60	40	28	41	55	44
Delta King	DK 3967 (RR)	46 ± 1	54	58	36	33	41	50	49
Delta King	DK 3968 (RR)	45 ± 1	51	58	43	26	43	50	46
Vigoro	V36N5RR	45 ± 1	53	54	39	28	41	54	46
Dyna-Gro	32C38 (RR/STS)	45 ± 1	50	56	35	26	43	56	49
Asgrow	AG 3705	44 ± 1	54	57	41	29	39	52	40
USG	7393nRR	44 ± 1	51	55	39	28	44	52	40
Dyna-Gro	3373 (RR)	43 ± 1	47	57	33	28	42	50	44
Average (bu/a)		48	57	61	41	31	44	55	46
L.S.D._{.05} (bu/a)		3	8	8	7	8	5	6	7
C.V. (%)		8.9	8.5	8.3	10.6	15.5	6.6	6.3	8.7

† All yields are adjusted to 13% moisture.

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

Table 4. Mean yields † and agronomic characteristics of 29 Maturity Group III Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.						Retention	Quality		
		(n=7)	(n=7)	(n=3)	(n=7)	(n=7)	(n=4)	(n=1)	(n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Progeny	3906 RR	52 ± 1	15.1	1.3	36	120	1.0	1.5	2.1	40.4	21.4
Delta Grow	3960 RR	52 ± 1	14.7	1.4	37	122	1.0	2.5	2.5	39.7	22.8
Dyna-Gro	31J39 (RR)	51 ± 1	15.1	2.1	38	124	1.0	2.0	1.7	36.4	23.1
Hornbeck	HBK R 3824 (RR)	51 ± 1	15.1	1.8	38	122	1.1	1.0	1.9	36.3	23.2
Gutwein	H-3606 RR	51 ± 1	15.3	1.3	34	121	1.0	2.0	2.0	39.9	21.9
Armor	42-P7	51 ± 1	15.2	1.4	36	124	1.1	2.0	2.4	38.9	21.9
Progeny	3916 RR	50 ± 1	14.5	1.6	37	121	1.1	2.5	2.1	38.9	22.9
Armor	AFX 3907	50 ± 1	14.7	2.1	38	120	1.3	1.5	2.0	38.4	22.8
Excel Brand	8396 RR/STS	49 ± 1	14.1	1.5	33	119	1.3	1.0	2.0	38.6	22.3
Asgrow	AG3906 (RR)	49 ± 1	14.8	1.1	33	121	1.1	1.5	2.4	38.2	23.4
FFR	3990 RR	49 ± 1	14.9	1.2	35	120	1.1	1.5	2.0	37.6	22.7
Delta King	DK XTJ 39T6 (RR)	49 ± 1	14.2	1.7	35	122	1.1	2.5	2.0	37.5	23.4
Delta Grow	3950 RR	49 ± 1	14.8	1.2	34	121	1.1	2.0	2.5	38.3	23.4
Progeny	3900 RR	48 ± 1	15.0	1.1	33	120	1.0	2.0	2.5	38.7	23.3
Delta King	DK 3964 RR	47 ± 1	14.9	1.7	38	119	1.0	1.0	2.0	38.7	22.7
Delta & Pine Land	DP 3861 RR	47 ± 1	15.3	1.1	32	119	1.3	1.5	2.1	39.7	21.9
USG	7384nRS	46 ± 1	14.5	1.3	29	121	1.1	1.5	1.9	37.2	22.9
Vigoro	V39N7RR	46 ± 1	14.4	1.1	30	122	1.0	3.0	2.1	38.7	22.3
Pioneer	93M90 (RR)	46 ± 1	14.3	1.1	36	119	1.2	2.5	2.0	39.1	22.3
TN Exp	TN05-4534 RR	46 ± 1	13.7	1.7	36	118	1.3	1.0	1.9	36.5	22.7
Delta & Pine Land	DPX 3994 RR	46 ± 1	14.6	1.2	35	120	1.1	1.5	2.3	37.0	23.0
Vigoro	V39N4RR	46 ± 1	14.9	1.1	33	120	1.1	2.5	2.5	38.4	23.5
Delta King	DK 3967 (RR)	46 ± 1	14.3	1.4	36	119	1.1	1.0	2.2	39.3	22.8
Delta King	DK 3968 (RR)	45 ± 1	14.3	1.1	31	120	1.1	1.5	1.9	38.6	23.0
Vigoro	V36N5RR	45 ± 1	13.6	1.2	34	117	1.3	2.0	2.2	41.5	20.8
Dyna-Gro	32C38 (RR/STS)	45 ± 1	14.2	1.1	30	121	1.2	1.5	1.7	37.2	22.9
Asgrow	AG 3705	44 ± 1	14.6	1.2	33	122	1.1	3.0	2.8	37.9	22.6
USG	7393nRR	44 ± 1	14.8	1.4	33	121	1.1	2.0	2.4	38.1	23.6
Dyna-Gro	3373 (RR)	43 ± 1	14.5	1.1	32	119	1.1	1.0	2.0	39.4	22.1
Average		48	14.6	1.4	34	120	1.1	1.8	2.1	38.4	22.7

† 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).

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 5. Mean yields † of 11 Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Spring Hill			Milan		
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
		-----bu/a-----						
FFR	3990 RR	49 ± 1	60	42	35	46	59	54
Asgrow	AG3906 (RR)	47 ± 1	59	38	33	45	56	53
Pioneer	93M90 (RR)	47 ± 1	51	39	33	44	67	50
Delta King	DK 3967 (RR)	47 ± 1	56	35	38	45	54	55
Delta Grow	3950 RR	47 ± 1	56	40	38	46	57	44
Progeny	3900 RR	46 ± 1	49	38	38	45	59	47
Vigoro	V39N4RR	46 ± 1	52	41	34	41	57	49
Delta King	DK 3968 (RR)	45 ± 1	48	42	35	45	51	50
Dyna-Gro	3373 (RR)	45 ± 1	49	37	37	45	53	50
Delta & Pine Land	DP 3861 RR	45 ± 1	54	36	31	45	54	50
USG	7393nRR	45 ± 1	50	37	36	44	56	47
Average (bu/a)		46	53	39	35	45	57	50
L.S.D._{.05} (bu/a)		3	9	7	6	5	6	8
C.V. (%)		10.0	10.9	12.1	11.4	7.9	7.3	10.6

† All yields are adjusted to 13% moisture.

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

Table 6. Mean yields † and agronomic characteristics of 11 Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield	Moisture § (n=12)	Lodging (n=6)	Height (n=12)	Maturity (n=12)	Shattering (n=8)	Leaf	Seed	Protein (n=8)	Oil (n=8)
		± Std Err. (n=12)						Retention (n=2)	Quality (n=8)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
FFR	3990 RR	49 ± 1	14.9	2.2	37	120	1.0	1.5	2.1	38.6	22.6
Asgrow	AG3906 (RR)	47 ± 1	14.9	1.6	34	122	1.0	1.3	2.2	38.4	23.5
Pioneer	93M90 (RR)	47 ± 1	13.9	1.6	37	120	1.1	2.0	2.2	39.6	22.2
Delta King	DK 3967 (RR)	47 ± 1	14.5	1.9	38	119	1.1	1.0	2.3	39.9	22.7
Delta Grow	3950 RR	47 ± 1	14.8	2.1	36	123	1.0	3.0	2.6	39.3	22.9
Progeny	3900 RR	46 ± 1	15.1	2.1	35	123	1.0	3.5	2.7	39.4	23.0
Vigoro	V39N4RR	46 ± 1	14.7	2.1	35	122	1.1	3.5	2.7	39.1	23.2
Delta King	DK 3968 (RR)	45 ± 1	14.2	1.6	33	120	1.1	1.5	1.8	39.3	22.9
Dyna-Gro	3373 (RR)	45 ± 1	14.5	1.9	35	119	1.0	1.3	2.0	40.2	22.0
Delta & Pine Land	DP 3861 RR	45 ± 1	15.0	2.0	34	119	1.1	1.3	1.9	40.2	21.9
USG	7393nRR	45 ± 1	14.9	2.3	35	122	1.0	3.3	2.5	39.1	23.1
Average		46	14.7	1.9	35	121	1.1	2.1	2.3	39.4	22.7

† 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).

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 7. Mean yields † of eight Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville	Spring Hill		Springfield	Milan	
				Irr.	Non-Irr.		Irr.	Non-Irr.
-----bu/a-----								
Asgrow	AG3906 (RR)	53 ± 1	64	47	45	45	60	58
Pioneer	93M90 (RR)	51 ± 1	60	44	41	48	66	49
Vigoro	V39N4RR	50 ± 1	61	45	39	44	61	50
USG	7393nRR	50 ± 1	60	45	41	43	58	51
Delta Grow	3950 RR	50 ± 1	63	46	40	45	56	47
Progeny	3900 RR	49 ± 1	59	44	41	43	58	49
Delta & Pine Land	DP 3861 RR	49 ± 1	61	44	38	46	56	50
Delta King	DK 3968 (RR)	49 ± 1	54	46	42	48	50	51
Average (bu/a)		50	60	45	41	45	58	51
L.S.D._{.05} (bu/a)		3	8	7	6	9	7	8
C.V. (%)		10.3	9.0	10.6	10.5	13.2	8.2	10.6

† All yields are adjusted to 13% moisture.

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

Table 8. Mean yields † and agronomic characteristics of eight Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=10)	Height (n=18)	Maturity (n=18)	Shattering (n=14)	Seed	Protein (n=12)	Oil (n=12)
								Quality (n=12)		
-----Score-----									%	%
Asgrow	AG3906 (RR)	53 ± 1	14.8	1.7	35	122	1.0	2.3	38.5	23.2
Pioneer	93M90 (RR)	51 ± 1	14.4	1.6	39	121	1.0	2.3	39.4	22.2
Vigoro	V39N4RR	50 ± 1	14.9	2.5	36	122	1.0	2.8	39.1	23.0
USG	7393nRR	50 ± 1	14.8	2.6	36	123	1.0	2.6	39.2	23.0
Delta Grow	3950 RR	50 ± 1	14.8	2.4	36	123	1.0	2.6	39.3	22.9
Progeny	3900 RR	49 ± 1	14.9	2.6	36	123	1.0	2.7	39.4	22.8
Delta & Pine Land	DP 3861 RR	49 ± 1	15.0	2.5	35	119	1.1	2.0	40.0	21.9
Delta King	DK 3968 (RR)	49 ± 1	14.2	1.6	34	119	1.0	2.0	39.1	22.7
Average		50	14.7	2.2	36	121	1.0	2.4	39.2	22.7

† 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

Maturity = days after planting (DAP).

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

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

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 9. Yields † of 22 Maturity Group III Roundup Ready soybean varieties in 12 County Standard Tests in Tennessee and Kentucky during 2006.

MS	Brand/Variety	(KY)														West TN
		Avg. Yield	Moisture ‡	Coffee	Dyer <i>fi</i>	Fulton <i>fi</i>	Giles <i>f</i>	Hardin	Henry	Lake <i>fi</i>	Lauderdale <i>fi</i>	Madison	Obion	Weakley <i>fi</i>	REC <i>fi</i>	
		bu/a	%	5/15 §	4/18	5/18	5/19	5/3	5/19	5/17	4/24	4/14	4/19	5/17	5/15	
A	**Asgrow AG3906	56.2	13.6	41.4	73.0	83.8	59.6	15.2	55.7	62.8	66.8	57.4	54.2	58.4	46.0	
AB	***Pioneer 93M90	55.1	12.3	41.1	65.0	82.0	54.6	24.1	55.9	66.1	72.5	63.8	53.8	33.2	49.6	
AB	*Progeny 3900	54.7	13.2	43.1	72.9	82.4	54.3	16.0	52.8	61.4	63.6	58.0	55.7	49.2	47.4	
ABC	Excel 8396NRR	54.3	12.7	46.7	71.1	80.0	57.3	14.7	52.7	53.2	68.5	60.7	48.8	55.6	42.3	
ABC	Armor 42-P7	54.3	14.8	43.7	63.7	82.9	47.3	18.6	48.9	59.8	69.0	64.7	52.4	53.9	46.4	
ABCD	Delta Grow DG3950	53.5	14.2	43.6	68.6	80.8	51.3	14.5	49.3	67.0	75.8	53.8	49.9	43.7	43.5	
ABCD	Crow's C 3817 R	53.1	12.4	41.9	70.6	75.2	48.7	18.1	57.0	64.9	64.6	49.5	48.8	50.3	48.1	
ABCD	*Gutwein H-3945	53.0	12.7	39.3	68.3	80.9	49.4	28.9	52.1	64.8	74.9	48.0	52.9	36.7	40.0	
ABCD	AgVenture 6361	52.6	13.7	42.9	64.5	79.5	53.7	14.7	53.3	60.9	67.5	50.0	56.3	43.9	43.5	
ABCD	*Vigoro V39N4RR	52.3	13.3	38.7	66.8	79.5	49.0	18.5	50.3	63.1	73.0	48.9	49.9	50.2	40.1	
BCD	*Dekalb DKB 38-52	52.2	12.7	43.3	65.4	81.7	45.8	18.7	50.1	64.7	64.7	51.1	57.2	37.8	46.3	
BCD	Gutwein H-3606	52.2	12.7	40.2	61.6	81.6	47.4	21.1	51.2	63.7	69.3	49.9	57.6	45.3	37.9	
BCD	NK Brand S37-N4	52.2	13.6	38.4	67.3	61.2	44.1	29.9	46.6	66.0	71.6	56.2	51.7	41.0	51.8	
BCD	*Dekalb DKB 36-52	52.0	12.2	44.1	62.4	83.2	47.6	16.1	48.7	61.5	70.8	41.7	47.5	58.9	41.1	
BCD	Dyna-Gro DG31J39	51.8	15.4	45.0	68.9	63.6	52.7	29.4	48.4	59.2	65.1	56.6	45.9	46.8	39.3	
BCD	Pioneer 93M42	51.6	12.5	40.4	58.5	78.0	50.9	22.2	53.1	65.2	65.5	53.0	47.9	40.6	44.2	
BCD	Croplan RC3935	51.3	12.6	39.5	72.0	78.9	51.0	15.3	47.3	60.9	64.9	44.4	50.6	48.5	42.7	
CD	Delta King DK39T6	50.7	13.5	40.4	69.5	75.1	48.4	19.4	49.8	55.2	65.7	58.1	49.1	35.3	43.1	
CD	Asgrow AG3705	50.7	12.6	41.8	61.0	58.3	56.6	18.3	50.5	57.4	66.6	56.9	55.9	40.7	44.2	
CD	Deltapine DP3861	50.6	13.1	45.9	61.8	79.1	47.1	26.7	48.2	63.2	58.2	52.7	46.3	39.6	38.2	
D	FFR 3990	50.0	12.7	36.3	64.8	74.4	44.8	16.0	49.0	58.5	71.9	45.8	46.0	49.1	44.0	
D	NK Brand S39-K6	49.6	12.9	37.0	67.7	61.1	49.3	16.6	46.4	62.6	62.4	55.4	57.1	40.4	39.8	
Average		52.5	13.2	41.6	66.6	76.5	50.5	19.7	50.8	61.9	67.9	53.5	51.6	45.4	43.6	

† 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 2005, 2004, and/or 2003.

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 10. Yields † and disease ratings § of 22 Maturity Group III Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2006.

MS	Brand/Variety	CST Avg. Yield (n=12)	Moisture ‡	----- Research and Education Center at Milan -----						Sprayed ¶ Yield	Unsprayed Yield	SCN Race 2
				SDS	Frogeye	Anthracnose	Brown Spot	2006	2006			
A	**Asgrow AG3906	56.2	13.6	2003 / 04 / 06 / 1.3 / 1.0	2003 / 04 / 05 / 06 / 5.0 / 5.0 / 4.0	2006 7.0	2006 4.0	49.8	47.6	S		
AB	***Pioneer 93M90	55.1	12.3	1.0 / 0.3 / 0.0	3.0 / 3.0 / 6.0 / 2.0	7.0	5.7	57.0	49.4	S		
AB	*Progeny 3900	54.7	13.2	/ / 0.7	/ / / 5.3	9.3	6.0	55.8	46.6	S		
ABC	Excel 8396NRR	54.3	12.7	/ / 1.0	/ / / 0.0	8.0	6.0	67.2	54.7	S		
ABC	Armor 42-P7	54.3	14.8	/ / 0.3	/ / / 2.7	6.3	4.7	58.3	47.0	MS		
ABCD	Delta Grow DG3950	53.5	14.2	/ / 3.3	/ / / 3.3	6.0	3.0	51.6	48.6	MS		
ABCD	Crow's C 3817 R	53.1	12.4	---	---	---	---	---	---	---		
ABCD	*Gutwein H-3945	53.0	12.7	4.0 / 1.7 / 0.0	3.0 / 4.7 / 3.0 / 1.0	7.3	3.7	54.5	47.3	S		
ABCD	AgVenture 6361	52.6	13.7	/ / 0.3	/ / 7.0 / 7.7	8.7	4.0	49.5	41.3	S		
ABCD	*Vigoro V39N4RR	52.3	13.3	/ 2.0 / 0.3	/ 6.7 / 6.0 / 5.7	8.3	5.7	52.1	47.3	S		
BCD	*Dekalb DKB 38-52	52.2	12.7	/ 2.3 / 0.3	/ 4.0 / 6.0 / 3.7	7.7	5.3	51.3	44.8	S		
BCD	Gutwein H-3606	52.2	12.7	/ / 1.0	/ / 5.0 / 0.0	8.0	7.3	56.6	48.2	S		
BCD	NK Brand S37-N4	52.2	13.6	/ / 0.7	/ / / 7.7	7.0	4.7	54.3	41.8	MS		
BCD	*Dekalb DKB 36-52	52.0	12.2	/ 0.3 / 0.3	/ 3.3 / 4.0 / 2.7	7.0	5.0	57.2	47.3	S		
BCD	Dyna-Gro DG31J39	51.8	15.4	---	---	---	---	---	---	---		
BCD	Pioneer 93M42	51.6	12.5	/ / 0.3	/ / / 2.3	8.3	7.7	45.7	38.7	S		
BCD	Croplan RC3935	51.3	12.6	/ / 0.3	/ / / 2.3	6.0	5.0	47.6	44.0	S		
CD	Delta King DK39T6	50.7	13.5	/ / 1.0	/ / / 5.7	6.3	3.3	60.6	49.3	S		
CD	Asgrow AG3705	50.7	12.6	/ / 0.3	/ / / 1.7	5.7	6.7	45.9	38.8	S		
CD	Deltapine DP3861	50.6	13.1	/ 2.7 /	/ 0.0 / 3.0 /	---	---	---	---	---		
D	FFR 3990	50.0	12.7	/ / 1.0	/ / / 6.3	7.3	4.0	50.6	44.9	MS		
D	NK Brand S39-K6	49.6	12.9	/ / 0.7	/ / / 9.7	6.0	3.3	56.7	42.1	S		
Average		52.5	13.2					53.8	45.8			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

¶ Sprayed plots at Milan treated with Headline SBR @ 6 oz./Acre + 0.25% Induce at 20 gpa at R3 growth stage (July 11).

