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Research Report 07-03

# Soybean Variety Performance Tests in Tennessee 2006

## Research & Education Centers and County Standard Tests

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Variety test results are posted on the UT Institute of Agriculture website at
http://varietytrials.tennessee.edu/ and
www.utcrops.com

THE UNIVERSITY of TENNESSEE

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**Vince Pantalone**, Associate Professor and Soybean Breeder
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*Plateau Research & Education Center, Crossville*
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**Jason Williams**, Research Associate
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*Research & Education Center at Ames Plantation, Grand Junction*
**Rick Carlisle**, Superintendent
**Jamie Evans**, Research Associate

# 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 | | |
|---|---|---|
| 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) | | |
|---|---|---|
| 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 Wynnia | 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, frogeye 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 | Moisture ‡ | Coffee | Dyer *fi* | (KY) Fulton *fi* | Giles *f* | Henry | Lake *fi* | Obion | Weakley *fi* | West TN REC *fi* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **bu/a** | **%** | **5/15 §** | **4/18** | **5/18** | **5/19** | **5/19** | **5/17** | **4/19** | **5/17** | **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 loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

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) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=3) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Leaf Retention (n=1) | Seed Quality (n=4) | Protein (n=4) | Oil (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) | Knoxville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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 ± Std Err. (n=12) | Moisture § (n=12) | Lodging (n=6) | Height (n=12) | Maturity (n=12) | Shattering (n=8) | Leaf Retention (n=2) | Seed Quality (n=8) | Protein (n=8) | Oil (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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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 Quality (n=12) | Protein (n=12) | Oil (n=12) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | ---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 | Avg. Yield | Moisture ‡ | Coffee | Dyer *fi* | (KY) Fulton *fi* | Giles *f* | Hardin | Henry | Lake *fi* | Lauderdale *fi* | Madison | Obion | Weakley *fi* | West TN REC *fi* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 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 loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), 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 Tennesse County Standard Tests during 2006.**

| MS | Brand/Variety | CST Avg. Yield (n=12) | Moisture ‡ | SDS | Frogeye | Anthracnose | Brown Spot | Sprayed ¶ Yield | Unsprayed Yield | SCN Race 2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ---------- Research and Education Center at Milan ---------- | | | | | | |
| | | bu/a | % | 2003 / 04 / 06 | 2003 / 04 / 05 / 06 | 2006 | 2006 | bu/a | bu/a | 2006 |
| A | **Asgrow AG3906 | 56.2 | 13.6 | / 1.3 / 1.0 | / 5.0 / 5.0 / 4.0 | 7.0 | 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.**