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

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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

Table 11. Overall average yields † and moistures ‡ of 13 Maturity Group III Roundup Ready soybean varieties evaluated in County Standard Tests (n=12) and Research and Education Centers (n=7) in Tennessee in 2006.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield bu/a	Moisture %	Avg. Yield bu/a	Moisture %
Asgrow	AG3906 (RR)	56	13.6	49	14.8
Pioneer	93M90 (RR)	55	12.3	46	14.3
Progeny	3900 RR	55	13.2	48	15.0
Armor	42-P7	54	14.8	51	15.2
Excel Brand	8396 RR/STS	54	12.7	49	14.1
Delta Grow	3950 RR	54	14.2	49	14.8
Vigoro	V39N4RR	52	13.3	46	14.9
Gutwein	H-3606 RR	52	12.7	51	15.3
Dyna-Gro	31J39 (RR)	52	15.4	51	15.1
Asgrow	AG 3705	51	12.6	44	14.6
Delta King	DK XTJ 39T6 (RR)	51	13.5	49	14.2
Delta & Pine Land	DP 3861 RR	51	13.1	47	15.3
FFR	3990 RR	50	12.7	49	14.9
Average (bu/a)		53	13.4	48	14.8

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 12. Mean yields † of 45 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Spring Hill							
			Knoxville	Crossville	Irr.	Non-Irr.	Springfield	Milan		Ames
			-----bu/a-----							
Morsoy	RT 4485N (RR)	52 ± 1	45	61	56	46	34	68	53	54
Morsoy	RT 4480N (RR)	51 ± 1	39	69	57	43	31	66	51	49
Crow's	CRX 451-6	50 ± 1	40	75	53	43	37	67	44	42
FFR	4545 RR	50 ± 1	38	63	52	47	33	67	51	49
USG	74A45 (RR)	49 ± 1	32	57	55	44	35	68	52	45
Progeny	4506 RR	48 ± 1	36	62	53	46	36	68	49	35
Progeny	4206 RR	48 ± 1	35	68	55	43	31	61	51	41
Vigoro	V44N6RR	48 ± 1	33	61	50	37	39	70	51	42
Steyer	4420 RR Scn	48 ± 1	36	58	52	39	38	68	47	44
Progeny	4406 RR	48 ± 1	36	62	51	41	37	64	52	39
Progeny	4405 RR	48 ± 1	35	59	52	36	39	66	49	45
Delta Grow	4150 RR	47 ± 1	33	71	55	40	32	60	47	39
Crow's	C 4444 R	47 ± 1	38	55	54	40	34	69	50	37
Armor	X4114	47 ± 1	35	65	55	39	33	62	47	39
Vigoro	V42N7RS	47 ± 1	35	66	52	41	31	62	52	34
Gutwein	H-4534 RR	47 ± 1	41	66	48	35	33	65	49	36
Vigoro	V41N6RR	47 ± 1	31	62	55	37	30	65	53	40
Excel Brand	8450N RR	47 ± 1	36	65	50	45	36	56	47	36
Trisler Seed	Trisoy 4557RR (CN)	46 ± 1	37	58	51	37	36	63	46	39
Steyer	4040 RR Scn	46 ± 1	30	67	52	38	32	63	51	33
USG	74C36 (RR)	46 ± 1	30	62	51	40	33	62	49	39
Delta Grow	4460 RR	46 ± 1	35	58	49	42	34	67	44	37
Delta & Pine Land	DP 4546 RR	45 ± 1	37	68	47	48	28	58	45	32
Delta & Pine Land	DP 4331 RR	45 ± 1	36	68	49	37	29	63	47	35
Dyna-Gro	3443 (RR)	45 ± 1	33	64	51	37	32	65	45	37
Delta King	DK 4567 (RR)	45 ± 1	31	53	50	40	25	67	49	48
Asgrow	AG4404 (RR)	45 ± 1	34	65	48	36	31	60	46	39
Dyna-Gro	37A44 (RR)	45 ± 1	36	59	50	35	37	66	42	34
Dyna-Gro	35B40 (RR)	45 ± 1	33	63	49	39	35	61	42	37
DeKalb	DKB42-51	45 ± 1	30	69	49	41	27	61	49	30
MO Exp	S03-058 RR	44 ± 1	30	64	46	38	29	64	47	37
USG	7440nRR	44 ± 1	32	69	47	33	26	63	45	37
Progeny	4216 RR	44 ± 1	33	69	45	30	29	60	48	37
N.K. Brand	S44-J5	43 ± 1	29	58	50	36	29	58	47	39
Armor	45-M1	43 ± 1	36	57	50	35	32	56	46	34
USG	7423nRS	42 ± 1	30	66	47	32	30	55	46	34
USG	7443nRR	42 ± 1	27	65	49	35	31	58	47	29

Table 12 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
USG	7434nRR	42 ± 1	24	60	53	31	28	54	49	39
Vigoro	V42N3RR	42 ± 1	28	65	45	31	28	62	46	28
Asgrow	AG 4103	41 ± 1	29	58	46	29	28	60	46	32
Hornbeck	HBK R 4623 (RR)	41 ± 1	33	60	41	30	32	57	42	32
MO Exp	S03-051 RR	40 ± 1	24	60	42	31	27	62	39	33
TN Exp	TN05-3503 RR	39 ± 1	29	59	42	35	29	46	41	32
Delta & Pine Land	DPX 4112 RR/S	39 ± 1	24	60	42	36	29	57	39	25
Excel Brand	8427N RR/STS	37 ± 1	26	57	35	26	25	53	47	26
Average (bu/a)		46	34	63	50	38	32	63	47	38
L.S.D._{.05} (bu/a)		2	6	8	7	7	4	6	6	8
C.V. (%)		8.8	11.3	7.4	9.1	10.7	8.5	5.5	7.6	12.9

† All yields are adjusted to 13% moisture.

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

Table 13. Mean yields † and agronomic characteristics of 45 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=7)	Maturity (n=7)	Shattering (n=4)	Seed		
		± Std Err. (n=8)						Quality (n=4)	Protein (n=4)	Oil (n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Morsoy	RT 4485N (RR)	52 ± 1	14.2	1.8	39	126	1.1	2.5	39.3	22.5
Morsoy	RT 4480N (RR)	51 ± 1	14.3	1.3	37	126	1.2	2.4	38.4	23.6
Crow's	CRX 451-6	50 ± 1	14.4	1.5	37	125	1.2	2.3	39.1	22.7
FFR	4545 RR	50 ± 1	15.4	1.7	35	127	1.0	2.5	38.9	21.7
USG	74A45 (RR)	49 ± 1	14.1	1.7	39	123	1.0	2.4	39.0	22.6
Progeny	4506 RR	48 ± 1	15.5	1.9	39	131	1.1	2.3	39.5	22.3
Progeny	4206 RR	48 ± 1	14.7	1.1	34	125	1.1	2.3	38.7	23.5
Vigoro	V44N6RR	48 ± 1	14.1	1.5	38	124	1.2	2.5	38.7	22.8
Steyer	4420 RR Scn	48 ± 1	14.1	1.6	40	123	1.2	2.3	38.8	22.5
Progeny	4406 RR	48 ± 1	14.2	1.5	39	125	1.2	2.4	38.4	22.8
Progeny	4405 RR	48 ± 1	14.3	1.7	39	125	1.3	2.6	38.5	22.7
Delta Grow	4150 RR	47 ± 1	14.0	1.3	35	126	1.3	2.3	39.5	22.6
Crow's	C 4444 R	47 ± 1	14.6	1.6	38	125	1.2	2.4	38.9	22.6
Armor	X4114	47 ± 1	14.1	1.3	35	126	1.2	2.4	39.7	22.4
Vigoro	V42N7RS	47 ± 1	14.9	1.3	32	127	1.1	2.2	40.6	22.3
Gutwein	H-4534 RR	47 ± 1	14.4	1.2	37	126	1.1	2.5	37.9	23.6
Vigoro	V41N6RR	47 ± 1	14.3	1.1	33	123	1.2	2.6	40.0	22.9
Excel Brand	8450N RR	47 ± 1	14.3	1.2	32	129	1.2	2.3	37.5	22.8
Trisler Seed	Trisoy 4557RR (CN)	46 ± 1	14.3	1.6	40	124	1.1	2.5	38.5	22.6
Steyer	4040 RR Scn	46 ± 1	14.7	1.2	34	123	1.1	2.7	41.3	21.8
USG	74C36 (RR)	46 ± 1	14.1	1.5	36	125	1.1	2.6	39.9	22.5
Delta Grow	4460 RR	46 ± 1	14.5	1.8	39	125	1.2	2.4	38.1	22.7
Delta & Pine Land	DP 4546 RR	45 ± 1	14.8	2.0	39	128	1.2	2.1	40.5	21.9
Delta & Pine Land	DP 4331 RR	45 ± 1	14.3	1.2	35	126	1.2	2.3	38.1	23.6
Dyna-Gro	3443 (RR)	45 ± 1	14.5	1.3	35	126	1.1	2.2	37.5	23.7
Delta King	DK 4567 (RR)	45 ± 1	15.1	1.3	32	127	1.0	2.5	39.8	22.6
Asgrow	AG4404 (RR)	45 ± 1	14.7	1.3	34	127	1.1	2.5	40.4	22.0
Dyna-Gro	37A44 (RR)	45 ± 1	14.7	1.6	38	126	1.2	2.3	37.8	22.9
Dyna-Gro	35B40 (RR)	45 ± 1	13.7	1.3	35	125	1.2	2.3	39.5	22.7
DeKalb	DKB42-51	45 ± 1	15.3	1.1	33	125	1.1	2.7	38.0	23.3
MO Exp	S03-058 RR	44 ± 1	13.5	1.3	39	124	1.2	2.1	39.6	22.5
USG	7440nRR	44 ± 1	14.3	1.3	35	125	1.3	2.3	37.5	23.9
Progeny	4216 RR	44 ± 1	14.3	1.0	35	121	1.2	2.0	38.8	22.6
N.K. Brand	S44-J5	43 ± 1	14.1	1.2	36	124	1.2	2.7	40.2	22.9
Armor	45-M1	43 ± 1	14.7	1.4	32	128	1.2	2.3	38.3	22.5
USG	7423nRS	42 ± 1	14.3	1.1	32	125	1.2	2.6	39.4	22.7
USG	7443nRR	42 ± 1	14.4	1.3	33	126	1.1	2.4	39.2	23.1

Table 13 (continued)

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=7)	Maturity (n=7)	Shattering (n=4)	Seed	Protein (n=4)	Oil (n=4)
		± Std Err. (n=8)						Quality (n=4)		
		bu/a	%	Score	in.	DAP	-----Score-----	%		
USG	7434nRR	42 ± 1	14.3	1.1	29	122	1.2	2.9	39.3	23.1
Vigoro	V42N3RR	42 ± 1	14.5	1.0	32	125	1.2	2.6	39.5	22.6
Asgrow	AG 4103	41 ± 1	14.6	1.0	32	122	1.2	2.2	38.9	23.0
Hornbeck	HBK R 4623 (RR)	41 ± 1	14.3	1.5	38	124	1.1	2.2	39.5	22.9
MO Exp	S03-051 RR	40 ± 1	13.9	1.2	39	124	1.2	2.3	39.4	22.5
TN Exp	TN05-3503 RR	39 ± 1	14.4	1.8	38	124	1.2	2.3	41.3	22.6
Delta & Pine Land	DPX 4112 RR/S	39 ± 1	15.2	1.6	38	124	1.0	2.5	40.8	21.9
Excel Brand	8427N RR/STS	37 ± 1	14.7	1.0	29	124	1.1	2.6	38.8	23.2
Average		46	14.4	1.4	36	125	1.1	2.4	39.1	22.7

† 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 15. Mean yields † and agronomic characteristics of 25 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments (n=16) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=16)	Moisture § (n=16)	Lodging (n=7)	Height (n=15)	Maturity (n=14)	Shattering (n=9)	Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Morsoy	RT 4485N (RR)	52 ± 1	14.3	2.1	40	127	1.0	2.5	39.6	22.5
Vigoro	V44N6RR	50 ± 1	14.0	2.0	40	126	1.1	2.4	39.3	22.6
Progeny	4405 RR	49 ± 1	14.3	2.1	41	126	1.1	2.5	39.3	22.4
Steyer	4420 RR Scn	49 ± 1	14.0	2.0	42	126	1.1	2.3	39.5	22.3
FFR	4545 RR	49 ± 1	15.7	2.2	37	129	1.0	2.6	39.6	21.8
Morsoy	RT 4480N (RR)	49 ± 1	14.5	1.6	38	128	1.1	2.3	38.4	23.6
Delta Grow	4460 RR	48 ± 1	14.6	2.0	41	127	1.1	2.4	39.2	22.4
Gutwein	H-4534 RR	48 ± 1	14.3	1.6	38	127	1.0	2.3	38.3	23.5
USG	74A45 (RR)	48 ± 1	13.8	1.9	41	126	1.0	2.3	39.3	22.5
Trisler Seed	Trisoy 4557RR (CN)	48 ± 1	14.2	1.9	41	126	1.0	2.4	39.2	22.5
Delta Grow	4150 RR	48 ± 1	13.9	1.7	37	127	1.1	2.1	40.3	22.2
Delta & Pine Land	DP 4331 RR	48 ± 1	14.3	1.6	37	128	1.1	2.2	38.3	23.6
Dyna-Gro	3443 (RR)	48 ± 1	14.6	1.6	37	128	1.0	2.2	38.1	23.6
Dyna-Gro	37A44 (RR)	48 ± 1	14.4	2.1	40	127	1.1	2.4	38.7	22.7
Dyna-Gro	35B40 (RR)	47 ± 1	13.8	1.8	37	127	1.1	2.1	40.0	22.3
Vigoro	V41N6RR	47 ± 1	14.7	1.6	36	126	1.1	2.4	39.8	22.8
USG	7440nRR	47 ± 1	14.7	1.7	38	127	1.1	2.2	38.1	23.7
Asgrow	AG4404 (RR)	46 ± 1	14.8	1.6	36	128	1.0	2.2	40.4	21.9
USG	7443nRR	45 ± 1	14.5	1.7	36	129	1.0	2.4	39.8	22.8
Delta & Pine Land	DP 4546 RR	45 ± 1	15.0	2.2	41	130	1.1	2.0	41.0	21.9
USG	7423nRS	45 ± 1	14.0	1.6	33	127	1.1	2.3	39.3	22.6
Vigoro	V42N3RR	44 ± 1	14.5	1.6	33	127	1.1	2.5	39.6	22.5
USG	7434nRR	43 ± 1	14.0	1.6	31	126	1.1	2.7	39.5	22.7
Hornbeck	HBK R 4623 (RR)	43 ± 1	14.5	1.9	40	126	1.0	2.1	40.2	22.8
Excel Brand	8427N RR/STS	42 ± 1	14.4	1.4	31	126	1.0	2.5	39.1	22.9
Average		47	14.4	1.8	38	127	1.1	2.3	39.4	22.7

† 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 16. Mean yields † of eight Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments (n=24) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=24)	Spring Hill				Milan		Ames	
			Knoxville	Crossville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
-----bu/a-----										
USG	7440nRR	55 ± 1	55	66	53	45	48	66	59	49
Delta & Pine Land	DP 4331 RR	55 ± 1	55	69	49	44	48	67	58	48
Dyna-Gro	3443 (RR)	54 ± 1	53	65	51	46	49	66	56	49
Vigoro	V42N3RR	52 ± 1	52	64	51	49	45	61	55	42
USG	7443nRR	52 ± 1	50	65	51	46	50	56	55	43
USG	7434nRR	52 ± 1	50	59	56	49	46	61	56	40
Delta & Pine Land	DP 4546 RR	52 ± 1	54	60	50	48	46	60	53	42
Hornbeck	HBK R 4623 (RR)	49 ± 1	48	59	44	42	47	62	50	41
Average (bu/a)		53	52	63	51	46	47	62	55	44
L.S.D._{.05} (bu/a)		3	6	7	7	7	7	10	7	9
C.V. (%)		10.0	7.5	7.9	9.8	11.1	10.0	11.4	9.2	13.0

Table 17. Mean yields † and agronomic characteristics of eight Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments (n=24) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=24)	Moisture § (n=24)	Lodging (n=11)	Height (n=22)	Maturity (n=21)	Shattering (n=16)	Seed		
								Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
USG	7440nRR	55 ± 1	14.3	1.7	39	128	1.1	2.1	38.2	23.4
Delta & Pine Land	DP 4331 RR	55 ± 1	14.0	1.5	38	128	1.0	2.1	38.4	23.3
Dyna-Gro	3443 (RR)	54 ± 1	14.2	1.6	39	128	1.0	2.1	38.1	23.4
Vigoro	V42N3RR	52 ± 1	14.2	1.4	33	127	1.0	2.5	39.4	22.5
USG	7443nRR	52 ± 1	14.1	1.6	36	128	1.0	2.3	39.4	22.7
USG	7434nRR	52 ± 1	13.8	1.5	32	126	1.0	2.7	39.4	22.7
Delta & Pine Land	DP 4546 RR	52 ± 1	14.6	2.5	41	130	1.0	2.0	40.9	21.8
Hornbeck	HBK R 4623 (RR)	49 ± 1	14.2	2.0	40	127	1.0	2.0	40.3	22.6
Average		53	14.2	1.7	37	128	1.0	2.2	39.3	22.8

† 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 18. Yields † of 22 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties in ten County Standard Tests in Tennessee and Kentucky during 2006.

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	(KY)									
				Carlisle 6/7 §	Coffee 5/16	Dyer f 5/23	Gibson fi 5/23	Henry fi 5/15	Lake fi 6/8	Lauderdale fi 5/20	Lawrence f 6/7	Montgomery 6/21	Weakley f 6/2
A	***Vigoro V42N3RR	56.2	12.3	51.7	49.0	67.5	51.7	72.8	73.7	60.2	36.5	39.8	59.2
A	Morsoy RT4485N	56.1	12.2	53.2	44.4	69.7	66.1	71.2	64.3	62.7	25.0	38.3	65.8
AB	Dekalb DKB42-51	55.8	12.4	57.2	46.8	71.0	50.3	74.9	66.3	62.9	36.8	36.6	55.6
AB	*Pioneer 94M50	55.7	12.3	53.8	50.9	67.6	56.8	70.8	69.3	58.9	31.3	36.4	61.4
AB	*Merschman Rocky	55.5	12.4	49.7	49.3	69.6	47.9	74.1	67.8	61.6	39.7	36.1	59.4
AB	Dyna-Gro 3443N	55.0	12.0	51.9	46.6	65.7	62.3	73.0	64.3	57.3	39.4	36.5	52.6
AB	Vigoro V44N6RR	54.8	12.1	54.6	47.9	68.7	61.9	70.9	58.4	62.1	33.4	36.9	53.2
AB	Gutwein H-4024	54.8	12.3	51.8	37.6	70.8	59.4	68.9	68.1	58.9	38.3	37.8	56.6
AB	Crow's C4444R	54.7	12.1	59.1	46.3	70.2	61.6	71.4	58.7	61.5	35.6	34.0	48.8
AB	*FFR 4545	54.5	12.3	46.9	52.9	68.3	57.4	73.5	67.1	55.9	29.1	37.5	56.8
AB	USG 74C36	54.4	12.2	49.7	49.8	69.0	54.6	68.6	66.9	55.6	34.7	37.6	57.5
AB	**Morsoy RT4480N	54.3	12.4	51.5	45.9	63.8	55.3	68.9	64.5	64.7	34.7	37.1	57.1
ABC	Excel 8427NRR	54.2	12.2	49.8	43.6	69.9	49.8	70.4	66.0	62.4	34.3	38.4	57.9
ABC	Asgrow AG4103	54.0	12.1	51.8	48.9	70.8	58.2	64.8	64.3	58.7	39.4	33.2	49.4
ABC	Delta Grow 4460 RR	53.3	12.3	49.6	49.3	66.1	57.7	66.1	53.5	58.2	40.9	38.1	53.8
ABC	Croplan RC4455	53.2	12.1	46.0	48.4	65.8	65.3	69.5	66.3	61.7	26.0	33.2	50.1
ABC	*Progeny 4401	53.2	11.9	48.9	47.1	62.3	52.9	71.9	66.8	57.8	39.0	33.9	51.6
ABC	Trisler 4254 RR (CN)	53.1	12.3	50.2	47.5	71.0	49.8	72.3	63.1	57.8	36.6	35.5	47.3
BC	**Dekalb DKB 44-51	52.5	12.3	52.6	41.2	63.2	55.0	64.6	69.6	57.6	32.3	37.6	51.6
BC	*Gutwein H-4534	52.4	12.1	53.7	45.2	64.6	54.1	71.3	62.0	59.0	23.6	30.2	60.1
C	Armor 45-M1	50.8	12.0	45.0	44.4	59.7	54.3	73.1	62.8	55.8	35.6	33.3	43.7
D	Deltapine DP4112	46.7	12.6	43.2	48.2	59.7	40.6	65.0	57.4	47.8	23.0	38.1	44.0
AVERAGE		53.9	12.2	51.0	46.9	67.0	55.6	70.4	64.6	59.0	33.9	36.2	54.2

† 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 2005, 2004, and/or 2003.

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 19. Yields † and disease ratings § of 22 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2006.

MS	Brand/Variety	CST Avg. Yield (n=10) bu/a	Moisture ‡ %	----- Research and Education Center at Milan -----						Soybean Yield Yield bu/a	Unsprayed Yield bu/a	SCN Race 2 2006
				SDS	Frogeye	Anthracnose	Brown Spot	Sprayed †	Unsprayed			
A	***Vigoro V42N3RR	56.2	12.3	2003 / 04 / 06	2003 / 04 / 05 / 06	2006	2006	62.2	53.8	S		
A	Morsoy RT4485N	56.1	12.2	---	---	---	---	---	---	---		
AB	Dekalb DKB42-51	55.8	12.4	/ / 0.0	/ / / 5.0	6.3	5.7	61.0	46.4	S		
AB	*Pioneer 94M50	55.7	12.3	/ / 0.3	/ / 1.0 / 0.0	6.0	7.7	57.9	52.0	S		
AB	*Merschman Rocky	55.5	12.4	/ / 0.7	/ / / 2.0	7.0	4.7	67.9	61.4	S		
AB	Dyna-Gro 3443N	55.0	12.0	/ / 0.7	/ / / 4.0	8.0	5.3	63.1	53.3	S		
AB	Vigoro V44N6RR	54.8	12.1	/ / 0.7	/ / / 2.0	8.0	5.7	63.9	59.4	S		
AB	Gutwein H-4024	54.8	12.3	/ / 0.0	/ / / 5.7	6.3	7.0	57.1	48.8	S		
AB	Crow's C4444R	54.7	12.1	/ / 1.0	/ / / 3.0	7.7	4.3	65.1	53.9	MS		
AB	*FFR 4545	54.5	12.3	/ / 0.3	/ / 7.0 / 5.7	7.0	3.7	67.3	56.0	MS		
AB	USG 74C36	54.4	12.2	/ / 0.7	/ / / 1.7	7.0	6.3	55.4	53.5	S		
AB	**Morsoy RT4480N	54.3	12.4	---	---	---	---	---	---	---		
ABC	Excel 8427NRR	54.2	12.2	/ / 1.0	/ / / 1.0	6.0	8.0	68.0	55.1	S		
ABC	Asgrow AG4103	54.0	12.1	/ / 0.0	/ / / 3.3	6.7	6.3	63.0	50.5	S		
ABC	Delta Grow 4460 RR	53.3	12.3	/ / 1.7	/ / / 2.3	8.0	4.3	65.4	51.4	MS		
ABC	Croplan RC4455	53.2	12.1	/ / 0.7	/ / / 3.7	7.7	5.3	67.5	55.6	S		
ABC	*Progeny 4401	53.2	11.9	/ / 0.0	/ / / 3.3	7.7	4.3	65.1	56.8	S		
ABC	Trisler 4254 RR (CN)	53.1	12.3	/ / 0.3	/ / / 3.0	6.7	6.0	60.7	50.8	S		
BC	**Dekalb DKB 44-51	52.5	12.3	1.0 / 0.0 / 0.0	8.0 / 6.0 / 6.0 / 5.0	7.0	6.0	63.5	54.5	S		
BC	*Gutwein H-4534	52.4	12.1	2.0 / 0.0 / 0.3	7.0 / 5.7 / 6.0 / 3.7	7.0	7.0	65.6	54.0	S		
C	Armor 45-M1	50.8	12.0	/ / 0.3	/ / / 8.3	8.3	3.0	59.9	47.1	S		
D	Deltapine DP4112	46.7	12.6	/ / 2.0	/ / / 0.3	7.3	6.0	49.2	45.6	S		
Average		53.9	12.2					62.4	53.0			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

¶ Sprayed plots at Milan treated with Headline SBR @ 9 oz./Acre + 0.37% Induce at 20 gpa at R4 growth stage (July 24).

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

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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

Table 20. Overall average yields † and moistures ‡ of 15 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and Research and Education Centers (n=8) in Tennessee in 2006.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Vigoro	V42N3RR	56	12.3	42	14.5
Morsoy	RT 4485N (RR)	56	12.2	52	14.2
DeKalb	DKB42-51	56	12.4	45	15.3
Dyna-Gro	3443 (RR)	55	12.0	45	14.5
Vigoro	V44N6RR	55	12.1	48	14.1
Crow's	C 4444 R	55	12.1	47	14.6
FFR	4545 RR	55	12.3	50	15.4
USG	74C36 (RR)	54	12.2	46	14.1
Morsoy	RT 4480N (RR)	54	12.4	51	14.3
Excel Brand	8427N RR/STS	54	12.2	37	14.7
Asgrow	AG 4103	54	12.1	41	14.7
Delta Grow	4460 RR	53	12.3	46	14.5
Gutwein	H-4534 RR	52	12.1	47	14.4
Armor	45-M1	51	12.0	43	14.7
Delta & Pine Land	DPX 4112 RR/S	47	12.6	39	15.2
Average (bu/a)		54	12.2	45	14.6

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 21. Mean yields † of 81 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Crossville	Spring			Milan	
					Hill	Springfield	Irr.	Non-Irr.	
					bu/a				
Morsoy	RT 4914N (RR)	63 ± 1	83	60	72	55	32	73	63
Morsoy	RTS 4955N (RR)	62 ± 1	79	66	69	52	26	74	64
Delta King	DK XTJ 750 (RR)	61 ± 1	84	65	68	49	33	73	57
Delta King	DK 4866 (RR/STS)	61 ± 1	79	67	71	50	27	75	55
Dyna-Gro	37P49 (RR)	61 ± 1	79	67	71	49	30	71	56
Terral	TVX 49R270 (RR)	60 ± 1	73	57	70	60	32	67	63
USG	7495nRS	60 ± 1	80	64	71	50	28	73	53
Asgrow	AG4903 (RR)	60 ± 1	78	65	62	47	34	73	59
Morsoy	RT 4755N (RR)	60 ± 1	79	52	73	49	31	74	59
Delta Grow	4770 RR	59 ± 1	71	62	71	50	33	67	61
Schillinger Seed	495 RC	59 ± 1	78	56	65	56	33	70	55
Crow's	C 4817 R	59 ± 1	79	63	62	53	27	73	57
Progeny	4906 RR	59 ± 1	79	71	62	46	28	70	54
FFR	4886 RR	59 ± 1	79	60	69	48	27	69	57
N.K. Brand	S 49-Q9 (RR)	58 ± 1	74	57	68	52	31	73	54
Morsoy	RT 4993N (RR)	58 ± 1	81	56	71	50	28	63	58
USG	74A91 (RR)	58 ± 1	77	59	60	47	29	77	54
Dyna-Gro	36Y48 (RR / STS)	58 ± 1	79	61	61	47	27	72	57
Delta King	DK 4667 (RR)	57 ± 1	78	51	74	51	28	65	56
Morsoy	RT 4706N (RR)	57 ± 1	77	60	66	46	28	70	56
Delta King	DK 4968 (RR)	57 ± 1	75	53	74	49	34	62	54
Delta Grow	4970 RR	57 ± 1	78	57	67	49	31	65	51
Gutwein	H-4878 RR	57 ± 1	71	59	60	52	29	70	58
MO Exp	S03-007 RR	57 ± 1	73	59	62	42	31	72	58
Midwest Premium Genetics	MPV 4905nRR	57 ± 1	77	57	60	44	30	70	58
Progeny	4706 RR	57 ± 1	67	67	62	48	30	67	56
Delta & Pine Land	DPX 4919 RR/S	57 ± 1	74	57	66	51	27	67	53
Armor	49-V6	57 ± 1	72	56	66	44	30	69	56
Vigoro	V49N6RR	56 ± 1	73	59	62	48	35	65	51
Progeny	4805 RR	56 ± 1	72	67	65	50	28	59	53
Excel Brand	8509N RR	56 ± 1	71	56	63	48	33	70	54
Croplan	RC 4955	56 ± 1	77	58	59	48	26	71	53
USG	747R6 (RR)	56 ± 1	77	56	67	48	30	62	54
Asgrow	AG4703 (RR)	56 ± 1	69	67	59	40	30	70	56
Delta Grow	4860 RR	56 ± 1	73	55	66	53	27	62	54
Delta King	DK 4764 (RR)	56 ± 1	76	52	63	46	31	70	53
Delta Grow	4960 RR	56 ± 1	77	59	58	48	31	63	53
Armor	49-T3 (RR)	56 ± 1	77	55	62	47	28	69	51

Table 21 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Crossville	Spring Hill			Milan	
					Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
Trisler Seed	Trisoy 4858RR (CN)	56 ± 1	73	65	64	48	29	55	55
TN Exp	TN03-012 RR	55 ± 1	71	60	63	52	26	62	54
Progeny	4949 RR	55 ± 1	75	59	66	50	28	63	46
Delta Grow	4660 RR	55 ± 1	78	50	64	47	26	68	54
Dyna-Gro	32R46 (RR/STS)	55 ± 1	72	54	64	44	24	72	57
USG	74A76 (RR)	55 ± 1	71	60	61	41	31	67	55
USG	74F96 (RR)	55 ± 1	75	57	64	47	33	63	47
Stine	S 4842-4 (RR)	55 ± 1	80	53	64	43	29	61	54
Progeny	4804 RR	55 ± 1	75	50	64	47	30	65	53
Midwest Premium Genetics	MPG Exp 7448nRR	55 ± 1	72	56	60	41	29	69	57
Steyer	4600 RR Scn	55 ± 1	74	57	60	42	27	69	55
Delta King	DK 4461 (RR)	55 ± 1	72	55	62	48	27	66	55
Morsoy	RT 4806N (RR)	55 ± 1	75	59	68	43	32	57	50
Terral	TVX 47R017 (RR)	55 ± 1	74	55	64	48	24	64	53
Dyna-Gro	36M49 (RR)	55 ± 1	75	52	59	47	28	66	55
Vigoro	V50N6RR	55 ± 1	68	58	57	47	32	69	51
Terral	TVX 49R017 (RR)	54 ± 1	74	55	63	47	28	59	53
Excel Brand	8447N RR	54 ± 1	72	51	62	44	29	68	51
Delta King	DK 4763 (RR)	54 ± 1	72	52	70	45	29	61	47
Progeny	4716 RR	54 ± 1	72	51	61	47	27	65	53
Delta & Pine Land	DP 4724 RR	54 ± 1	73	55	61	48	24	66	50
Progeny	4606 RR	53 ± 1	67	56	67	48	26	57	54
Dyna-Gro	3481 (RR)	53 ± 1	72	55	65	47	28	59	48
Terral	TV 48R14 (RR)	53 ± 1	71	51	59	50	29	58	56
Excel Brand	8493N RR	53 ± 1	78	48	60	42	28	70	47
Pioneer	94M80 (RR)	53 ± 1	69	57	61	44	26	66	50
USG	7494nRR	53 ± 1	70	50	63	38	30	70	51
DeKalb	DKB46-51	53 ± 1	72	49	59	49	31	60	52
Pioneer	94B73 (RR)	53 ± 1	64	57	56	47	30	64	52
Dyna-Gro	35Z49 (RR)	53 ± 1	77	42	62	45	30	66	49
Dyna-Gro	37F46 (RR)	53 ± 1	81	46	57	41	28	64	52
Armor	AFX 4784	53 ± 1	67	53	64	47	23	63	51
USG	74T85 (RR)	52 ± 1	72	45	56	45	26	70	52
Delta King	DK 4967 (RR)	52 ± 1	69	49	63	47	26	57	54
Hornbeck	HBK R 4924 (RR)	52 ± 1	77	46	57	42	27	64	50
Delta Grow	4840 RR	52 ± 1	73	45	64	47	28	58	48
Excel Brand	8481N RR	52 ± 1	73	47	57	44	27	66	48
Trisler Seed	Trisoy 4838RR (CN)	52 ± 1	65	53	60	47	25	62	49
Armor	47-G7 (RR)	51 ± 1	67	50	61	40	31	61	50

Table 21 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Crossville	Spring Hill		Springfield	Milan	
					Irr.	Non-Irr.		Irr.	Non-Irr.
USG	7475nRR	51 ± 1	66	54	53	44	23	68	50
Hornbeck	HBK R 4724 (RR)	51 ± 1	62	50	56	40	25	71	55
Delta King	DK XTJ 747 (RR)	50 ± 1	63	53	60	39	20	65	52
Delta Center	JTN-4206 (RR)	49 ± 1	69	50	55	38	23	59	47
Average (bu/a)		56	74	56	63	47	29	66	54
L.S.D._{.05} (bu/a)		3	7	8	8	8	6	9	7
C.V. (%)		8.3	6.2	8.2	7.6	9.9	12.9	8.2	7.7

† All yields are adjusted to 13% moisture.

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

Table 22. Mean yields † and agronomic characteristics of 81 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee in 2006.

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=7)	(n=7)	(n=4)	(n=7)	(n=7)	(n=4)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Morsoy	RT 4914N (RR)	63 ± 1	15.0	2.1	42	134	1.0	2.0	40.7	20.9
Morsoy	RTS 4955N (RR)	62 ± 1	14.5	1.8	40	133	1.0	1.8	38.8	22.7
Delta King	DK XTJ 750 (RR)	61 ± 1	14.1	1.5	38	133	1.0	2.0	40.6	21.2
Delta King	DK 4866 (RR/STS)	61 ± 1	13.1	1.4	37	131	1.0	1.9	38.0	21.3
Dyna-Gro	37P49 (RR)	61 ± 1	13.7	1.3	39	131	1.0	1.5	38.2	22.2
Terral	TVX 49R270 (RR)	60 ± 1	14.5	1.9	40	132	1.0	1.7	40.0	21.2
USG	7495nRS	60 ± 1	14.4	1.6	39	133	1.0	1.8	38.9	22.7
Asgrow	AG4903 (RR)	60 ± 1	14.3	1.4	36	133	1.0	1.7	37.8	22.4
Morsoy	RT 4755N (RR)	60 ± 1	14.8	1.7	40	131	1.0	1.4	38.4	21.3
Delta Grow	4770 RR	59 ± 1	14.6	1.8	39	127	1.0	1.9	37.8	22.1
Schillinger Seed	495 RC	59 ± 1	14.2	1.9	40	132	1.0	2.0	40.2	21.2
Crow's	C 4817 R	59 ± 1	13.2	1.4	38	131	1.0	1.8	37.4	21.4
Progeny	4906 RR	59 ± 1	13.7	1.4	38	132	1.0	1.4	38.2	22.5
FFR	4886 RR	59 ± 1	14.4	2.0	39	133	1.0	1.8	39.3	22.3
N.K. Brand	S 49-Q9 (RR)	58 ± 1	13.5	1.5	40	133	1.0	1.8	38.9	21.2
Morsoy	RT 4993N (RR)	58 ± 1	13.9	1.9	36	132	1.0	2.3	38.5	21.6
USG	74A91 (RR)	58 ± 1	13.9	1.4	38	132	1.0	1.5	38.0	22.1
Dyna-Gro	36Y48 (RR / STS)	58 ± 1	13.9	1.8	40	133	1.0	1.8	38.8	22.7
Delta King	DK 4667 (RR)	57 ± 1	14.1	2.2	40	130	1.0	2.1	37.5	22.0
Morsoy	RT 4706N (RR)	57 ± 1	14.5	1.1	33	132	1.0	1.9	36.8	23.0
Delta King	DK 4968 (RR)	57 ± 1	14.4	1.5	38	131	1.0	1.4	38.4	21.3
Delta Grow	4970 RR	57 ± 1	14.5	2.1	40	132	1.0	2.1	38.3	21.6
Gutwein	H-4878 RR	57 ± 1	14.2	2.0	40	133	1.0	1.8	40.1	21.1
MO Exp	S03-007 RR	57 ± 1	13.4	1.7	44	131	1.0	2.1	38.5	22.2
Midwest Premium Genetics	MPV 4905nRR	57 ± 1	13.5	1.6	36	129	1.0	2.3	38.4	21.7
Progeny	4706 RR	57 ± 1	14.3	1.6	37	128	1.0	2.0	38.3	22.1
Delta & Pine Land	DPX 4919 RR/S	57 ± 1	13.7	1.5	41	131	1.0	2.0	38.7	22.0
Armor	49-V6	57 ± 1	14.4	1.4	39	132	1.0	1.5	40.1	21.7
Vigoro	V49N6RR	56 ± 1	14.4	2.0	41	132	1.0	2.1	39.7	21.3
Progeny	4805 RR	56 ± 1	14.7	1.7	40	133	1.0	2.1	38.2	21.5
Excel Brand	8509N RR	56 ± 1	14.2	2.2	40	133	1.0	2.0	39.8	21.1
Croplan	RC 4955	56 ± 1	16.0	1.8	42	134	1.0	2.1	37.5	22.7
USG	747R6 (RR)	56 ± 1	13.9	1.6	37	131	1.0	2.3	38.5	21.7
Asgrow	AG4703 (RR)	56 ± 1	14.5	1.2	34	129	1.0	2.0	39.1	21.6
Delta Grow	4860 RR	56 ± 1	14.0	1.6	36	129	1.0	2.0	40.4	21.6
Delta King	DK 4764 (RR)	56 ± 1	13.9	1.6	38	128	1.0	1.8	37.9	22.4
Delta Grow	4960 RR	56 ± 1	15.4	1.9	39	134	1.0	1.3	39.9	21.0
Armor	49-T3 (RR)	56 ± 1	13.2	1.5	37	131	1.0	1.9	37.5	21.6

Table 22 (continued)

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=7)	(n=7)	(n=4)	(n=7)	(n=7)	(n=4)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Trisler Seed	Trisoy 4858RR (CN)	56 ± 1	14.9	1.4	39	134	1.0	2.0	37.7	21.5
TN Exp	TN03-012 RR	55 ± 1	14.9	1.7	35	135	1.0	1.4	36.0	22.5
Progeny	4949 RR	55 ± 1	14.1	1.5	41	134	1.0	2.0	39.1	22.1
Delta Grow	4660 RR	55 ± 1	14.1	1.7	41	128	1.0	2.2	37.3	22.1
Dyna-Gro	32R46 (RR/STS)	55 ± 1	14.3	1.1	32	132	1.0	1.8	36.4	23.0
USG	74A76 (RR)	55 ± 1	14.3	1.5	38	127	1.0	1.7	38.0	22.0
USG	74F96 (RR)	55 ± 1	14.8	1.6	38	134	1.0	1.9	37.7	21.7
Stine	S 4842-4 (RR)	55 ± 1	13.7	1.6	37	131	1.0	2.0	37.7	21.9
Progeny	4804 RR	55 ± 1	13.7	1.7	37	132	1.0	1.9	38.1	21.8
Midwest Premium Genetics	MPG Exp 7448nRR	55 ± 1	14.1	1.4	39	130	1.0	1.9	37.6	23.0
Steyer	4600 RR Scn	55 ± 1	13.8	1.4	35	127	1.0	2.0	38.6	22.1
Delta King	DK 4461 (RR)	55 ± 1	13.9	1.2	38	128	1.0	2.0	37.1	23.4
Morsoy	RT 4806N (RR)	55 ± 1	14.4	1.9	39	127	1.0	1.9	38.0	22.0
Terral	TVX 47R017 (RR)	55 ± 1	15.8	2.2	45	134	1.0	2.0	37.9	22.2
Dyna-Gro	36M49 (RR)	55 ± 1	13.7	1.8	37	131	1.0	2.2	38.4	21.7
Vigoro	V50N6RR	55 ± 1	15.0	1.4	42	133	1.0	2.0	37.3	22.7
Terral	TVX 49R017 (RR)	54 ± 1	14.2	2.0	45	133	1.0	1.9	40.5	20.8
Excel Brand	8447N RR	54 ± 1	14.2	1.4	35	133	1.0	1.6	37.7	21.9
Delta King	DK 4763 (RR)	54 ± 1	14.3	1.6	36	129	1.0	1.8	39.8	21.6
Progeny	4716 RR	54 ± 1	14.0	1.4	35	133	1.0	1.7	38.1	21.8
Delta & Pine Land	DP 4724 RR	54 ± 1	13.9	1.5	37	130	1.0	1.8	40.0	21.7
Progeny	4606 RR	53 ± 1	14.1	1.2	32	131	1.0	1.9	36.8	22.7
Dyna-Gro	3481 (RR)	53 ± 1	13.9	1.5	36	129	1.0	1.8	39.9	21.8
Terral	TV 48R14 (RR)	53 ± 1	14.1	1.6	39	132	1.0	1.6	39.2	22.2
Excel Brand	8493N RR	53 ± 1	13.4	1.8	39	131	1.0	2.4	39.4	21.4
Pioneer	94M80 (RR)	53 ± 1	13.0	1.6	41	129	1.0	2.1	39.3	21.8
USG	7494nRR	53 ± 1	14.2	1.6	37	130	1.0	2.1	37.7	22.1
DeKalb	DKB46-51	53 ± 1	15.1	1.3	36	129	1.0	2.2	39.8	21.6
Pioneer	94B73 (RR)	53 ± 1	13.6	1.4	38	127	1.0	2.2	38.8	23.0
Dyna-Gro	35Z49 (RR)	53 ± 1	14.5	1.7	39	134	1.0	1.8	38.0	22.0
Dyna-Gro	37F46 (RR)	53 ± 1	13.6	1.7	41	129	1.0	2.0	37.1	22.1
Armor	AFX 4784	53 ± 1	14.3	1.6	33	131	1.0	1.6	37.9	22.2
USG	74T85 (RR)	52 ± 1	13.5	1.5	38	131	1.0	2.2	39.3	21.7
Delta King	DK 4967 (RR)	52 ± 1	14.2	1.6	36	129	1.0	1.8	40.4	21.6
Hornbeck	HBK R 4924 (RR)	52 ± 1	14.9	1.9	43	134	1.0	1.8	37.8	22.2
Delta Grow	4840 RR	52 ± 1	14.0	1.8	37	132	1.0	1.9	37.4	22.1
Excel Brand	8481N RR	52 ± 1	14.5	2.2	43	132	1.0	1.9	39.0	21.8
Trisler Seed	Trisoy 4838RR (CN)	52 ± 1	14.0	1.6	36	129	1.0	1.9	39.5	22.0
Armor	47-G7 (RR)	51 ± 1	14.6	1.4	35	129	1.0	2.0	39.6	21.7