| | | County Standard Trials | | Research and Education Center Trials | |
|---|---|---|---|---|---|
| **Brand** | **Variety** | **Avg. Yield** | **Moisture** | **Avg. Yield** | **Moisture** |
| | | bu/a | % | bu/a | % |
| 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) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | | | | | | | | |
| 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 ± Std Err. (n=8) | Moisture § (n=8) | Lodging (n=4) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Seed 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 ± Std Err. (n=8) | Moisture § (n=8) | Lodging (n=4) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Seed Quality (n=4) | Protein (n=4) | Oil (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 14. Mean yields † 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 ± Std Err. (n=16) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ---bu/a--- | | | | | | | | |
| Morsoy | RT 4485N (RR) | 52 ± 1 | 56 | 57 | 48 | 43 | 46 | 62 | 58 | 43 |
| Vigoro | V44N6RR | 50 ± 1 | 48 | 60 | 45 | 39 | 45 | 63 | 59 | 40 |
| Progeny | 4405 RR | 49 ± 1 | 50 | 58 | 46 | 37 | 47 | 58 | 56 | 43 |
| Steyer | 4420 RR Scn | 49 ± 1 | 49 | 56 | 46 | 40 | 46 | 62 | 55 | 40 |
| FFR | 4545 RR | 49 ± 1 | 50 | 58 | 47 | 42 | 41 | 57 | 56 | 41 |
| Morsoy | RT 4480N (RR) | 49 ± 1 | 47 | 64 | 47 | 39 | 37 | 58 | 56 | 43 |
| Delta Grow | 4460 RR | 48 ± 1 | 51 | 57 | 43 | 39 | 42 | 61 | 57 | 37 |
| Gutwein | H-4534 RR | 48 ± 1 | 51 | 62 | 42 | 35 | 41 | 62 | 57 | 35 |
| USG | 74A45 (RR) | 48 ± 1 | 47 | 57 | 48 | 39 | 42 | 58 | 57 | 38 |
| Trisler Seed | Trisoy 4557RR (CN) | 48 ± 1 | 50 | 58 | 45 | 36 | 44 | 55 | 57 | 39 |
| Delta Grow | 4150 RR | 48 ± 1 | 46 | 63 | 49 | 41 | 40 | 55 | 56 | 34 |
| Delta & Pine Land | DP 4331 RR | 48 ± 1 | 48 | 66 | 41 | 36 | 37 | 58 | 57 | 39 |
| Dyna-Gro | 3443 (RR) | 48 ± 1 | 45 | 64 | 43 | 37 | 38 | 60 | 56 | 38 |
| Dyna-Gro | 37A44 (RR) | 48 ± 1 | 50 | 55 | 45 | 36 | 45 | 61 | 53 | 35 |
| Dyna-Gro | 35B40 (RR) | 47 ± 1 | 49 | 60 | 43 | 38 | 43 | 56 | 51 | 37 |
| Vigoro | V41N6RR | 47 ± 1 | 44 | 60 | 45 | 38 | 38 | 60 | 53 | 38 |
| USG | 7440nRR | 47 ± 1 | 45 | 63 | 44 | 35 | 36 | 58 | 57 | 37 |
| Asgrow | AG4404 (RR) | 46 ± 1 | 49 | 59 | 44 | 34 | 38 | 54 | 52 | 36 |
| USG | 7443nRR | 45 ± 1 | 42 | 65 | 43 | 35 | 39 | 55 | 51 | 32 |
| Delta & Pine Land | DP 4546 RR | 45 ± 1 | 45 | 59 | 42 | 44 | 39 | 52 | 50 | 31 |
| USG | 7423nRS | 45 ± 1 | 44 | 62 | 44 | 33 | 40 | 51 | 52 | 35 |
| Vigoro | V42N3RR | 44 ± 1 | 44 | 63 | 44 | 33 | 36 | 55 | 52 | 30 |
| USG | 7434nRR | 43 ± 1 | 40 | 55 | 47 | 33 | 38 | 53 | 52 | 29 |
| Hornbeck | HBK R 4623 (RR) | 43 ± 1 | 43 | 56 | 39 | 31 | 37 | 59 | 49 | 33 |
| Excel Brand | 8427N RR/STS | 42 ± 1 | 41 | 56 | 38 | 29 | 36 | 53 | 51 | 31 |
| **Average (bu/a)** | | **47** | **47** | **60** | **44** | **37** | **40** | **57** | **54** | **37** |
| **L.S.D.$_{.05}$ (bu/a)** | | **2** | **6** | **7** | **7** | **6** | **7** | **9** | **7** | **9** |
| **C.V. (%)** | | **10.1** | **8.0** | **8.0** | **10.3** | **10.7** | **11.1** | **10.3** | **9.0** | **14.9** |

† All yields are adjusted to 13% moisture.

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

**Table 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 ± Std Err. (n=16) | Moisture § (n=16) | Lodging (n=7) | Height (n=15) | Maturity (n=14) | Shattering (n=9) | Seed 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) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 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 | 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 | Moisture ‡ | (KY) Carlisle | Coffee | Dyer *f* | Gibson *fi* | Henry *fi* | Lake *fi* | Lauderdale *fi* | Lawrence *f* | Montgomery | Weakley *f* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **bu/a** | **%** | **6/7 §** | **5/16** | **5/23** | **5/23** | **5/15** | **6/8** | **5/20** | **6/7** | **6/21** | **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 loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), 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) | Moisture ‡ | Research and Education Center at Milan: SDS | Frogeye | Anthracnose | Brown Spot | Sprayed ¶ Yield | Unsprayed Yield | SCN Race 2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | 2003 / 04 / 06 | 2003 / 04 / 05 / 06 | 2006 | 2006 | bu/a | bu/a | 2006 |
| A | ***Vigoro V42N3RR | 56.2 | 12.3 | 5.0 / 1.7 / 0.3 | 0.0 / 0.3 / 1.0 / 0.0 | 6.3 | 7.7 | 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.**