Table 22 (continued)

Brand	Variety ‡	Avg. Yield	Moisture § (n=7)	Lodging (n=4)	Height (n=7)	Maturity (n=7)	Shattering (n=4)	Seed	Protein (n=1)	Oil (n=1)
		± Std Err. (n=7)						Quality (n=1)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
USG	7475nRR	51 ± 1	14.1	1.4	39	132	1.0	2.0	38.1	21.5
Hornbeck	HBK R 4724 (RR)	51 ± 1	14.3	1.4	38	130	1.0	2.1	38.2	21.4
Delta King	DK XTJ 747 (RR)	50 ± 1	14.3	1.1	34	128	1.0	2.0	38.5	22.7
Delta Center	JTN-4206 (RR)	49 ± 1	13.7	1.6	38	129	1.0	2.2	40.2	21.4
Average		56	14.2	1.6	38	131	1.0	1.9	38.5	21.9

† 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 23. Mean yields † of 38 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Spring						
			Knoxville	Crossville	Hill		Springfield	Milan	
			bu/a						
			Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.	
Morsoy	RTS 4955N (RR)	57 ± 1	70	58	59	53	26	74	60
Asgrow	AG4903 (RR)	57 ± 1	68	58	58	48	31	75	57
Dyna-Gro	36Y48 (RR / STS)	56 ± 1	71	57	53	55	26	74	58
Delta King	DK 4866 (RR/STS)	55 ± 1	68	61	56	47	24	73	59
Morsoy	RT 4914N (RR)	55 ± 1	72	54	60	52	28	65	53
N.K. Brand	S 49-Q9 (RR)	55 ± 1	66	50	60	52	25	74	56
Schillinger Seed	495 RC	55 ± 1	69	53	58	56	31	66	50
Progeny	4805 RR	54 ± 1	65	61	60	51	29	62	54
Trisler Seed	Trisoy 4858RR (CN)	54 ± 1	63	60	61	52	26	60	56
Asgrow	AG4703 (RR)	53 ± 1	65	60	55	41	26	69	57
Morsoy	RT 4993N (RR)	53 ± 1	68	47	58	48	26	66	56
Midwest Premium Genetics	MPV 4905nRR	53 ± 1	67	50	51	49	28	69	54
Delta Grow	4960 RR	53 ± 1	67	51	56	49	30	61	54
Vigoro	V50N6RR	52 ± 1	64	53	56	52	26	68	48
Vigoro	V49N6RR	52 ± 1	64	55	57	55	31	58	47
Gutwein	H-4878 RR	52 ± 1	64	52	55	53	26	64	50
Delta King	DK 4667 (RR)	52 ± 1	68	43	56	46	25	70	55
Dyna-Gro	35Z49 (RR)	51 ± 1	68	44	55	49	27	67	49
Delta Grow	4970 RR	51 ± 1	69	52	57	49	26	53	52
Delta Grow	4860 RR	51 ± 1	64	50	58	49	24	60	54
Hornbeck	HBK R 4924 (RR)	51 ± 1	69	43	53	49	28	65	52
Hornbeck	HBK R 4724 (RR)	51 ± 1	59	48	50	43	22	74	61
Pioneer	94M80 (RR)	51 ± 1	61	52	54	45	24	67	52
Delta King	DK 4461 (RR)	50 ± 1	65	53	51	42	25	65	53
Delta & Pine Land	DP 4724 RR	50 ± 1	65	51	55	46	23	60	51
Progeny	4949 RR	50 ± 1	65	52	57	51	24	60	42
Progeny	4804 RR	50 ± 1	64	43	53	45	26	66	52
Excel Brand	8493N RR	50 ± 1	70	49	52	44	24	65	45
USG	7494nRR	50 ± 1	62	45	50	44	28	66	53
Delta Grow	4660 RR	50 ± 1	67	44	53	42	25	63	54
USG	7475nRR	49 ± 1	57	50	50	42	20	74	53
Delta King	DK 4967 (RR)	49 ± 1	59	47	55	49	24	58	55
Pioneer	94B73 (RR)	49 ± 1	61	53	48	46	24	62	50
Delta Grow	4840 RR	49 ± 1	63	42	56	47	26	61	48
Terral	TV 48R14 (RR)	49 ± 1	60	49	51	48	24	57	52
Armor	47-G7 (RR)	49 ± 1	61	48	53	41	27	61	51
Trisler Seed	Trisoy 4838RR (CN)	48 ± 1	59	46	50	45	21	61	51
Delta King	DK 4763 (RR)	48 ± 1	64	48	57	40	24	57	45
Average (bu/a)		52	65	51	55	48	26	65	53
L.S.D._{.05} (bu/a)		3	6	6	8	8	6	11	8
C.V. (%)		10.3	6.7	8.3	9.4	12.1	15.6	11.7	10.2

† All yields are adjusted to 13% moisture.

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

Table 24. Mean yields † and agronomic characteristics of 38 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=14) bu/a	Moisture § (n=14) %	Lodging (n=10) Score	Height (n=14) in.	Maturity (n=14) DAP	Shattering (n=9) -----Score-----	Quality (n=8)	Protein (n=8) %	Oil (n=8) %
Morsoy	RTS 4955N (RR)	57 ± 1	14.9	2.1	40	134	1.0	2.1	39.7	22.6
Asgrow	AG4903 (RR)	57 ± 1	14.8	1.6	37	133	1.0	1.9	38.5	22.6
Dyna-Gro	36Y48 (RR / STS)	56 ± 1	15.0	2.0	40	134	1.0	2.1	39.8	22.6
Delta King	DK 4866 (RR/STS)	55 ± 1	13.7	1.7	37	130	1.0	2.1	38.8	21.6
Morsoy	RT 4914N (RR)	55 ± 1	15.0	2.6	41	135	1.0	2.3	40.8	21.2
N.K. Brand	S 49-Q9 (RR)	55 ± 1	14.2	1.6	41	133	1.0	2.0	39.7	21.3
Schillinger Seed	495 RC	55 ± 1	15.1	2.6	41	135	1.0	2.4	40.9	21.2
Progeny	4805 RR	54 ± 1	15.3	1.9	40	133	1.0	2.3	39.0	21.7
Trisler Seed	Trisoy 4858RR (CN)	54 ± 1	15.3	1.7	39	134	1.0	2.3	38.8	21.6
Asgrow	AG4703 (RR)	53 ± 1	15.0	1.5	34	129	1.0	2.0	39.6	21.7
Morsoy	RT 4993N (RR)	53 ± 1	15.0	2.5	37	131	1.0	2.4	39.0	21.8
Midwest Premium Genetics	MPV 4905nRR	53 ± 1	14.3	2.4	37	130	1.0	2.3	39.1	21.9
Delta Grow	4960 RR	53 ± 1	16.0	2.2	39	136	1.0	1.9	41.3	20.9
Vigoro	V50N6RR	52 ± 1	15.8	1.7	42	135	1.0	2.3	38.0	22.8
Vigoro	V49N6RR	52 ± 1	15.0	2.4	41	134	1.0	2.3	40.3	21.3
Gutwein	H-4878 RR	52 ± 1	15.0	2.5	40	135	1.0	2.3	40.6	21.2
Delta King	DK 4667 (RR)	52 ± 1	14.8	2.5	40	130	1.0	2.1	38.2	22.1
Dyna-Gro	35Z49 (RR)	51 ± 1	15.5	1.9	41	135	1.0	2.2	38.9	22.1
Delta Grow	4970 RR	51 ± 1	15.4	2.4	40	134	1.0	2.5	39.9	21.4
Delta Grow	4860 RR	51 ± 1	14.3	2.0	37	130	1.0	2.1	41.1	21.7
Hornbeck	HBK R 4924 (RR)	51 ± 1	15.5	2.0	43	135	1.0	2.1	38.6	22.4
Hornbeck	HBK R 4724 (RR)	51 ± 1	14.8	1.6	40	131	1.0	2.2	39.1	21.5
Pioneer	94M80 (RR)	51 ± 1	13.8	2.0	40	130	1.0	2.1	40.1	21.8
Delta King	DK 4461 (RR)	50 ± 1	14.1	1.5	38	128	1.0	2.1	38.1	23.3
Delta & Pine Land	DP 4724 RR	50 ± 1	14.4	1.9	37	130	1.0	2.1	40.8	21.7
Progeny	4949 RR	50 ± 1	14.9	2.1	41	136	1.0	2.3	39.9	22.2
Progeny	4804 RR	50 ± 1	14.5	2.5	37	131	1.0	2.1	39.0	21.8
Excel Brand	8493N RR	50 ± 1	14.2	2.0	39	132	1.0	2.4	40.2	21.5
USG	7494nRR	50 ± 1	14.3	2.2	37	130	1.0	2.3	39.0	22.0
Delta Grow	4660 RR	50 ± 1	14.7	2.4	41	129	1.0	2.3	38.3	22.1
USG	7475nRR	49 ± 1	15.0	1.6	40	132	1.0	2.2	39.0	21.5
Delta King	DK 4967 (RR)	49 ± 1	14.9	2.0	37	130	1.0	2.0	41.0	21.7
Pioneer	94B73 (RR)	49 ± 1	13.7	2.0	38	127	1.0	2.3	39.6	22.9
Delta Grow	4840 RR	49 ± 1	14.3	2.6	37	131	1.0	2.2	38.6	22.0
Terral	TV 48R14 (RR)	49 ± 1	14.8	1.8	39	132	1.0	1.8	40.1	22.0
Armor	47-G7 (RR)	49 ± 1	14.8	1.8	37	129	1.0	2.2	40.4	21.5
Trisler Seed	Trisoy 4838RR (CN)	48 ± 1	14.2	1.9	37	129	1.0	2.0	40.5	21.9
Delta King	DK 4763 (RR)	48 ± 1	14.8	1.8	36	130	1.0	2.3	40.9	21.3
Average		52	14.8	2.0	39	132	1.0	2.2	39.6	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

Maturity = days after planting (DAP).

Protein & Oil on dry weight basis.

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

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 25. Mean yields † of 21 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Spring Hill					Milan	
			Knoxville	Crossville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
-----bu/a-----									
Asgrow	AG4903 (RR)	63 ± 1	70	57	67	58	44	82	60
N.K. Brand	S 49-Q9 (RR)	59 ± 1	68	48	63	58	39	77	60
Delta Grow	4960 RR	56 ± 1	65	52	62	54	35	66	58
Delta Grow	4970 RR	56 ± 1	69	52	65	57	32	62	56
Hornbeck	HBK R 4724 (RR)	56 ± 1	63	52	54	51	32	79	61
Delta King	DK 4461 (RR)	56 ± 1	68	52	57	52	36	69	58
Hornbeck	HBK R 4924 (RR)	56 ± 1	71	43	58	54	35	73	56
Midwest Premium Genetics	MPV 4905nRR	55 ± 1	68	47	57	54	34	70	56
Morsoy	RT 4993N (RR)	55 ± 1	68	46	62	53	34	66	55
Progeny	4949 RR	55 ± 1	68	54	64	55	32	61	50
Delta King	DK 4967 (RR)	54 ± 1	61	48	64	56	31	64	56
Pioneer	94B73 (RR)	54 ± 1	63	53	53	57	33	65	53
Terral	TV 48R14 (RR)	54 ± 1	62	45	58	59	31	67	54
Delta Grow	4860 RR	54 ± 1	63	48	62	55	31	63	53
Delta & Pine Land	DP 4724 RR	54 ± 1	66	50	60	52	31	64	52
Trisler Seed	Trisoy 4838RR (CN)	53 ± 1	63	46	58	52	29	68	56
USG	7494nRR	53 ± 1	65	44	54	50	35	68	55
Delta Grow	4840 RR	53 ± 1	64	41	59	53	31	68	51
Progeny	4804 RR	52 ± 1	64	41	57	50	32	69	53
Armor	47-G7 (RR)	52 ± 1	61	47	57	49	35	66	49
Delta King	DK 4763 (RR)	52 ± 1	66	48	61	47	33	62	47
Average (bu/a)		55	65	48	60	54	34	68	55
L.S.D._{.05} (bu/a)		3	6	6	8	9	7	11	8
C.V. (%)		10.3	6.6	8.7	9.3	12.0	14.6	11.2	10.7

† All yields are adjusted to 13% moisture.

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

Table 26. Mean yields † and agronomic characteristics of 21 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=17)	Height (n=21)	Maturity (n=21)	Shattering (n=16)	Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Asgrow	AG4903 (RR)	63 ± 1	14.5	1.8	38	133	1.0	1.9	38.5	22.4
N.K. Brand	S 49-Q9 (RR)	59 ± 1	14.1	1.9	41	134	1.0	2.0	39.9	21.1
Delta Grow	4960 RR	56 ± 1	16.1	2.1	39	138	1.0	1.7	41.4	20.9
Delta Grow	4970 RR	56 ± 1	15.0	2.5	41	135	1.0	2.4	40.2	21.3
Hornbeck	HBK R 4724 (RR)	56 ± 1	14.8	1.9	42	133	1.0	2.2	39.0	21.4
Delta King	DK 4461 (RR)	56 ± 1	14.1	1.8	40	130	1.0	2.1	38.3	23.0
Hornbeck	HBK R 4924 (RR)	56 ± 1	15.1	2.4	44	135	1.0	2.0	38.8	22.2
Midwest Premium Genetics	MPV 4905nRR	55 ± 1	14.0	2.5	38	130	1.0	2.3	39.2	21.8
Morsoy	RT 4993N (RR)	55 ± 1	14.5	2.6	37	131	1.0	2.3	39.1	21.6
Progeny	4949 RR	55 ± 1	14.5	2.2	42	136	1.0	2.3	39.9	22.1
Delta King	DK 4967 (RR)	54 ± 1	14.4	2.1	38	131	1.0	2.0	41.0	21.5
Pioneer	94B73 (RR)	54 ± 1	13.7	2.2	39	128	1.0	2.1	39.6	22.7
Terral	TV 48R14 (RR)	54 ± 1	14.5	2.0	40	133	1.0	1.9	39.9	22.1
Delta Grow	4860 RR	54 ± 1	14.1	2.1	37	131	1.0	2.0	41.1	21.5
Delta & Pine Land	DP 4724 RR	54 ± 1	14.2	2.1	38	131	1.0	2.0	40.9	21.6
Trisler Seed	Trisoy 4838RR (CN)	53 ± 1	14.0	2.1	38	130	1.0	2.0	40.8	21.6
USG	7494nRR	53 ± 1	14.1	2.4	38	130	1.0	2.2	39.3	21.7
Delta Grow	4840 RR	53 ± 1	14.1	2.6	38	131	1.0	2.1	39.0	21.7
Progeny	4804 RR	52 ± 1	14.1	2.5	38	131	1.0	2.1	39.2	21.6
Armor	47-G7 (RR)	52 ± 1	14.6	2.0	37	131	1.0	2.2	40.5	21.4
Delta King	DK 4763 (RR)	52 ± 1	14.5	2.1	38	131	1.0	2.3	40.8	21.2
Average		55	14.4	2.2	39	132	1.0	2.1	39.8	21.7

† 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 27. Yields † of 26 Late Maturity Group IV (4.6-4.9) Roundup Ready soybean varieties in 11 County Standard Tests in Tennessee and Kentucky during 2006.

MS	Brand/Variety	(KY)												
		Avg. Yield	Moisture ‡	Coffee	Crockett <i>f</i>	Dyer <i>f</i>	Fayette <i>fi</i>	Gibson	Haywood <i>f</i>	Lake <i>f</i>	Lauderdale <i>fi</i>	McCracken	Obion <i>fi</i>	Weakley
		bu/a	%	5/17 §	4/19	5/23	5/24	5/25	5/17	5/22	5/19	6/12	5/24	5/19
A	FFR 4886	59.4	12.7	59.9	66.5	68.7	53.1	48.3	56.6	67.6	52.1	55.4	69.2	56.5
AB	Schillinger Seed 495RC	58.2	12.4	57.1	61.5	63.5	51.6	44.6	64.6	75.0	54.3	50.6	62.1	55.7
ABC	Vigoro V49N6RR	57.8	12.5	52.9	65.0	68.5	46.2	41.0	54.8	69.8	55.5	55.4	68.6	58.5
ABCD	Crow's C4817R	57.1	11.6	57.6	59.7	70.3	52.1	44.0	52.5	72.8	58.0	46.1	63.1	51.6
ABCDE	*Stine 4842	56.7	11.9	57.5	63.3	70.8	45.1	39.0	52.1	73.7	56.4	51.2	61.1	54.1
ABCDE	Delta Grow DG4970 RR	56.7	12.1	51.6	63.3	63.7	42.4	40.2	56.5	76.3	53.4	55.5	64.1	57.1
ABCDEF	*Gutwein H-4878	56.6	12.2	55.5	66.1	63.9	54.3	34.6	52.9	64.9	54.7	54.1	71.0	50.4
ABCDEF	Dyna-Gro 36Y48	56.3	12.0	55.7	60.5	63.7	44.4	35.5	52.7	73.0	56.7	52.8	64.4	60.1
ABCDEFG	Delta King 4968	55.7	12.1	57.3	63.2	70.5	43.3	36.8	58.7	64.5	53.4	49.9	63.5	51.8
BCDEFG	*Delta King 4866	55.6	11.5	56.1	59.1	69.1	39.7	50.3	54.9	64.6	59.0	44.3	61.3	53.0
BCDEFGH	*Progeny 4804	55.3	11.7	55.9	55.1	70.7	40.9	35.4	57.8	63.3	55.1	53.9	73.3	47.4
BCDEFGH	Asgrow AG4703	55.2	12.0	41.0	58.4	66.0	45.2	51.4	50.4	57.2	61.4	55.4	65.5	54.9
BCDEFGH	*Asgrow AG4903	55.1	11.9	56.2	71.7	65.9	37.8	42.1	51.2	67.1	57.4	42.2	62.3	52.2
BCDEFGH	Progeny 4805	54.8	13.4	45.3	67.8	64.1	45.5	43.5	53.5	69.6	54.9	47.8	60.9	49.5
CDEFGHI	Croplan RC4955	54.1	13.0	58.5	68.8	67.9	46.8	26.2	53.0	65.5	51.9	49.9	56.7	49.8
DEFGHI	NK Brand S49-Q9	54.0	12.1	61.5	58.8	68.6	43.9	36.0	47.3	60.7	55.2	52.8	59.3	49.5
DEFGHI	Armor 47-G7	53.8	11.8	57.5	58.7	70.7	46.2	34.1	55.9	62.2	52.0	49.9	57.6	47.5
DEFGHI	Delta Grow DG4840	53.6	11.7	54.5	53.8	62.4	44.1	37.1	50.1	67.5	57.9	49.9	60.7	52.1
DEFGHI	Deltapine DP4919	53.5	11.5	49.0	62.1	67.9	43.7	32.1	49.3	62.7	49.2	52.6	65.0	55.0
DEFGHI	USG 7475RR	53.5	12.2	48.6	57.7	60.6	37.7	39.1	60.9	60.0	55.0	55.5	63.7	49.7
DEFGHI	***Pioneer 94B73	53.3	11.5	45.2	57.7	67.9	38.4	33.4	61.0	66.1	55.3	51.3	63.4	47.2
EFGHI	AgVenture 46J5	53.1	12.1	50.4	63.6	67.9	52.9	19.5	60.3	64.3	48.7	50.6	63.2	43.0
FGHI	Pioneer 94M80	52.8	11.7	54.5	59.2	64.5	43.2	31.7	42.4	64.9	55.2	49.1	70.2	45.3
GHI	**Delta King 4967	52.1	11.4	57.3	52.9	59.5	42.4	36.4	50.8	63.8	45.0	49.3	64.2	51.0
HI	Trisler 4838 RR (CN)	51.5	11.9	54.6	61.1	59.6	52.4	16.3	49.3	60.8	54.7	46.4	63.6	47.7
I	Excel 8493NRR	50.8	11.7	46.8	60.6	60.2	43.6	25.9	49.0	63.4	52.0	45.6	64.9	46.7
Average		54.87	12.0	53.8	61.4	66.0	45.3	36.7	53.8	66.2	54.4	50.7	64.0	51.4

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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 28. Yields † and disease ratings § of 26 late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2006.

MS	Brand/Variety	CST Avg. Yield (n=11) bu/a	Moisture ‡ %	Research and Education Center at Milan						Soybean Yield bu/a	Unsprayed Yield bu/a	SCN Race 2 2006
				SDS 2003 / 04 / 06	Frogeye 2003 / 04 / 05 / 06	Anthracnose 2006	Brown Spot 2006	Sprayed ¶ Yield bu/a	Unsprayed Yield bu/a			
A	FFR 4886	59.4	12.7	/ / 0.3	/ / / 3.3	6.3	3.0	74.1	61.8	S		
AB	Schillinger Seed 495RC	58.2	12.4	/ / 1.0	/ / / 0.0	6.0	3.0	65.3	60.9	S		
ABC	Vigoro V49N6RR	57.8	12.5	/ / 2.0	/ / / 0.0	7.0	3.7	64.1	54.4	S		
ABCD	Crow's C4817R	57.1	11.6	/ / 0.0	/ / / 8.3	7.0	2.7	69.2	56.0	S		
ABCDE	*Stine 4842	56.7	11.9	/ / 0.0	/ / / 2.3	8.0	6.0	69.1	58.0	S		
ABCDE	Delta Grow DG4970 RR	56.7	12.1	/ / 1.0	/ / / 0.0	6.0	4.7	59.4	52.7	S		
ABCDEF	*Gutwein H-4878	56.6	12.2	/ / 2.0	/ / 0.0 / 0.0	6.7	2.7	66.0	55.1	S		
ABCDEF	Dyna-Gro 36Y48	56.3	12.0	/ / 0.7	/ / / 5.3	6.3	3.0	69.3	58.1	S		
ABCDEFG	Delta King 4968	55.7	12.1	/ / 2.7	/ / / 0.0	7.7	3.3	62.2	50.4	S		
BCDEFG	*Delta King 4866	55.6	11.5	/ 0.0 / 0.0	/ 7.3 / 10.0 / 8.0	7.3	2.3	68.7	55.2	S		
BCDEFGH	*Progeny 4804	55.3	11.7	/ 1.0 / 0.0	/ 6.7 / 6.0 / 2.7	7.7	6.7	72.9	58.4	S		
BCDEFGH	Asgrow AG4703	55.2	12.0	/ / 0.3	/ / 8.0 / 5.7	6.3	3.0	64.5	57.2	S		
BCDEFGH	*Asgrow AG4903	55.1	11.9	/ 0.3 / 0.0	/ 5.0 / 7.0 / 6.0	5.3	4.7	67.2	57.8	S		
BCDEFGH	Progeny 4805	54.8	13.4	/ / 0.7	/ / / 8.0	7.0	2.7	60.8	49.5	MS		
CDEFGHI	Croplan RC4955	54.1	13.0	/ / 0.3	/ / / 8.3	6.3	2.3	62.5	51.3	S		
DEFGHI	NK Brand S49-Q9	54.0	12.1	5.0 / 0.7 / 0.7	7.0 / 7.7 / 4.0 / 3.3	6.7	2.7	57.2	49.1	S		
DEFGHI	Armor 47-G7	53.8	11.8	/ 0.0 / 0.7	5.0 / 7.0 / 8.0 / 1.3	5.3	7.3	57.3	48.4	S		
DEFGHI	Delta Grow DG4840	53.6	11.7	/ / 0.3	/ / / 5.0	6.3	6.3	64.4	55.8	S		
DEFGHI	Deltapine DP4919	53.5	11.5	/ / 0.3	/ / / 4.0	7.0	6.7	66.9	54.7	S		
DEFGHI	USG 7475RR	53.5	12.2	/ / 0.0	/ / 6.0 / 5.3	7.0	3.7	54.9	43.7	S		
DEFGHI	***Pioneer 94B73	53.3	11.5	5.0 / 3.0 / 0.0	1.0 / 0.0 / 0.0 / 0.3	7.3	8.0	56.0	56.4	S		
EFGHI	AgVenture 46J5	53.1	12.1	/ / 0.0	/ / 2.0 / 0.0	5.3	7.0	62.9	53.4	S		
FGHI	Pioneer 94M80	52.8	11.7	/ / 0.0	/ / 3.0 / 1.0	6.0	6.0	59.5	52.8	S		
GHI	**Delta King 4967	52.1	11.4	4.0 / 2.0 / 0.0	3.0 / 3.7 / 3.0 / 0.7	5.0	5.3	61.5	48.0	S		
HI	Trisler 4838 RR (CN)	51.5	11.9	/ / 0.0	/ / / 0.0	5.0	3.7	60.3	47.1	S		
I	Excel 8493NRR	50.8	11.7	/ / 0.3	/ / 4.0 / 1.7	6.3	4.3	63.2	55.1	S		
Average (bu/a)		54.9	12.0					63.8	53.9			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

¶ Sprayed plots at Milan treated with Headline SBR @ 9 oz./Acre + 0.37% Induce at 20 gpa at R3 growth stage (July 24).

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

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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

Table 29. Overall average yields † and moistures ‡ of 21 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in County Standard Tests (n=11) and Research and Education Centers (n=8) in Tennessee in 2006.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
FFR	4886 RR	59	12.7	59	14.4
Schillinger Seed	495 RC	58	12.4	59	14.2
Vigoro	V49N6RR	58	12.5	56	14.4
Crow's	C 4817 R	57	11.6	59	13.2
Delta Grow	4970 RR	57	12.1	57	14.5
Stine	S 4842-4 (RR)	57	11.9	55	13.7
Gutwein	H-4878 RR	57	12.2	57	14.2
Dyna-Gro	36Y48 (RR / STS)	56	12.0	58	13.9
Delta King	DK 4968 (RR)	56	12.1	57	14.4
Delta King	DK 4866 (RR/STS)	56	11.5	61	13.1
Progeny	4804 RR	55	11.7	55	13.7
Asgrow	AG4703 (RR)	55	12.0	56	14.5
Asgrow	AG4903 (RR)	55	11.9	60	14.3
Progeny	4805 RR	55	13.4	56	14.7
Croplan	RC 4955	54	13.0	56	16.0
N.K. Brand	S 49-Q9 (RR)	54	12.1	58	13.5
Armor	47-G7 (RR)	54	11.8	51	14.6
Delta Grow	4840 RR	54	11.7	52	14.0
Delta & Pine Land	DPX 4919 RR/S	54	11.5	57	13.7
USG	7475nRR	54	12.2	51	14.1
Pioneer	94B73 (RR)	53	11.5	53	13.6
Pioneer	94M80 (RR)	53	11.7	53	13.0
Delta King	DK 4967 (RR)	52	11.4	52	14.2
Trisler Seed	Trisoy 4838RR (CN)	52	11.9	52	14.0
Excel Brand	8493N RR	51	11.7	53	13.4
Average (bu/a)		55	12.0	56	14.0

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 30. Mean yields † of 52 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill				Milan		Ames
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.	
Delta King	DK 52K6 (RR)	58 ± 1	75	61	44	56	67	61	43
Delta King	DK 5567 (RR)	58 ± 1	75	67	41	50	70	58	46
Delta Grow	5300 RR	58 ± 1	71	67	40	51	74	60	41
Delta Grow	5160 RR	58 ± 1	72	65	39	53	67	65	44
FFR	5663 RR	57 ± 1	80	61	49	47	63	61	40
Delta King	DK 5066 (RR)	57 ± 1	67	63	34	53	72	64	46
Delta King	DK XTJ 704 (RR)	56 ± 1	66	71	42	42	63	62	47
Terral	TV 55R15 (RR)	56 ± 1	69	53	49	50	68	61	42
Progeny	5260 RR	56 ± 1	73	61	33	50	75	61	37
Armor	54-03 (RR)	55 ± 1	70	62	38	53	63	62	38
USG	7515nRS	55 ± 1	71	55	38	52	74	61	35
FFR	5116 RR	55 ± 1	68	56	43	53	69	62	35
Vigoro	V52N3RR	54 ± 1	72	58	33	57	63	56	40
Terral	TV 52R14 (RR)	54 ± 1	69	58	42	46	61	59	44
MO Exp	S03-383 RR	54 ± 1	64	54	37	55	72	62	34
Hornbeck	HBK R 5525 (RR)	54 ± 1	76	57	42	43	64	57	37
Terral	TVX 53R017 (RR)	53 ± 1	69	52	38	52	62	67	34
Delta King	DK 5366 (RR)	53 ± 1	71	55	45	46	57	57	43
USG	75J32 (RR)	53 ± 1	69	56	37	50	72	58	31
Progeny	5115 RR	53 ± 1	69	54	36	52	66	59	36
Progeny	5406 RR	53 ± 1	74	60	36	42	67	58	33
Dyna-Gro	33X55 (RR)	53 ± 1	70	57	38	45	67	58	34
Trisler Seed	Trisoy 5060RR (CN)	53 ± 1	67	59	33	46	62	59	43
USG	540nRR	53 ± 1	69	54	31	51	71	58	34
USG	7553nRS	53 ± 1	72	55	33	44	74	59	32
Midwest Premium Genetics	MPV 5407nRR	53 ± 1	67	64	33	48	69	55	31
Midwest Premium Genetics	MPG Exp 7552nRR	52 ± 1	74	53	36	39	73	52	40
Midwest Premium Genetics	MPV 5505nRR (STS)	52 ± 1	72	57	31	52	70	58	23
Delta King	DK XTJ 703 (RR)	52 ± 1	64	60	34	47	57	54	44
Delta King	DK 5161 (RR)	51 ± 1	66	65	40	44	51	59	35
Dyna-Gro	32A53 (RR)	51 ± 1	68	59	46	44	58	51	34
Progeny	5250 RR	51 ± 1	69	61	29	48	61	56	34
Excel Brand	8512 N RR	51 ± 1	65	54	32	44	78	54	31
Vigoro	V50N7RS	51 ± 1	71	52	29	45	77	54	32
Vigoro	V51N7RS	51 ± 1	69	60	27	45	76	51	29
Midwest Premium Genetics	MPV 5206nRR	51 ± 1	69	53	33	40	73	51	38
USG	75M16 (RR)	51 ± 1	71	51	31	47	71	62	24

Table 30 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Delta King	DK 5368 (RR)	51 ± 1	70	67	39	34	56	49	39
MO Exp	S03-328 RR	50 ± 1	63	52	38	49	70	58	23
Delta & Pine Land	DP 5115 RR/S	49 ± 1	67	49	31	40	67	56	36
Armor	52-U2	49 ± 1	68	52	32	47	62	53	32
Delta Grow	5470 RR	49 ± 1	59	51	28	53	64	58	29
Gutwein	H-5053 RR	49 ± 1	66	49	35	39	63	54	38
Hornbeck	HBK R 5226 (RR)	49 ± 1	73	56	39	38	56	45	34
FFR	5033 RR	49 ± 1	66	55	41	45	41	56	36
Delta & Pine Land	DP 5414 RR	48 ± 1	68	46	36	43	59	48	38
Progeny	5205 RR	48 ± 1	65	49	34	44	59	56	27
Pioneer	95M30 (RR)	47 ± 1	70	52	31	36	53	57	33
Midwest Premium Genetics	MPG Exp 7450nRR	47 ± 1	69	50	35	40	53	53	32
Morsoy	RT 5206N (RR)	47 ± 1	68	50	37	39	51	51	32
USG	7505nRR	46 ± 1	62	50	27	41	59	56	26
Dyna-Gro	33B52 (RR)	45 ± 1	68	52	34	38	48	51	24
Average (bu/a)		52	70	57	37	47	65	57	36
L.S.D._{.05} (bu/a)		3	7	8	8	8	10	7	8
C.V. (%)		9.5	6.1	9.0	13.5	11.0	9.1	7.9	13.3

† All yields are adjusted to 13% moisture.

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

Table 31. Mean yields † and agronomic characteristics of 52 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=5)	Height (n=6)	Maturity (n=6)	Shattering (n=5)	Quality (n=4)	Protein (n=4)	Oil (n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Delta King	DK 52K6 (RR)	58 ± 1	15.2	1.9	39	146	1.0	1.7	39.6	21.5
Delta King	DK 5567 (RR)	58 ± 1	14.9	2.2	37	145	1.0	1.4	38.6	21.4
Delta Grow	5300 RR	58 ± 1	15.2	1.8	39	140	1.0	1.4	38.4	21.6
Delta Grow	5160 RR	58 ± 1	14.8	2.0	42	136	1.2	2.0	39.0	22.5
FFR	5663 RR	57 ± 1	14.2	2.7	36	144	1.0	1.5	40.0	20.9
Delta King	DK 5066 (RR)	57 ± 1	14.8	2.1	40	133	1.2	2.0	39.1	22.5
Delta King	DK XTJ 704 (RR)	56 ± 1	14.7	1.7	39	135	1.3	2.2	40.6	21.2
Terral	TV 55R15 (RR)	56 ± 1	15.3	2.5	41	143	1.0	1.4	38.6	21.2
Progeny	5260 RR	56 ± 1	14.5	1.8	41	139	1.0	1.4	37.7	21.8
Armor	54-03 (RR)	55 ± 1	13.9	1.4	37	144	1.0	1.4	38.1	21.5
USG	7515nRS	55 ± 1	14.7	1.9	41	134	1.2	1.9	38.5	22.6
FFR	5116 RR	55 ± 1	14.2	1.6	39	139	1.1	1.4	38.4	21.6
Vigoro	V52N3RR	54 ± 1	14.6	1.8	37	142	1.0	1.8	38.8	21.3
Terral	TV 52R14 (RR)	54 ± 1	14.6	2.4	40	141	1.0	1.3	39.5	21.6
MO Exp	S03-383 RR	54 ± 1	15.2	1.8	45	143	1.0	2.3	39.3	21.4
Hornbeck	HBK R 5525 (RR)	54 ± 1	15.1	2.0	39	146	1.0	1.6	37.6	21.6
Terral	TVX 53R017 (RR)	53 ± 1	14.7	1.6	40	142	1.1	1.6	38.8	21.2
Delta King	DK 5366 (RR)	53 ± 1	14.7	2.9	40	145	1.0	1.3	38.3	21.3
USG	75J32 (RR)	53 ± 1	14.0	1.6	40	140	1.1	1.6	37.9	21.6
Progeny	5115 RR	53 ± 1	14.8	1.6	45	136	1.2	2.0	37.0	22.7
Progeny	5406 RR	53 ± 1	14.7	2.0	38	143	1.0	1.3	37.5	22.1
Dyna-Gro	33X55 (RR)	53 ± 1	15.5	1.7	40	146	1.0	2.1	39.2	21.6
Trisler Seed	Trisoy 5060RR (CN)	53 ± 1	14.8	2.0	40	131	1.2	2.1	38.3	22.0
USG	540nRR	53 ± 1	14.5	1.4	40	144	1.0	1.5	38.5	22.0
USG	7553nRS	53 ± 1	13.6	1.2	39	143	1.0	1.3	36.8	22.1
Midwest Premium Genetics	MPV 5407nRR	53 ± 1	14.9	1.5	45	142	1.1	2.1	38.4	21.7
Midwest Premium Genetics	MPG Exp 7552nRR	52 ± 1	14.7	2.2	41	142	1.0	2.1	36.2	22.3
Midwest Premium Genetics	MPV 5505nRR (STS)	52 ± 1	13.6	1.2	37	142	1.0	1.4	37.4	22.1
Delta King	DK XTJ 703 (RR)	52 ± 1	14.4	1.8	41	133	1.2	1.6	38.1	21.6
Delta King	DK 5161 (RR)	51 ± 1	14.8	2.5	36	140	1.0	1.4	37.9	22.2
Dyna-Gro	32A53 (RR)	51 ± 1	14.9	2.3	38	142	1.0	1.6	38.4	21.9
Progeny	5250 RR	51 ± 1	14.9	1.4	37	142	1.0	1.4	38.5	21.3
Excel Brand	8512 N RR	51 ± 1	14.8	1.8	43	141	1.0	2.6	39.4	21.3
Vigoro	V50N7RS	51 ± 1	14.7	2.1	42	136	1.3	1.8	38.2	22.7
Vigoro	V51N7RS	51 ± 1	14.6	1.9	40	141	1.0	1.5	38.1	21.8
Midwest Premium Genetics	MPV 5206nRR	51 ± 1	15.3	2.5	40	141	1.0	2.0	36.2	22.1
USG	75M16 (RR)	51 ± 1	14.5	1.9	40	140	1.1	1.3	37.1	21.9

Table 31 (continued)

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=7)	(n=7)	(n=5)	(n=6)	(n=6)	(n=5)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	%
Delta King	DK 5368 (RR)	51 ± 1	15.0	2.7	37	143	1.0	1.5	39.0	21.4
MO Exp	S03-328 RR	50 ± 1	14.4	1.4	45	136	1.4	2.1	38.8	22.1
Delta & Pine Land	DP 5115 RR/S	49 ± 1	15.0	1.7	45	139	1.0	2.2	38.7	22.1
Armor	52-U2	49 ± 1	14.9	1.8	36	137	1.0	1.2	37.9	21.8
Delta Grow	5470 RR	49 ± 1	15.3	2.0	45	144	1.0	2.3	39.2	21.4
Gutwein	H-5053 RR	49 ± 1	14.1	1.9	39	132	1.4	2.3	38.4	21.9
Hornbeck	HBK R 5226 (RR)	49 ± 1	15.0	2.4	37	144	1.0	1.4	38.2	21.7
FFR	5033 RR	49 ± 1	15.4	2.2	38	134	1.0	1.4	40.7	20.7
Delta & Pine Land	DP 5414 RR	48 ± 1	15.0	2.3	43	142	1.0	2.0	39.4	20.3
Progeny	5205 RR	48 ± 1	14.4	2.0	42	135	1.2	1.9	39.2	21.5
Pioneer	95M30 (RR)	47 ± 1	14.5	2.2	39	142	1.0	1.6	38.0	21.2
Midwest Premium Genetics	MPG Exp 7450nRR	47 ± 1	13.9	1.8	45	135	1.5	2.0	40.8	21.2
Morsoy	RT 5206N (RR)	47 ± 1	15.2	2.1	42	142	1.0	1.4	38.9	20.7
USG	7505nRR	46 ± 1	14.0	2.2	42	134	1.3	1.8	39.0	21.5
Dyna-Gro	33B52 (RR)	45 ± 1	14.7	2.3	37	142	1.0	1.2	37.4	22.3
Average		52	14.7	2.0	40	140	1.1	1.7	38.5	21.7

† 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).

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 32. Mean yields † of 24 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Delta King	DK 5567 (RR)	58 ± 1	66	60	50	53	62	59	53
Dyna-Gro	33X55 (RR)	56 ± 1	63	55	49	51	64	67	42
Terral	TV 55R15 (RR)	56 ± 1	58	54	54	52	57	63	52
Armor	54-03 (RR)	55 ± 1	61	58	42	53	61	63	47
Delta King	DK 5366 (RR)	55 ± 1	60	54	50	51	59	62	48
Delta Grow	5160 RR	55 ± 1	67	57	42	50	67	61	40
Delta King	DK 5066 (RR)	55 ± 1	65	57	47	50	61	62	41
USG	540nRR	55 ± 1	60	56	43	53	65	65	40
USG	7515nRS	53 ± 1	66	52	45	52	62	62	33
MO Exp	S03-383 RR	53 ± 1	55	52	44	52	65	65	39
Terral	TV 52R14 (RR)	53 ± 1	60	54	46	50	51	62	48
USG	7553nRS	53 ± 1	63	50	43	49	61	62	41
Hornbeck	HBK R 5525 (RR)	53 ± 1	65	54	43	44	59	63	40
Midwest Premium Genetics	MPV 5505nRR (STS)	52 ± 1	64	52	36	54	63	59	38
Progeny	5250 RR	52 ± 1	62	59	40	47	55	58	44
Progeny	5115 RR	51 ± 1	62	51	42	56	54	58	36
Vigoro	V52N3RR	51 ± 1	64	50	30	54	58	57	44
Delta King	DK 5161 (RR)	51 ± 1	60	61	48	46	45	58	39
FFR	5033 RR	51 ± 1	62	57	47	49	46	58	37
Dyna-Gro	33B52 (RR)	49 ± 1	61	53	45	43	49	54	34
Gutwein	H-5053 RR	49 ± 1	60	50	39	46	52	58	35
USG	7505nRR	48 ± 1	59	51	39	50	56	53	29
Delta & Pine Land	DP 5414 RR	48 ± 1	56	47	37	48	54	51	41
Pioneer	95M30 (RR)	44 ± 1	59	46	32	41	45	51	36
Average (bu/a)		52	62	54	43	50	57	60	41
L.S.D._{.05} (bu/a)		3	6	8	7	7	12	8	10
C.V. (%)		11.1	6.3	10.5	11.2	10.1	13.7	9.3	16.6

† All yields are adjusted to 13% moisture.