| | | County Standard Trials | | Research and Education Center Trials | |
|---|---|---|---|---|---|
| **Brand** | **Variety** | **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 Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. |
|---|---|---|---|---|---|---|---|---|---|
| | | ---bu/a--- | | | | | | | |
| 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. |
|---|---|---|---|---|---|---|---|---|---|
| | | ----------bu/a---------- | | | | | | | |
| 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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=4) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Seed Quality (n=4) | Protein (n=4) | Oil (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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=4) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Seed Quality (n=4) | Protein (n=4) | Oil (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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=4) | Height (n=7) | Maturity (n=7) | Shattering (n=4) | Seed Quality (n=1) | Protein (n=1) | Oil (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) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. |
|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | | | | | | | |
| 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 ± Std Err. (n=14) | Moisture § (n=14) | Lodging (n=10) | Height (n=14) | Maturity (n=14) | Shattering (n=9) | Seed Quality (n=8) | Protein (n=8) | Oil (n=8) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | --------Score--------- | | % | % |
| 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) | Knoxville | Crossville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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 ± Std Err. (n=21) | Moisture § (n=21) | Lodging (n=17) | Height (n=21) | Maturity (n=21) | Shattering (n=16) | Seed 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 | Avg. Yield | Moisture ‡ | Coffee | Crockett *f* | Dyer *f* | Fayette *fi* | Gibson | Haywood *f* | Lake *f* | Lauderdale *fi* | (KY) McCracken | Obion *fi* | 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 loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), 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) | Moisture ‡ | SDS | Frogeye | Anthracnose | Brown Spot | Sprayed ¶ Yield | Unsprayed Yield | SCN Race 2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ---------- Research and Education Center at Milan ---------- | | | | | | |
| | | bu/a | % | 2003 / 04 / 06 | 2003 / 04 / 05 / 06 | 2006 | 2006 | bu/a | bu/a | 2006 |
| 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.**

| | | County Standard Trials | | Research and Education Center Trials | |
|---|---|---|---|---|---|
| **Brand** | **Variety** | **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) | Knoxville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | | | | | | | |
| 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ---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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=5) | Height (n=6) | Maturity (n=6) | Shattering (n=5) | Seed 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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=5) | Height (n=6) | Maturity (n=6) | Shattering (n=5) | Seed Quality (n=4) | Protein (n=4) | Oil (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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ---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 ± Std Err. (n=14) | Moisture § (n=14) | Lodging (n=9) | Height (n=12) | Maturity (n=12) | Shattering (n=9) | Seed 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ---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 ± Std Err. (n=21) | Moisture § (n=21) | Lodging (n=15) | 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-------- | | % | % |
| 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 | Moisture ‡ | (KY) Carlisle | Dyer *fi* | Gibson | Hardin | Haywood *f* | Lauderdale *fi* | Milan REC Gibson *fi* | Obion | Weakley |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | 6/7 § | 5/19 | 6/14 | 6/13 | 5/17 | 6/6 | 6/7 | 6/6 | 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 loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), 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.**

| | | CST Avg. Yield | | ---------- Research and Education Center at Milan ---------- | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MS** | **Brand/Variety** | **(n=11)** | **Moisture ‡** | **SDS** | **Frogeye** | **Anthracnose** | **Brown Spot** | **Sprayed ¶ Yield** | **Unsprayed Yield** | **SCN Race 2** |
| | | bu/a | % | 2003 / 04 / 06 | 2003 / 04 / 05 / 06 | 2006 | 2006 | bu/a | bu/a | 2006 |
| A | FFR 5663 | 53.6 | 13.2 | / / 0.3 | / / / 0.0 | 5.7 | 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.**