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

Table 33. Mean yields † and agronomic characteristics of 24 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield	Moisture § (n=14)	Lodging (n=9)	Height (n=12)	Maturity (n=12)	Shattering (n=9)	Seed		
		± Std Err. (n=14)						Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Delta King	DK 5567 (RR)	58 ± 1	14.4	2.3	37	148	1.0	1.6	39.6	21.34
Dyna-Gro	33X55 (RR)	56 ± 1	14.8	2.0	40	147	1.0	2.0	40.5	21.5
Terral	TV 55R15 (RR)	56 ± 1	14.5	2.6	41	147	1.0	1.6	39.5	21.3
Armor	54-03 (RR)	55 ± 1	13.7	1.6	37	147	1.0	1.7	39.0	21.6
Delta King	DK 5366 (RR)	55 ± 1	14.2	3.1	40	148	1.0	1.6	39.3	21.4
Delta Grow	5160 RR	55 ± 1	14.6	3.0	41	138	1.2	2.1	39.8	22.6
Delta King	DK 5066 (RR)	55 ± 1	14.5	2.4	41	138	1.1	2.2	40.2	22.4
USG	540nRR	55 ± 1	14.1	1.7	39	147	1.0	1.8	39.6	21.7
USG	7515nRS	53 ± 1	14.3	2.4	42	137	1.1	2.2	39.7	22.5
MO Exp	S03-383 RR	53 ± 1	14.8	2.0	45	147	1.0	2.7	40.6	21.3
Terral	TV 52R14 (RR)	53 ± 1	14.3	2.6	40	143	1.0	1.5	40.4	21.6
USG	7553nRS	53 ± 1	13.6	1.6	39	147	1.0	1.6	38.3	21.9
Hornbeck	HBK R 5525 (RR)	53 ± 1	14.6	2.1	40	148	1.0	2.0	38.8	21.8
Midwest Premium Genetics	MPV 5505nRR (STS)	52 ± 1	13.6	1.5	38	146	1.0	1.8	38.7	21.8
Progeny	5250 RR	52 ± 1	14.6	1.9	37	147	1.0	1.8	39.1	21.6
Progeny	5115 RR	51 ± 1	14.7	2.0	44	139	1.1	2.2	38.3	22.7
Vigoro	V52N3RR	51 ± 1	14.5	2.0	36	147	1.0	2.1	39.4	21.5
Delta King	DK 5161 (RR)	51 ± 1	14.3	2.9	35	144	1.0	1.7	38.6	22.3
FFR	5033 RR	51 ± 1	14.9	2.2	39	138	1.0	1.8	41.7	20.8
Dyna-Gro	33B52 (RR)	49 ± 1	14.3	2.9	36	145	1.0	1.5	38.4	22.5
Gutwein	H-5053 RR	49 ± 1	14.1	2.6	39	136	1.2	2.5	39.8	21.7
USG	7505nRR	48 ± 1	14.1	2.8	43	138	1.1	2.4	40.6	21.3
Delta & Pine Land	DP 5414 RR	48 ± 1	14.7	2.4	42	145	1.0	1.9	41.3	20.2
Pioneer	95M30 (RR)	44 ± 1	14.1	2.5	38	144	1.0	1.8	39.2	21.3
	Average	52	14.3	2.3	40	144	1.0	1.9	39.6	21.7

† 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 34. Mean yields † of 13 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Armor	54-03 (RR)	60 ± 1	65	60	53	61	66	57	57
USG	540nRR	58 ± 1	64	60	49	54	68	62	51
USG	7553nRS	58 ± 1	66	57	53	55	63	59	51
Delta King	DK 5366 (RR)	57 ± 1	59	58	56	50	61	57	59
Midwest Premium Genetics	MPV 5505nRR (STS)	57 ± 1	66	55	48	59	65	57	48
Progeny	5250 RR	55 ± 1	62	60	50	48	56	53	55
FFR	5033 RR	55 ± 1	62	61	55	52	52	54	48
Terral	TV 55R15 (RR)	55 ± 1	56	53	54	47	58	59	56
Vigoro	V52N3RR	55 ± 1	65	54	44	54	60	51	53
Delta King	DK 5161 (RR)	54 ± 1	58	63	55	46	49	52	51
Dyna-Gro	33B52 (RR)	53 ± 1	58	59	56	46	53	52	51
Delta & Pine Land	DP 5414 RR	51 ± 1	56	52	47	48	57	49	50
Gutwein	H-5053 RR	50 ± 1	61	52	44	43	51	53	44
Average (bu/a)		55	61	57	51	51	58	55	52
L.S.D._{.05} (bu/a)		3	7	8	7	9	12	8	8
C.V. (%)		10.9	7.1	9.4	10.4	12.8	13.6	10.9	11.7

† All yields are adjusted to 13% moisture.

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

Table 35. Mean yields † and agronomic characteristics of 13 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=15)	Height (n=18)	Maturity (n=18)	Shattering (n=15)	Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Armor	54-03 (RR)	60 ± 1	13.7	1.7	38	147	1.0	1.8	39.4	21.5
USG	540nRR	58 ± 1	14.1	1.8	39	147	1.0	2.0	39.7	21.6
USG	7553nRS	58 ± 1	13.6	1.6	39	147	1.0	1.8	38.7	21.7
Delta King	DK 5366 (RR)	57 ± 1	14.3	3.2	39	148	1.0	1.9	39.5	21.4
Midwest Premium Genetics	MPV 5505nRR (STS)	57 ± 1	13.6	1.6	39	147	1.0	1.8	39.1	21.6
Progeny	5250 RR	55 ± 1	14.6	2.0	37	148	1.0	2.2	39.3	21.6
FFR	5033 RR	55 ± 1	15.1	2.1	39	139	1.0	1.8	41.6	20.9
Terral	TV 55R15 (RR)	55 ± 1	14.5	2.9	41	147	1.0	1.8	39.7	21.2
Vigoro	V52N3RR	55 ± 1	14.5	2.0	36	148	1.0	2.3	39.3	21.7
Delta King	DK 5161 (RR)	54 ± 1	14.2	3.1	35	145	1.0	2.0	38.9	22.2
Dyna-Gro	33B52 (RR)	53 ± 1	14.4	3.0	36	145	1.0	1.9	38.8	22.4
Delta & Pine Land	DP 5414 RR	51 ± 1	14.8	2.6	43	145	1.0	1.8	41.6	20.3
Gutwein	H-5053 RR	50 ± 1	14.0	2.5	40	137	1.1	2.6	39.8	21.7
Average		55	14.3	2.3	39	145	1.0	2.0	39.6	21.5

† 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.

Table 36. Yields † of 19 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties in nine County Standard Tests in Tennessee and Kentucky during 2006.

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	(KY)						Milan REC		
				Carlisle 6/7 §	Dyer <i>fi</i> 5/19	Gibson 6/14	Hardin 6/13	Haywood <i>f</i> 5/17	Lauderdale <i>fi</i> 6/6	Gibson <i>fi</i> 6/7	Obion 6/6	Weakley 5/24
A	FFR 5663	53.6	13.2	56.4	66.1	58.2	44.1	53.5	62.1	47.8	54.8	39.1
AB	*Armor 54-03	53.2	12.6	49.3	54.4	54.2	42.5	63.0	68.2	57.9	50.6	38.9
AB	**Delta King 5567	53.2	13.2	52.3	51.1	57.5	41.9	56.7	63.0	54.0	59.6	42.2
ABC	Hornbeck HBK R 5525	52.4	13.4	41.9	69.6	52.4	40.1	56.0	64.2	53.2	57.4	36.7
ABCD	**Dyna-Gro 33B52	50.9	13.1	37.4	60.1	52.7	41.7	56.7	62.5	52.7	56.5	38.1
ABCDE	***Progeny 5250	50.6	13.1	45.2	58.8	50.7	41.8	53.7	62.4	50.6	55.1	37.0
ABCDE	USG 7515nRS	50.4	12.9	51.2	42.2	49.0	35.7	58.7	62.2	50.7	64.8	39.0
ABCDE	Delta King 5367	49.9	13.1	43.6	55.6	52.7	48.7	57.9	66.2	42.5	47.9	34.4
ABCDE	***Vigoro V52N3RR	49.8	13.1	47.7	46.5	52.1	39.4	56.1	60.7	52.5	55.1	38.2
ABCDEF	Delta Grow DG5160	49.6	13.1	46.4	44.2	50.6	35.2	53.3	63.6	51.1	64.6	37.8
BCDEF	*Gutwein H-5053	49.4	13.0	53.3	47.8	51.0	35.4	53.0	69.5	48.7	49.2	36.9
BCDEF	Dyna-Gro 33X55	49.4	13.9	44.3	51.9	53.1	39.5	53.4	49.9	53.8	59.4	39.4
CDEF	Stine 5142	48.7	12.8	47.6	47.3	48.6	33.5	49.7	67.1	50.1	58.2	35.8
DEF	Excel 8509NRR	48.4	12.9	44.3	45.1	50.8	32.3	53.6	60.2	52.0	58.0	38.9
DEF	*FFR 5033	47.6	13.3	36.9	48.5	52.8	34.1	55.2	63.1	47.3	52.9	37.4
DEF	Pioneer 95M30	47.5	12.9	37.9	51.1	50.8	35.5	55.8	57.7	51.4	52.0	35.5
DEF	Croplan RC5222	47.4	13.0	46.2	44.3	50.6	39.5	61.2	53.4	43.1	52.1	36.6
EF	Deltapine DP5115	46.8	12.9	44.8	49.7	45.3	33.4	46.7	58.2	51.8	54.9	36.2
F	Progeny 5115	45.7	13.2	39.0	48.6	45.9	32.6	55.7	58.6	49.1	48.9	33.4
Average		49.7	13.1	45.6	51.7	51.5	38.2	55.3	61.7	50.5	55.4	37.4

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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

Milan REC = Research and Education Center at Milan

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

Table 37. Yields † and disease ratings § of 19 early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2006.

MS	Brand/Variety	CST Avg. Yield (n=11) bu/a	Moisture ‡ %	----- Research and Education Center at Milan -----				Sprayed ¶ Yield bu/a	Unsprayed Yield bu/a	SCN Race 2 2006
				SDS	Frogeye	Anthracnose	Brown Spot			
A	FFR 5663	53.6	13.2	2003 / 04 / 06 / / 0.3	2003 / 04 / 05 / 06 / / / 0.0	2006 5.7	2006 3.7	63.4	59.3	S
AB	*Armor 54-03	53.2	12.6	/ / 0.3	/ / 9.0 / 4.0	5.7	4.0	68.8	56.2	S
AB	**Delta King 5567	53.2	13.2	/ 2.0 / 0.7	/ 2.3 / 5.0 / 0.0	6.7	3.0	65.5	55.8	S
ABC	Hornbeck HBK R 5525	52.4	13.4	/ / 3.0	/ / / 0.0	5.7	3.7	63.2	51.7	S
ABCD	**Dyna-Gro 33B52	50.9	13.1	/ 5.0 / 1.0	/ 1.0 / 1.0 / 0.0	5.3	5.0	56.5	51.9	S
ABCDE	***Progeny 5250	50.6	13.1	2.0 / 4.7 / 0.7	5.0 / 6.3 / 8.0 / 3.7	5.3	5.7	63.8	56.7	S
ABCDE	USG 7515nRS	50.4	12.9	/ / 0.7	/ / / 5.7	7.0	3.7	62.8	58.8	MS
ABCDE	Delta King 5367	49.9	13.1	/ / 5.0	/ / / 0.0	6.7	3.7	37.9	29.3	S
ABCDE	***Vigoro V52N3RR	49.8	13.1	3.0 / 4.7 / 0.7	6.0 / 5.3 / 7.0 / 3.7	6.0	8.7	71.0	56.6	S
ABCDEF	Delta Grow DG5160	49.6	13.1	/ / 0.3	/ / / 6.3	7.3	3.0	61.4	56.0	S
BCDEF	*Gutwein H-5053	49.4	13.0	/ 2.7 / 0.0	/ 6.7 / 9.0 / 6.0	8.0	5.3	60.9	55.5	S
BCDEF	Dyna-Gro 33X55	49.4	13.9	/ / 0.3	/ / / 0.0	5.7	2.0	61.7	52.4	S
CDEF	Stine 5142	48.7	12.8	/ / 0.3	/ / / 3.3	7.3	4.3	56.7	58.9	S
DEF	Excel 8509NRR	48.4	12.9	/ / 2.0	/ / / 0.7	7.0	4.7	59.0	50.5	S
DEF	*FFR 5033	47.6	13.3	/ 5.7 / 0.7	/ 1.7 / 3.0 / 2.3	7.3	4.0	59.6	58.5	S
DEF	Pioneer 95M30	47.5	12.9	/ / 1.0	/ / / 0.7	5.3	5.3	57.2	47.1	S
DEF	Croplan RC5222	47.4	13.0	/ / 0.3	/ / / 4.0	6.3	6.3	60.1	48.8	S
EF	Deltapine DP5115	46.8	12.9	/ / 0.0	/ / / 6.0	6.3	3.7	58.7	50.1	S
F	Progeny 5115	45.7	13.2	/ / 1.0	/ / / 8.7	7.7	3.0	57.0	48.4	MS
Average (bu/a)		49.7	13.1					60.3	52.8	

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

¶ Sprayed plots at Milan treated with Headline SBR @ 9 oz./Acre + 0.37% Induce at 20 gpa at R3 growth stage (Aug 2).

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

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

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

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2005, 2004, and/or 2003.

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

Table 38. Overall average yields † and moistures ‡ of 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=9) and Research and Education Centers (n=7) in Tennessee in 2006.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield bu/a	Moisture %	Avg. Yield bu/a	Moisture %
FFR	5663 RR	54	13.2	57	14.2
Armor	54-03 (RR)	53	12.6	55	13.9
Delta King	DK 5567 (RR)	53	13.2	58	14.9
Hornbeck	HBK R 5525 (RR)	52	13.4	54	15.1
Dyna-Gro	33B52 (RR)	51	13.1	45	14.7
Progeny	5250 RR	51	13.1	51	14.9
USG	7515nRS	50	12.9	55	14.7
Vigoro	V52N3RR	50	13.1	54	14.6
Delta Grow	5160 RR	50	13.1	58	14.8
Dyna-Gro	33X55 (RR)	49	13.9	53	15.5
Gutwein	H-5053 RR	49	13.0	49	14.1
FFR	5033 RR	48	13.3	49	15.4
Pioneer	95M30 (RR)	48	12.9	47	14.5
Delta & Pine Land	DP 5115 RR/S	47	12.9	49	15.0
Progeny	5115 RR	46	13.2	53	14.8
Average (bu/a)		50	13.1	52	14.7

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 39. Mean yields † of 16 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill			Milan		Ames	
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
-----bu/a-----									
Delta King	DK 55T6 (RR)	57 ± 1	47	63	58	54	48	66	63
Terral	TV 59R16 (RR)	56 ± 1	55	63	55	52	61	52	55
USG	Allen	55 ± 1	52	58	53	51	62	59	47
USG	56379	54 ± 1	52	63	50	45	66	56	43
Progeny	5650 RR	52 ± 1	53	61	50	46	48	59	46
Delta & Pine Land	DP 5915 RR	51 ± 1	52	61	51	41	60	54	40
USG	56293	51 ± 1	48	55	49	47	73	50	32
Asgrow	AG5605 (RR)	50 ± 1	40	58	48	43	65	63	36
Delta & Pine Land	DP 5634 RR	50 ± 1	55	55	48	41	61	52	37
Dyna-Gro	3583 (RR)	50 ± 1	52	56	50	47	50	56	38
Terral	TV 57R16 (RR)	50 ± 1	42	54	53	42	59	57	42
Delta & Pine Land	DPX 5914 RR	50 ± 1	44	60	52	50	50	58	33
USG	75M74 (RR)	49 ± 1	45	60	45	47	57	53	38
Dyna-Gro	36N57 (RR)	49 ± 1	47	61	47	45	52	56	36
USG	56124	49 ± 1	46	54	44	45	65	55	35
Dyna-Gro	34J56 (RR)	47 ± 1	42	54	48	46	52	52	32
Average (bu/a)		52	49	59	50	46	58	57	41
L.S.D._{.05} (bu/a)		3	6	9	5	6	13	10	7
C.V. (%)		9.6	7.9	8.8	6.2	7.2	13.0	9.9	10.6

† All yields are adjusted to 13% moisture.

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

Table 40. Mean yields † and agronomic characteristics of 16 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2006.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=6)	Height (n=6)	Maturity (n=6)	Shattering (n=5)	Quality (n=4)	Protein (n=4)	Oil (n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Delta King	DK 55T6 (RR)	57 ± 1	14.5	2.0	40	148	1.0	1.4	38.8	21.4
Terral	TV 59R16 (RR)	56 ± 1	15.1	2.3	40	147	1.0	1.5	40.0	20.6
USG	Allen	55 ± 1	14.8	1.7	40	148	1.0	1.7	39.2	20.9
USG	56379	54 ± 1	15.0	1.4	40	147	1.0	1.3	38.6	21.2
Progeny	5650 RR	52 ± 1	14.9	2.5	40	148	1.0	1.5	36.9	22.1
Delta & Pine Land	DP 5915 RR	51 ± 1	14.9	1.9	40	147	1.0	2.9	39.0	21.0
USG	56293	51 ± 1	14.7	1.9	42	147	1.0	1.7	39.8	21.2
Asgrow	AG5605 (RR)	50 ± 1	13.9	1.3	37	144	1.0	1.6	37.4	22.1
Delta & Pine Land	DP 5634 RR	50 ± 1	14.3	2.3	42	144	1.0	1.8	38.5	21.2
Dyna-Gro	3583 (RR)	50 ± 1	14.7	1.8	40	148	1.0	1.5	37.6	21.9
Terral	TV 57R16 (RR)	50 ± 1	14.8	2.6	41	143	1.0	2.1	39.5	21.2
Delta & Pine Land	DPX 5914 RR	50 ± 1	14.4	1.6	38	144	1.0	1.8	39.1	21.1
USG	75M74 (RR)	49 ± 1	14.5	1.9	38	143	1.0	1.8	38.6	21.2
Dyna-Gro	36N57 (RR)	49 ± 1	14.5	1.9	37	144	1.0	1.8	39.4	21.2
USG	56124	49 ± 1	14.5	1.6	41	147	1.0	1.7	39.2	21.1
Dyna-Gro	34J56 (RR)	47 ± 1	14.1	2.0	44	144	1.1	1.7	38.4	20.9
Average		52	14.6	1.9	40	146	1.0	1.7	38.7	21.3

† 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 41. Mean yields † of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Spring Hill			Milan		Ames	
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
Progeny	5650 RR	52 ± 1	38	59	55	50	56	63	47
Delta & Pine Land	DP 5915 RR	52 ± 1	39	60	55	45	64	59	43
Dyna-Gro	36N57 (RR)	51 ± 1	37	58	51	51	57	60	42
Asgrow	AG5605 (RR)	50 ± 1	33	56	53	50	59	61	38
Dyna-Gro	3583 (RR)	49 ± 1	40	55	56	51	46	59	38
Delta & Pine Land	DP 5634 RR	49 ± 1	40	53	55	45	58	54	36
Average (bu/a)		51	38	57	54	49	56	59	41
L.S.D._{.05} (bu/a)		3	5	8	7	6	11	9	8
C.V. (%)		10.1	8.2	9.5	8.3	8.3	12.5	9.9	12.1

† All yields are adjusted to 13% moisture.

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

Table 42. Mean yields † and agronomic characteristics of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2005 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Moisture § (n=14)	Lodging (n=11)	Height (n=12)	Maturity (n=12)	Seed			
							hatterin (n=9)	Quality (n=8)	Protein (n=8)	Oil (n=8)
Progeny	5650 RR	52 ± 1	13.4	2.2	41	153	1.0	1.8	38.0	22.0
Delta & Pine Land	DP 5915 RR	52 ± 1	13.4	1.8	41	154	1.0	2.5	40.3	20.9
Dyna-Gro	36N57 (RR)	51 ± 1	13.1	2.1	37	147	1.0	2.0	40.8	21.0
Asgrow	AG5605 (RR)	50 ± 1	12.7	1.4	38	146	1.0	2.0	39.0	21.6
Dyna-Gro	3583 (RR)	49 ± 1	13.2	1.9	41	150	1.0	2.1	38.9	21.7
Delta & Pine Land	DP 5634 RR	49 ± 1	13.0	2.0	42	148	1.0	2.0	39.8	21.1
Average		51	13.1	1.9	40	150	1.0	2.1	39.5	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).

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 43. Mean yields † of four Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Delta & Pine Land	DP 5915 RR	56 ± 1	51	64	61	43	63	59	52
Asgrow	AG5605 (RR)	54 ± 1	50	58	56	48	61	58	49
Delta & Pine Land	DP 5634 RR	53 ± 1	54	57	58	44	60	52	49
Dyna-Gro	3583 (RR)	53 ± 1	53	58	60	48	50	51	49
Average (bu/a)		54	52	59	59	46	59	55	50
L.S.D._{.05} (bu/a)		3	8	8	8	6	13	10	8
C.V. (%)		10.4	8.6	8.6	8.5	8.6	14.5	12.7	8.8

† All yields are adjusted to 13% moisture.

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

Table 44. Mean yields † and agronomic characteristics of four Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2004 - 2006.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=17)	Height (n=18)	Maturity (n=18)	Shattering (n=15)	Seed		
								Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Delta & Pine Land	DP 5915 RR	56 ± 1	13.7	2.0	40	154	1.0	2.4	40.8	20.6
Asgrow	AG5605 (RR)	54 ± 1	13.3	1.4	37	147	1.0	2.0	39.6	21.4
Delta & Pine Land	DP 5634 RR	53 ± 1	13.7	2.2	41	149	1.0	2.2	40.2	21.0
Dyna-Gro	3583 (RR)	53 ± 1	13.8	1.9	40	151	1.0	2.1	39.3	21.5
Average		54	13.6	1.9	40	150	1.0	2.2	40.0	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).

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 45. Mean yields † of 10 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2006.

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	50 ± 1	44	57	34	39	75	55
MO Exp	Stoddard	50 ± 1	59	57	35	43	54	50
MO	Anand	49 ± 1	53	54	32	40	59	57
MO Exp	Jake	49 ± 1	51	50	33	43	63	54
VA	Teejay	49 ± 1	47	54	37	41	56	58
USG	5002T	48 ± 1	44	51	38	35	66	56
TN Exp	TN02-283	47 ± 1	45	55	30	42	58	52
AR	Ozark	44 ± 1	43	43	32	39	56	52
TN Exp	TN05-5110	41 ± 1	37	60	33	31	45	42
<i>Maturity Group IV</i>								
AR	UA 4805	43 ± 1	38	51	29	36	48	55
Average (bu/a)		47	46	53	34	39	58	53
L.S.D._{.05} (bu/a)		3	9	8	8	7	8	8
C.V. (%)		9.9	11.7	8.7	13.3	9.8	8.1	9.1

† All yields are adjusted to 13% moisture.

Table 46. Mean yields † and agronomic characteristics of 10 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2006.

Brand	Variety	Avg. Yield	Moisture ‡ (n=6)	Lodging (n=3)	Height (n=6)	Maturity (n=6)	Shattering (n=4)	Seed	Protein (n=4)	Oil (n=4)
		± Std Err. (n=6)						Quality (n=4)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
<i>Maturity Group V</i>										
USG	5601T	50 ± 1	14.7	2.4	40	141	1.0	1.6	40.4	20.9
MO Exp	Stoddard	50 ± 1	14.8	2.7	33	140	1.0	1.8	38.2	21.7
MO	Anand	49 ± 1	14.8	1.9	33	144	1.0	1.8	38.7	21.6
MO Exp	Jake	49 ± 1	15.2	2.2	36	144	1.0	2.5	38.5	21.2
VA	Teejay	49 ± 1	15.3	2.6	36	141	1.0	1.8	39.0	21.7
USG	5002T	48 ± 1	14.8	2.4	33	141	1.0	1.8	38.6	22.1
TN Exp	TN02-283	47 ± 1	15.0	2.2	36	144	1.0	2.3	38.3	20.9
AR	Ozark	44 ± 1	15.4	2.7	36	143	1.0	1.4	38.6	21.1
TN Exp	TN05-5110	41 ± 1	14.6	2.7	38	139	1.0	2.3	42.0	20.0
<i>Maturity Group IV</i>										
AR	UA 4805	43 ± 1	14.9	2.4	32	140	1.0	1.6	40.3	20.6
Average		47	14.9	2.4	35	142	1.0	1.9	39.3	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).

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 47. Mean yields † of seven Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2005 - 2006.

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>								
USG	5601T	53 ± 1	40	58	50	38	73	58
USG	5002T	50 ± 1	40	55	50	36	63	58
VA	Teejay	50 ± 1	42	55	50	39	63	53
MO	Anand	50 ± 1	46	54	46	36	60	57
TN Exp	TN02-283	50 ± 1	41	55	49	39	61	53
AR	Ozark	50 ± 1	37	48	49	38	67	59
<i>Maturity Group IV</i>								
AR	UA 4805	45 ± 1	35	50	43	37	55	50
Average (bu/a)		50	40	54	48	38	63	55
L.S.D._{.05} (bu/a)		3	6	7	9	7	7	8
C.V. (%)		9.8	10.4	9.3	9.0	12.6	7.9	10.6

† All yields are adjusted to 13% moisture.

Table 48. Mean yields † and agronomic characteristics of seven Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2005 - 2006.

Brand	Variety	Avg. Yield ± Std Err. (n=12)	Moisture ‡ (n=12)	Lodging (n=9)	Height (n=12)	Maturity (n=12)	Shattering (n=10)	Seed		
								Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
<i>Maturity Group V</i>										
USG	5601T	53 ± 1	13.8	2.2	39	145	1.0	1.9	41.2	20.7
USG	5002T	50 ± 1	14.3	2.3	32	144	1.0	2.1	39.6	21.9
VA	Teejay	50 ± 1	14.4	2.6	35	143	1.0	2.1	40.1	21.5
MO	Anand	50 ± 1	14.0	1.9	33	146	1.0	2.1	39.5	21.6
TN Exp	TN02-283	50 ± 1	14.2	2.0	34	146	1.0	2.4	39.5	20.8
AR	Ozark	50 ± 1	14.6	2.6	36	145	1.0	2.0	39.5	21.1
<i>Maturity Group IV</i>										
AR	UA 4805	45 ± 1	14.1	2.7	32	141	1.0	2.0	41.3	20.4
Average		50	14.2	2.3	34	144	1.0	2.1	40.1	21.1

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

Maturity = days after planting (DAP).

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

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 49. Mean yields † of five Maturity Group V Conventional soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2004 - 2006.

Brand	Variety	Avg. Yield ± Std Err. (n=18)	Spring Hill			Milan		
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
			-----bu/a-----					
USG	5601T	56 ± 1	54	63	58	41	67	56
AR	Ozark	55 ± 1	48	58	59	40	67	56
VA	Teejay	53 ± 1	54	58	51	43	61	53
USG	5002T	53 ± 1	50	62	57	38	58	53
MO	Anand	53 ± 1	57	60	49	40	58	54
Average (bu/a)		54	53	60	55	40	62	54
L.S.D._{.05} (bu/a)		3	6	7	8	7	11	8
C.V. (%)		10.5	8.4	7.9	8.9	12.0	13.1	11.8

† All yields are adjusted to 13% moisture.

Table 50. Mean yields † and agronomic characteristics of five Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2004 - 2006.

Brand	Variety	Avg. Yield ± Std Err. (n=18)	Moisture ‡ (n=18)	Lodging (n=12)	Height (n=18)	Maturity (n=18)	Shattering (n=14)	Seed		
								Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
USG	5601T	56 ± 1	13.6	2.1	38	146	1.0	2.0	41.7	20.6
AR	Ozark	55 ± 1	14.5	2.5	36	144	1.0	1.9	39.9	20.9
VA	Teejay	53 ± 1	14.3	2.3	35	142	1.0	2.2	40.3	21.4
USG	5002T	53 ± 1	14.1	2.3	32	144	1.0	2.3	40.2	21.8
MO	Anand	53 ± 1	14.2	1.8	33	147	1.0	2.3	40.0	21.5
Average		54	14.1	2.2	35	145	1.0	2.1	40.4	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 51. Yield comparisons of 10 soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in seven to eight environments in Tennessee during 2006.

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield†	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=7)</i>											
Asgrow	AG3906 (RR) Cruiser	63	66	41	36	43	60	49	---	51	+2
Asgrow	AG3906 (RR)	56	68	42	30	44	55	49	---	49	
Vigoro	V39N4RR (Cruiser)	59	65	42	36	43	59	45	---	50	+4
Vigoro	V39N4RR	53	60	40	28	41	55	44	---	46	
	L.S.D._{.05} (bu/a)	8	8	7	8	5	6	7	---	3	
	C.V. (%)	8.5	8.3	10.6	15.5	6.6	6.3	8.7	---	8.9	
<i>Maturity Group IV Early (n=8)</i>											
Progeny	4405 RR (Cruiser)	41	57	57	40	37	68	51	51	50	+2
Progeny	4405 RR	35	59	52	36	39	66	49	45	48	
Vigoro	V44N6RR (Cruiser)	34	65	52	44	35	70	55	43	50	+2
Vigoro	V44N6RR	33	61	50	37	39	70	51	42	48	
	L.S.D._{.05} (bu/a)	6	8	7	7	4	6	6	8	2	
	C.V. (%)	11.3	7.4	9.1	10.7	8.5	5.5	7.6	12.9	8.8	
<i>Maturity Group IV Late (n=7)</i>											
Asgrow	AG4903 (RR) Cruiser	83	64	64	51	30	71	59	---	60	0
Asgrow	AG4903 (RR)	78	65	62	47	34	73	59	---	60	
Delta King	DK 4667 (RR) (Cruiser)	81	52	73	47	29	65	59	---	58	+1
Delta King	DK 4667 (RR)	78	51	74	51	28	65	56	---	57	
	L.S.D._{.05} (bu/a)	7	8	8	8	6	9	7	---	3	
	C.V. (%)	6.2	8.2	7.6	9.9	12.9	8.2	7.7	---	8.3	

Table 51 (continued)

<i>Maturity Group V Early (n=7)</i>											
Delta King	DK 5567 (RR) (Cruiser)	78	---	66	52	50	71	64	44	61	+3
Delta King	DK 5567 (RR)	75	---	67	41	50	70	58	46	58	
USG	7553nRS (Gaucho)	79	---	53	36	45	70	55	35	53	0
USG	7553nRS	72	---	55	33	44	74	59	32	53	
	L.S.D._{.05} (bu/a)	7	---	8	8	8	10	7	8	3	
	C.V. (%)	6.1	---	9.0	13.5	11.0	9.1	7.9	13.3	9.5	
<i>Maturity Group V Late (n=7)</i>											
USG	Allen (Gaucho)	51	---	63	48	49	63	62	49	55	0
USG	Allen	52	---	58	53	51	62	59	47	55	
Progeny	5650 RR (Cruiser)	53	---	66	55	47	53	58	46	54	+2
Progeny	5650 RR	53	---	61	50	46	48	59	46	52	
	L.S.D._{.05} (bu/a)	6	---	9	5	6	13	10	7	3	
	C.V. (%)	7.9	---	8.8	6.2	7.2	13	9.9	10.6	9.6	
Average -- Treated Seed (bu/a)		62	61	58	44	41	65	56	45	54	+2
Average -- Untreated Seed (bu/a)		58	61	56	40	41	64	54	43	52	

† All yields are adjusted to 13% moisture.

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

Table 52. Comparisons of overall mean yields and agronomic characteristics of 10 soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in seven to eight environments in Tennessee during 2006.

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering -----Score-----	Seed	Protein %	Oil %
								Quality		
<i>Maturity Group III (n=7)</i>										
Asgrow	AG3906 (RR) Cruiser	51	14.4	1.1	33	121	1.1	2.7	38.4	23.5
Asgrow	AG3906 (RR)	49	14.8	1.1	33	121	1.1	2.4	38.2	23.4
Vigoro	V39N4RR (Cruiser)	50	15.0	1.2	33	121	1.0	2.5	38.6	23.5
Vigoro	V39N4RR	46	14.9	1.1	33	120	1.1	2.5	38.4	23.5
<i>Maturity Group IV Early (n=8)</i>										
Progeny	4405 RR (Cruiser)	50	14.3	1.8	40	124	1.1	2.6	39.4	22.4
Progeny	4405 RR	48	14.3	1.7	39	125	1.3	2.6	38.5	22.7
Vigoro	V44N6RR (Cruiser)	50	14.2	1.8	39	126	1.2	2.7	38.9	22.7
Vigoro	V44N6RR	48	14.1	1.5	38	124	1.2	2.5	38.7	22.8
<i>Maturity Group IV Late (n=7)</i>										
Asgrow	AG4903 (RR) Cruiser	60	14.2	1.4	37	133	1.0	1.7	37.8	22.4
Asgrow	AG4903 (RR)	60	14.3	1.4	36	133	1.0	1.7	37.8	22.4
Delta King	DK 4667 (RR) (Cruiser)	58	14.2	2.0	41	128	1.0	2.1	37.6	21.8
Delta King	DK 4667 (RR)	57	14.1	2.2	40	130	1.0	2.1	37.5	22.0
<i>Maturity Group V Early (n=7)</i>										
Delta King	DK 5567 (RR) (Cruiser)	61	14.5	2.3	39	145	1	1.3	38.8	21.3
Delta King	DK 5567 (RR)	58	14.9	2.2	37	145	1	1.4	38.6	21.4
USG	7553nRS (Gaucho)	53	13.9	1.4	40	143	1	1.6	37.2	22.0
USG	7553nRS	53	13.6	1.2	39	143	1	1.3	36.8	22.1
<i>Maturity Group V Late (n=7)</i>										
USG	Allen (Gaucho)	55	14.6	1.6	41	148	1	1.6	39.3	20.8
USG	Allen	55	14.8	1.7	40	148	1	1.7	39.2	20.9
Progeny	5650 RR (Cruiser)	54	14.8	2.4	41	150	1.0	1.5	36.9	22.0
Progeny	5650 RR	52	14.9	2.5	40	148	1.0	1.5	36.9	22.1

† All yields are adjusted to 13% moisture.

Protein & Oil on dry weight basis.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

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 53. Yield comparisons of three soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 12 or 14 environments in Tennessee for two years (2005 - 2006).

Brand	Variety ‡	Knoxville	Crossville	Spring Hill			Milan		Avg. Yield†	Avg. Yield Difference
				Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.		
<i>Maturity Group III (n=12)</i>										
Asgrow	AG3906 (RR) Cruiser	59	---	40	37	47	59	53	49	+ 2
Asgrow	AG3906 (RR)	59	---	38	33	45	56	53	47	
Vigoro	V39N4RR (Cruiser)	57	---	41	38	42	59	47	47	+ 1
Vigoro	V39N4RR	52	---	41	34	41	57	49	46	
L.S.D._{.05} (bu/a)		9	---	7	6	5	6	8	3	
C.V. (%)		10.9	---	12.1	11.4	7.9	7.3	10.6	10.0	
<i>Maturity Group IV Late (n=14)</i>										
Asgrow	AG4903 (RR) Cruiser	72	58	56	48	31	73	56	56	- 1
Asgrow	AG4903 (RR)	68	58	58	48	31	75	57	57	
L.S.D._{.05} (bu/a)		6	6	8	8	6	11	8	3	
C.V. (%)		6.7	8.3	9.4	12.1	15.6	11.7	10.2	10.3	
Average -- Treated Seed (bu/a)		63	58	46	41	40	64	52	51	+ 1
Average -- Untreated Seed (bu/a)		60	58	45	39	39	63	53	50	

† All yields are adjusted to 13% moisture.

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

Table 54. Comparisons of overall mean yields and agronomic characteristics of three soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 12 or 14 environments in Tennessee for two years (2005-2006).

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Seed		Protein %	Oil %
							Shattering -----Score-----	Quality		
<i>Maturity Group III (n=12)</i>										
Asgrow	AG3906 (RR) Cruiser	49	14.7	1.7	35	122	1.0	2.5	38.9	23.3
Asgrow	AG3906 (RR)	47	14.9	1.6	34	122	1.0	2.2	38.4	23.5
Vigoro	V39N4RR (Cruiser)	47	14.8	2.1	36	122	1.0	2.5	39.1	23.1
Vigoro	V39N4RR	46	14.7	2.1	35	122	1.1	2.7	39.1	23.2
<i>Maturity Group IV Late (n=14)</i>										
Asgrow	AG4903 (RR) Cruiser	56	14.6	1.6	37	133	1.0	1.9	38.6	22.5
Asgrow	AG4903 (RR)	57	14.8	1.6	37	133	1.0	1.9	38.5	22.6

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

Maturity = days after planting (DAP).

Protein & Oil on dry weight basis.

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

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

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

Table 55. Characteristics of soybean varieties evaluated in Tennessee during 2006, as provided by the seed company.

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
AR	Ozark	CV5	5.2	---	3	R	---	R	P	G
AR	UA 4805	CV4	4.8	---	---	---	---	---	P	G
Armor	42-P7	RR3	3.9	RR	R3	R	MR	MR	P	T
Armor	45-M1	R4E	4.5	RR	---	---	---	---	---	---
Armor	47-G7 (RR)	R4L	4.7	RR	3,6,9,14	M	M	M	W	T
Armor	49-T3 (RR)	R4L	4.8	RR	3,14	M	MR	M	P	G
Armor	49-V6	R4L	4.9	RR	MR 3	R	M	M	P	T
Armor	52-U2	R5E	5.2	RR	MR 3,14	R	MR	M	W	G
Armor	54-03 (RR)	R5E	5.4	RR	3, 14	MR	MR	MS	W	G
Armor	AFX 3907	RR3	3.9	RR	MR 3	R	M	M	P	T
Armor	AFX 4784	R4L	4.7	RR	---	---	---	---	---	---
Armor	X4114	R4E	4.1	RR	3, 14, MR 6	---	---	---	---	T
Asgrow	AG 3705	RR3	3.7	RR	MR 3	---	---	---	P	T
Asgrow	AG 4103	R4E	4.1	RR	MR 3	---	---	---	W	G
Asgrow	AG3906 (RR)	RR3	3.9	RR	MR 3	---	---	---	P	T
Asgrow	AG3906 (RR) Cruiser	RR3	3.9	RR	MR 3	---	---	---	P	T
Asgrow	AG4404 (RR)	R4E	4.4	RR	MR 3,14	---	---	---	W	T
Asgrow	AG4703 (RR)	R4L	4.7	RR	S	---	---	---	P	LT
Asgrow	AG4903 (RR)	R4L	4.9	RR	S	---	---	---	P	LT
Asgrow	AG4903 (RR) Cruiser	R4L	4.9	RR	S	---	---	---	P	LT
Asgrow	AG5605 (RR)	R5L	5.6	RR	R 3, MR 14	---	---	---	P	G
Croplan	RC 4955	R4L	4.9	RR	R3	R	R	R	P	T
Crow's	C 4444 R	R4E	4.4	RR	R3, MR14	R	MR	MR	P	T
Crow's	C 4817 R	R4L	4.8	RR	MR 3,MR14	MS	MR	MR	P	T
Crow's	CRX 451-6	R4E	4.5	RR	R3	MR	MR	MR	W	T
DeKalb	DKB42-51	R4E	4.2	RR	MR 3	---	---	---	P	G
DeKalb	DKB46-51	R4L	4.6	RR	R3,14	---	---	---	W	T
Delta & Pine Land	DP 3861 RR	RR3	3.8	RR	3	R	MR	R	P	G
Delta & Pine Land	DP 4331 RR	R4E	4.3	RR	MR 3	MR	R	MR	P	T
Delta & Pine Land	DP 4546 RR	R4E	4.5	RR	None	R	MR	R	W	T
Delta & Pine Land	DP 4724 RR	R4L	4.7	RR	3	R	R	R	P	T
Delta & Pine Land	DP 5115 RR/S	R5E	5.1	RR/STS	---	R	MR	MR	W	T
Delta & Pine Land	DP 5414 RR	R5E	5.4	RR	3	R	MR	R	W	T
Delta & Pine Land	DP 5634 RR	R5L	5.6	RR	1,3	R	MR	R	W	T
Delta & Pine Land	DP 5915 RR	R5L	5.9	RR	3	R	R	R	W	T
Delta & Pine Land	DPX 3994 RR	RR3	3.9	RR	MR 3	R	MR	MR	W	T
Delta & Pine Land	DPX 4112 RR/S	R4E	4.1	RR/STS	---	R	S	MR	P	T
Delta & Pine Land	DPX 4919 RR/S	R4L	4.9	RR/STS	---	R	R	MR	W	T
Delta & Pine Land	DPX 5914 RR	R5L	5.9	RR	3, MR 14	R	MR	MR	P	T
Delta Center	JTN-4206 (RR)	R4L	4.6	RR	---	---	---	---	P	T