| | | County Standard Trials | | Research and Education Center Trials | |
|---|---|---|---|---|---|
| **Brand** | **Variety** | **Avg. Yield** | **Moisture** | **Avg. Yield** | **Moisture** |
| | | bu/a | % | bu/a | % |
| 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) | Knoxville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ----------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 ± Std Err. (n=7) | Moisture § (n=7) | Lodging (n=6) | Height (n=6) | Maturity (n=6) | Shattering (n=5) | Seed 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) | Knoxville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ---bu/a--- | | | | | | | |
| 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) | Shattering (n=9) | Seed Quality (n=8) | Protein (n=8) | Oil (n=8) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | --------Score----- | | % | % |
| 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. | Ames |
|---|---|---|---|---|---|---|---|---|---|
| | | ----------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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. |
|---|---|---|---|---|---|---|---|---|
| | | ----------bu/a---------- | | | | | | |
| *Maturity Group V* | | | | | | | | |
| 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 |
| *Maturity Group IV* | | | | | | | | |
| 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 ± Std Err. (n=6) | Moisture ‡ (n=6) | Lodging (n=3) | Height (n=6) | Maturity (n=6) | Shattering (n=4) | Seed Quality (n=4) | Protein (n=4) | Oil (n=4) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | ----------Score--------- | | % | % |
| *Maturity Group V* | | | | | | | | | | |
| 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 |
| *Maturity Group IV* | | | | | | | | | | |
| 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 Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan Non-Irr. |
|---|---|---|---|---|---|---|---|---|
| | | ---bu/a--- | | | | | | |
| *Maturity Group V* | | | | | | | | |
| 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 |
| *Maturity Group IV* | | | | | | | | |
| 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--------- | | % | % |
| *Maturity Group V* | | | | | | | | | | |
| 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 |
| *Maturity Group IV* | | | | | | | | | | |
| 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) | Knoxville | Spring Hill Irr. | Spring Hill Non-Irr. | Springfield | Milan Irr. | Milan 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.**

| | | | | Spring Hill | | | Milan | | | | Avg. Yield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Brand** | **Variety ‡** | **Knoxville** | **Crossville** | **Irr.** | **Non-Irr.** | **Springfield** | **Irr.** | **Non-Irr.** | **Ames** | **Avg. Yield†** | **Difference** |
| *Maturity Group III (n=7)* | | | | | | | | | | | |
| 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** | |
| *Maturity Group IV Early (n=8)* | | | | | | | | | | | |
| 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** | |
| *Maturity Group IV Late (n=7)* | | | | | | | | | | | |
| 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)**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Maturity Group V Early (n=7)* | | | | | | | | | | | |
| 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** | |
| *Maturity Group V Late (n=7)* | | | | | | | | | | | |
| 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 | Moisture ‡ | Lodging | Height | Maturity | Shattering | Seed Quality | Protein | Oil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | ----------Score--------- | | % | % |
| *Maturity Group III (n=7)* | | | | | | | | | | |
| 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 |
| *Maturity Group IV Early (n=8)* | | | | | | | | | | |
| 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 |
| *Maturity Group IV Late (n=7)* | | | | | | | | | | |
| 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 |
| *Maturity Group V Early (n=7)* | | | | | | | | | | |
| 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 |
| *Maturity Group V Late (n=7)* | | | | | | | | | | |
| 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).**

| | | | | Spring Hill | | | Milan | | | Avg. Yield |
|---|---|---|---|---|---|---|---|---|---|---|
| **Brand** | **Variety ‡** | **Knoxville** | **Crossville** | **Irr.** | **Non-Irr.** | **Springfield** | **Irr.** | **Non-Irr.** | **Avg. Yield†** | **Difference** |
| *Maturity Group III (n=12)* | | | | | | | | | | |
| 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** | |
| *Maturity Group IV Late (n=14)* | | | | | | | | | | |
| 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** | **Moisture ‡** | **Lodging** | **Height** | **Maturity** | **Shattering** | **Seed Quality** | **Protein** | **Oil** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | bu/a | % | Score | in. | DAP | ----------Score--------- | | % | % |
| *Maturity Group III (n=12)* | | | | | | | | | | |
| 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 |
| *Maturity Group IV Late (n=14)* | | | | | | | | | | |
| 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