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Delta Grow	3950 RR	RR3	3.9	RR	1, 3	MR	MR	M	P	T
Delta Grow	3960 RR	RR3	3.9	RR	3	R	MR	MS	P	T
Delta Grow	4150 RR	R4E	4.1	RR	3	M	MR	M	W	T
Delta Grow	4460 RR	R4E	4.4	RR	3, 14	M	MR	MR	P	T
Delta Grow	4660 RR	R4L	4.6	RR	3, 14	MR	MR	MR	P	T
Delta Grow	4770 RR	R4L	4.7	RR	3	MR	M	M	P	LT
Delta Grow	4840 RR	R4L	4.8	RR	3, 14	M	M	MR	P	T
Delta Grow	4860 RR	R4L	4.8	RR	3, 14	MR	MR	M	P	T
Delta Grow	4960 RR	R4L	4.9	RR	3,14	R	MR	MR	P	G
Delta Grow	4970 RR	R4L	4.9	RR	3, 14	R	M	MR	P	T
Delta Grow	5160 RR	R5E	5.1	RR	3	MR	M	MR	P	G
Delta Grow	5300 RR	R5E	5.3	RR	3	M	M	M	W	G
Delta Grow	5470 RR	R5E	5.4	RR	3, 14	M	MR	M	W	T
Delta King	DK 3964 RR	RR3	3.9	RR	3,2,5,14	R	MR	MR	W	T
Delta King	DK 3967 (RR)	RR3	3.9	RR	3,14	---	R	---	P	T
Delta King	DK 3968 (RR)	RR3	3.9	RR	3,6,14	R	MS	MR	W	G
Delta King	DK 4461 (RR)	R4L	4.6	RR	2,5,6	MR	MR	MR	P	LT
Delta King	DK 4667 (RR)	R4L	4.6	RR	3,14	MR	R	MR	P	T
Delta King	DK 4667 (RR) (Cruiser)	R4L	4.6	RR	3,14	MR	R	MR	P	T
Delta King	DK 4763 (RR)	R4L	4.7	RR	R 3, MR 5	MS	MS	MS	W	T
Delta King	DK 4764 (RR)	R4L	4.7	RR	3,14	R	R	---	P	T
Delta King	DK 4866 (RR/STS)	R4L	4.8	RR/STS	MR 3	MR	R	MS	P	T
Delta King	DK 4967 (RR)	R4L	4.9	RR	3,6,14	R	MR	MR	P	T
Delta King	DK 4968 (RR)	R4L	4.9	RR	2	R	MR	R	P	G
Delta King	DK 5066 (RR)	R5E	5.0	RR	3,14	R	R	MR	P	G
Delta King	DK 5161 (RR)	R5E	5.1	RR	3,14	R	MS	MR	W	G
Delta King	DK 52K6 (RR)	R5E	5.2	RR	3,14	MR	MR	R	P	T
Delta King	DK 5366 (RR)	R5E	5.3	RR	3,14	MR	MR	R	P	G
Delta King	DK 5567 (RR)	R5E	5.5	RR	3	R	R	MR	W	G
Delta King	DK 5567 (RR) (Cruiser)	R5E	5.5	RR	3	R	R	MR	W	G
Delta King	DK 55T6 (RR)	R5L	5.6	RR	3, 14	MR	MR	R	W	G
Delta King	DK XTJ 39T6 (RR)	RR3	3.9	RR	3	R	R	R	P	T
Delta King	DK XTJ 703 (RR)	R5E	5.0	RR	2	R	MR	R	P	G
Delta King	DK XTJ 704 (RR)	R5E	5.0	RR	---	---	MR	MR	W	G
Delta King	DK 4567 (RR)	R4E	4.4	RR	2	---	MR	R	W	T
Delta King	DK XTJ 747 (RR)	R4L	4.7	RR	3	---	MR	R	W	T
Delta King	DK XTJ 750 (RR)	R4L	4.9	RR	---	---	MR	MR	W	G
Delta King	DK 5368 (RR)	R5E	5.3	RR	4	R	MR	R	P	G
Dyna-Gro	31J39 (RR)	RR3	3.9	RR	MS 3	R	R	MR	P	T

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Dyna-Gro	32A53 (RR)	R5E	5.3	RR	MR 3, 14	R	MR	MR	P	T
Dyna-Gro	32C38 (RR/STS)	RR3	3.8	RR/STS	R3, MR14	---	MR	---	W	T
Dyna-Gro	32R46 (RR/STS)	R4L	4.6	RR/STS	R3, MR14	R	MR	MR	P	G
Dyna-Gro	3373 (RR)	RR3	3.7	RR	R 3, MR 14	MR	MR	MR	P	G
Dyna-Gro	33B52 (RR)	R5E	5.2	RR	MR 3,14	R	MR	MR	W	G
Dyna-Gro	33X55 (RR)	R5E	5.5	RR	R 3, MR 14	MR	MR	R	P	T
Dyna-Gro	3443 (RR)	R4E	4.4	RR	MR 2,3,14	MR	MR	MS	P	T
Dyna-Gro	3481 (RR)	R4L	4.8	RR	R 3,5 MR 6,9,14	MR	MR	MR	P	T
Dyna-Gro	34J56 (RR)	R5L	5.6	RR	R 3, 14	MR	MR	MR	P	T
Dyna-Gro	3583 (RR)	R5L	5.9	RR	R 3, MR 14	MR	MR	MR	W	G
Dyna-Gro	35B40 (RR)	R4E	4.0	RR	R 3, MR 14	MR	MR	MR	W	T
Dyna-Gro	35Z49 (RR)	R4L	4.9	RR	R 3, MR 14	R	R	MR	P	G
Dyna-Gro	36M49 (RR)	R4L	4.9	RR	R3, MR14	MR	MR	MR	P	T
Dyna-Gro	36N57 (RR)	R5L	5.7	RR	MR 3	MR	MR	MR	P	T
Dyna-Gro	36Y48 (RR / STS)	R4L	4.8	RR / STS	R 3, MR 14	MR	MR	MS	P	G
Dyna-Gro	37A44 (RR)	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	P	T
Dyna-Gro	37F46 (RR)	R4L	4.6	RR	R3, MR14	MR	MR	MR	P	T
Dyna-Gro	37P49 (RR)	R4L	4.9	RR	MS 3, 14	S	MR	MR	P	T
Excel Brand	8396 RR/STS	RR3	3.9	RR/STS	MR 3	---	---	---	P	LT
Excel Brand	8427N RR/STS	R4E	4.2	RR/STS	R 3	---	MR	---	P	T
Excel Brand	8447N RR	R4L	4.7	RR	MR 3	---	---	---	W	LT
Excel Brand	8450N RR	R4E	4.5	RR	MR 3	---	MR	---	W	LT
Excel Brand	8481N RR	R4L	4.8	RR	R 3	---	---	---	S	T
Excel Brand	8493N RR	R4L	4.9	RR	MR 3	---	MR	---	P	T
Excel Brand	8509N RR	R4L	4.9	RR	R3	---	MR	---	P	T
Excel Brand	8512 N RR	R5E	5.1	RR	MR 3, MR 4	---	---	---	W	T
FFR	3990 RR	RR3	3.9	RR	MR 3	MR	R	---	W	LT
FFR	4545 RR	R4E	4.5	RR	MR 3	R	R	S	W	LT
FFR	4886 RR	R4L	4.8	RR	3, 14	MR	MR	MR	P	G
FFR	5033 RR	R5E	5.0	RR	3,14	MR	M	M	P	G
FFR	5116 RR	R5E	5.1	RR	R 3	MR	MR	R	W	G
FFR	5663 RR	R5E	5.5	RR	3, 14	R	R	R	P	T
Gutwein	H-3606 RR	RR3	3.6	RR	3	---	---	---	P	G
Gutwein	H-4534 RR	R4E	4.5	RR	MR 3, 14	---	---	---	P	T
Gutwein	H-4878 RR	R4L	4.8	RR	3	---	---	---	P	T
Gutwein	H-5053 RR	R5E	5.0	RR	3, 14	---	---	---	P	T
Hornbeck	HBK R 3824 (RR)	RR3	3.9	RR	MS 3	R	MR	M	P	LT
Hornbeck	HBK R 4623 (RR)	R4E	4.5	RR	R 3, MR 14	R	MR	R	P	T
Hornbeck	HBK R 4724 (RR)	R4L	4.7	RR	---	R	R	MS	P	LT
Hornbeck	HBK R 4924 (RR)	R4L	4.9	RR	3, MR 14	R	R	S	P	LT

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Hornbeck	HBK R 5226 (RR)	R5E	5.2	RR	MR 3, 14	R	M	MR	P	T
Hornbeck	HBK R 5525 (RR)	R5E	5.5	RR	R 3, MR 14	R	M	MR	P	T
Midwest Premium Genetics	MPG Exp 7448nRR	R4L	4.8	RR	---	R	R	S	P	T
Midwest Premium Genetics	MPG Exp 7450nRR	R5E	5.0	RR	3,14	R	R	R	W	T
Midwest Premium Genetics	MPG Exp 7552nRR	R5E	5.2	RR	1,2,3,5,6,9,14	MR	MR	R	P	T
Midwest Premium Genetics	MPV 4905nRR	R4L	4.9	RR	3, 14	R	R	R	P	T
Midwest Premium Genetics	MPV 5206nRR	R5E	5.2	RR	1,2,3,5,6,9,14	R	R	R	P	T
Midwest Premium Genetics	MPV 5407nRR	R5E	5.4	RR	3,14	R	R	R	W	T
Midwest Premium Genetics	MPV 5505nRR (STS)	R5E	5.5	RR/STS	MR 3	R	R	R	W	G
MO	Anand	CV5	5.6	---	2,3,14,5	R	R	R	P	T
MO Exp	Jake	CV5	5.4	---	1,2,3,5,14	MR	MR	MR	P	T
MO Exp	S03-007 RR	R4L	4.8	RR	S	R	MR	MR	W	T
MO Exp	S03-051 RR	R4E	4.2	RR	MS	R	MR	MR	W	T
MO Exp	S03-058 RR	R4E	4.3	RR	MS	R	MR	MR	W	T
MO Exp	S03-328 RR	R5E	5.1	RR	MS	R	MR	MR	W	T
MO Exp	S03-383 RR	R5E	5.4	RR	R 3, 14	R	MR	MR	W	T
MO Exp	Stoddard	CV5	5.0	---	1,2,3,5,14	MR	MR	MR	W	T
Morsoy	RT 4480N (RR)	R4E	4.4	RR	MR 3,14	R	R	R	P	LT
Morsoy	RT 4485N (RR)	R4E	4.4	RR	R3, MR 14	R	R	R	P	LT
Morsoy	RT 4706N (RR)	R4L	4.7	RR	R 3	R	R	R	P	G
Morsoy	RT 4755N (RR)	R4L	4.7	RR	R 3	R	S	R	P	G
Morsoy	RT 4806N (RR)	R4L	4.8	RR	MR 3, 14	R	R	R	P	LT
Morsoy	RT 4914N (RR)	R4L	4.9	RR	R 3	R	R	R	P	LT
Morsoy	RT 4993N (RR)	R4L	4.9	RR	R 3,14	R	R	R	P	LT
Morsoy	RT 5206N (RR)	R5E	5.2	RR	MR 3	R	R	R	P	T
Morsoy	RTS 4955N (RR)	R4L	4.9	RR/STS	R 3, MR 14	R	R	S	P	G
N.K. Brand	S44-J5	R4E	4.4	RR	3,14	---	---	---	P	G
N.K. Brand	S 49-Q9 (RR)	R4L	4.9	RR	3, 9, 14	R	R	---	P	G
Pioneer	93M90 (RR)	RR3	3.9	RR	3,14	---	MR	MR	P	G
Pioneer	94B73 (RR)	R4L	4.7	RR	---	MR	MR	R	P	LT
Pioneer	94M80 (RR)	R4L	4.8	RR	3,14	MR	R	MR	W	T
Pioneer	95M30 (RR)	R5E	5.3	RR	3,14	R	---	R	W	T
Progeny	3900 RR	RR3	3.9	RR	R 2,3,5 MR 14	T	MR	T	P	LT
Progeny	3906 RR	RR3	3.9	RR	R 3, MR 14	T	MR	T	P	G
Progeny	3916 RR	RR3	3.9	RR	3	R	MR	T	P	T
Progeny	4206 RR	R4E	4.2	RR	R 3, MR 14	T	MR	MR	P	LT
Progeny	4216 RR	R4E	4.2	RR	3	MR	MR	T	P	T
Progeny	4405 RR	R4E	4.4	RR	R 2,3 MR 14	MR	T	R	P	LT
Progeny	4405 RR (Cruiser)	R4E	4.4	RR	R 2, 3 MR 14	MR	T	R	P	LT

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Progeny	4406 RR	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	P	LT
Progeny	4506 RR	R4E	4.5	RR	R 3	MR	MR	MR	P	T
Progeny	4606 RR	R4L	4.6	RR	R 3, MR 14	---	MR	MR	P	G
Progeny	4706 RR	R4L	4.7	RR	R 3, MR 14	T	MR	T	W	T
Progeny	4716 RR	R4L	4.7	RR	MR 3	T	T	T	W	LT
Progeny	4804 RR	R4L	4.8	RR	R 3, MR 14	T	MR	MR	P	LT
Progeny	4805 RR	R4L	4.8	RR	MR 3	R	T	T	P	LT
Progeny	4906 RR	R4L	4.9	RR	R 3, MR 14	S	MR	MR	P	T
Progeny	4949 RR	R4L	4.9	RR	---	MR	T	R	W	T
Progeny	5115 RR	R5E	5.1	RR	R 3	T	MR	MR	P	LT
Progeny	5205 RR	R5E	5.2	RR	R 3	T	T	T	P	LT
Progeny	5250 RR	R5E	5.2	RR	R 1,2,3, MR 14	T	T	MR	W	T
Progeny	5260 RR	R5E	5.2	RR	R 3	T	T	MR	W	G
Progeny	5406 RR	R5E	5.4	RR	R 3	MR	MR	MR	W	G
Progeny	5650 RR	R5L	5.6	RR	MR 3	M	R	R	W	G
Progeny	5650 RR (Cruiser)	R5L	5.6	RR	MR 3	M	R	R	W	G
Schillinger Seed	495 RC	R4L	4.9	RR	R 3	R	MS	R	P	LT
Steyer	4040 RR Scn	R4E	4.0	RR	R 3, MR 14	---	MR	MR	P	LT
Steyer	4420 RR Scn	R4E	4.4	RR	3,14	MS	MS	MR	P	LT
Steyer	4600 RR Scn	R4L	4.6	RR	MR 3, 14	MR	MR	MR	P	LT
Stine	S 4842-4 (RR)	R4L	4.8	RR	---	---	---	---	---	---
Terral	TV 48R14 (RR)	R4L	4.8	RR	R3	R	---	R	P	T
Terral	TV 52R14 (RR)	R5E	5.2	RR	R 3, MR 14	MR	M	MR	W	G
Terral	TV 55R15 (RR)	R5E	5.5	RR	MR 3,14	MS	---	MR	P	G
Terral	TV 57R16 (RR)	R5L	5.7	RR	R 3	R	---	R	P	T
Terral	TV 59R16 (RR)	R5L	5.9	RR	R 3,14	R	---	MR	W	G
Terral	TVX 47R017 (RR)	R4L	4.7	RR	R 3, 14	R	---	---	P	G
Terral	TVX 49R017 (RR)	R4L	4.9	RR	R 3, 14	MR	---	---	P	T
Terral	TVX 49R270 (RR)	R4L	4.9	RR	R 3	---	MR	---	P	LT
Terral	TVX 53R017 (RR)	R5E	5.2	RR	R 3,5,14	MR	---	---	P	T
TN Exp	TN02-283	CV5	5.8	---	2,3,5,14	---	---	---	P	T
TN Exp	TN03-012 RR	R4L	4.8	RR	---	---	---	---	P	G
TN Exp	TN05-3503 RR	R4E	4.1	RR	---	---	---	---	P	T
TN Exp	TN05-4534 RR	RR3	3.9	RR	---	---	---	---	P	T
TN Exp	TN05-5110	CV5	5.6	---	2,3,5,14	---	---	---	P	T
Trisler Seed	Trisoy 4557RR (CN)	R4E	4.5	RR	R 3	S	R	S	P	LT
Trisler Seed	Trisoy 4838RR (CN)	R4L	4.8	RR	MR 14	S	S	S	P	T
Trisler Seed	Trisoy 4858RR (CN)	R4L	4.8	RR	MR 3	S	MR	MR	W	T
Trisler Seed	Trisoy 5060RR (CN)	R5E	5.0	RR	MR 14	S	S	S	P	LT
USG	56124	R5L	5.6	RR	---	R	MR	MR	W	G

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
USG	56293	R5L	5.6	RR	---	R	MR	MR	W	G
USG	56379	R5L	5.6	RR	---	R	MR	MR	W	G
USG	5002T	CV5	5.0	---	---	R	MR	R	W	T
USG	540nRR	R5E	5.4	RR	MR 3, 14	R	R	---	W	T
USG	5601T	CV5	5.6	---	---	R	MR	MR	W	G
USG	7384nRS	RR3	3.8	RR/STS	R3, MR 14	---	MR	---	W	G
USG	7393nRR	RR3	3.9	RR	R 3, MR 14	R	MR	S	P	LT
USG	7423nRS	R4E	4.2	RR/STS	R 3, MR 14	R	MR	R	P	T
USG	7434nRR	R4E	4.3	RR	R3	---	R	---	P	T
USG	7440nRR	R4E	4.4	RR	MR 3,14	R	MR	MR	P	LT
USG	7443nRR	R4E	4.3	RR	MR 3, 14	S	MR	R	W	T
USG	7475nRR	R4L	4.7	RR	---	R	---	MR	P	LT
USG	747R6 (RR)	R4L	4.7	RR	R 3	---	---	MR	P	T
USG	7494nRR	R4L	4.9	RR	R3, 14	---	MR	---	P	LT
USG	7495nRS	R4L	4.9	RR/STS	R 3, MR 14	---	MR	---	P	G
USG	74A45 (RR)	R4E	4.5	RR	R 3, MR 14	---	MR	MR	P	LT
USG	74A76 (RR)	R4L	4.7	RR	MR 3,14	---	MR	MR	P	LT
USG	74A91 (RR)	R4L	4.9	RR	---	---	MR	MR	P	LT
USG	74C36 (RR)	R4E	4.3	RR	MR 3,14	R	R	MR	P	T
USG	74F96 (RR)	R4L	4.9	RR	MR 3	R	MR	MR	P	LT
USG	74T85 (RR)	R4L	4.8	RR	MR 3	---	---	---	P	LT
USG	7505nRR	R5E	5.0	RR	R 3	---	---	---	P	LT
USG	7515nRS	R5E	5.1	RR/STS	R 3, MR 14	---	MR	---	P	G
USG	7553nRS	R5E	5.5	RR/STS	MR 3,14	R	MR	MR	W	G
USG	7553nRS (STS) (Gaucho)	R5E	5.5	RR/STS	MR 3,14	R	MR	MR	W	G
USG	75J32 (RR)	R5E	5.3	RR	MR 3,14	---	MR	MR	P	G
USG	75M16 (RR)	R5E	5.1	RR	R 3	MR	MR	---	W	G
USG	75M74 (RR)	R5L	5.7	RR	MR 3	MR	MR	MR	P	T
USG	Allen	R5L	5.6	RR	---	R	MR	MR	W	G
USG	Allen (Gaucho)	R5L	5.6	RR	---	R	MR	MR	W	G
VA	Teejay	CV5	5.3	---	---	R	---	---	P	G
Vigoro	V36N5RR	RR3	3.6	RR	3,14	R	MR	---	P	G
Vigoro	V39N4RR	RR3	3.9	RR	R3, MR14	---	MR	MS	P	LT
Vigoro	V39N4RR (Cruiser)	RR3	3.9	RR	R3, MR14	---	MR	MS	P	LT
Vigoro	V39N7RR	RR3	3.9	RR	3	---	MR	---	W	G
Vigoro	V41N6RR	R4E	4.1	RR	MR 3	---	R	---	P	LT
Vigoro	V42N3RR	R4E	4.2	RR	R 3,MR 14	MR	MR	R	P	T
Vigoro	V42N7RS	R4E	4.2	RR/STS	3,14	---	MR	MS	W	T
Vigoro	V44N6RR	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	P	LT

Table 55 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Vigoro	V44N6RR (Cruiser)	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	P	LT
Vigoro	V49N6RR	R4L	4.9	RR	R 3	---	MR	MR	P	LT
Vigoro	V50N6RR	R4L	4.9	RR	R 3	MR	MR	MR	P	LT
Vigoro	V50N7RS	R5E	5.0	RR/STS	3,14	MR	MR	MS	P	G
Vigoro	V51N7RS	R5E	5.1	RR/STS	3	MR	MR	MR	W	G
Vigoro	V52N3RR	R5E	5.2	RR	MR 3,14	MS	MR	MS	W	T

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

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

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

Most information supplied by companies.

RR3 = Roundup Ready 3

R4E = Roundup Ready Early Group 4

R4L = Roundup Ready Late Group 4

R5E = Roundup Ready Early Group 5

R5L = Roundup Ready Late Group 5

CV4, CV5 = Conventional Group 4 & 5