

SOYBEAN VARIETY PERFORMANCE TESTS IN TENNESSEE

2008

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

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

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

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2008 County Standard Tests Soybean Plot Cooperators & Agents

Group III

| <u>Group III</u> | Cooperator(s) | Agent |
|------------------|--------------------------|-----------------------------------|
| Coffee | L.A. Teal | Steve Harris/Dean Northcutt (Ret) |
| Dyer | Alan Burchfiel | Tim Campbell |
| Franklin | Larry Williams | Ed Burns |
| Fulton, KY (1) | Johnson Linder | Ben Mullins |
| Fulton, KY (2) | Major Bros. | Cam Kenimer |
| Gibson | Denton Clay Parkins | Philip Shelby |
| Henry | David & Finis Wilson | Staci Foy |
| Lake | Keiser Farms | Greg Allen |
| Obion | Kenneth & Blake Cheatham | Tim Smith |
| Weakley | Gary & Gail Hall | Jeff Lannom |

Group IV Early

| | | |
|----------------|------------------------------------|-----------------------------------|
| Coffee | L.A. Teal | Steve Harris/Dean Northcutt (Ret) |
| Dyer | Mike Underwood | Tim Campbell |
| Franklin | Larry Williams | Ed Burns |
| Fulton, KY (1) | Johnson Linder | Ben Mullins |
| Fulton, KY (2) | Major Bros | Cam Kenimer |
| Gibson | Denton Clay Parkins | Philip Shelby |
| Henry | David & Finis Wilson | Staci Foy |
| Lake | Jon Dickey | Greg Allen |
| Lauderdale | Scott Mathis & Chris Peyton | James Griffin |
| McCracken, KY | Lester & Tracy Sullivan | Bob Middleton |
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| Weakley | Gary & Gail Hall | Jeff Lannom |

Group IV Late

| | | |
|------------|-----------------------------|-----------------------------------|
| Coffee | L. A. Teal | Steve Harris/Dean Northcutt (Ret) |
| Crockett | Mac Summerlin | Richard Buntin |
| Dyer | Mike Underwood | Tim Campbell |
| Fayette | Lee Graves | Jeff Via |
| Franklin | Bobby Woodall | Ed Burns |
| Fulton, KY | Mark Yaussi | Cam Kenimer |
| Gibson | Denton Clay Parkins | Philip Shelby |
| Graves, KY | Stermon Farms | Bob Middleton |
| Hardin | Gerry Lambert | Marcus McLemore |
| Haywood | John King | Tracey Sullivan |
| Henry | David & Finis Wilson | Staci Foy/Ranson Goodman |
| Lake | Jon Dickey | Greg Allen |
| Lauderdale | Scott Mathis & Chris Peyton | James Griffin |
| Montgomery | John Allensworth, Jr. | Rusty Evans |
| Obion | Kenneth & Blake Cheatham | Tim Smith |
| UT Martin | Charlie Rowlett | Dr. Richard Joost |
| Weakley | Bob Grooms | Jeff Lannom |

Group V Early

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

Cooperator(s)

L. A. Teal
Stoney Hargett
Paul & Gene Finley
Bobby Woodall
Denton Clay Parkins
John King
Terry Petty
Scott Mathis & Chris Peyton
Tommy & Jared Bradley
William & Bill Thompson
Charlie Rowlett
Brian Garner
Dr. Bob Hayes

Agent

Steve Harris/Dean Northcutt (Ret)
Richard Buntin
Tim Campbell
Ed Burns
Philip Shelby
Tracey Sullivan
Greg Allen
James Griffin
David Qualls
Tim Smith
Dr. Richard Joost
Jeff Lannom
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Table of Contents

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

PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

Experimental Procedures

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

The plot size at most REC locations was two rows, 30 feet in length. All varieties were planted at approximately 10 seeds per foot of row (i.e., approximately 175,000 seed per acre). Plots were replicated three times at each location in a randomized complete block design. Plots at Milan and Springfield were sprayed with a foliar fungicide approximately one month after planting, and again approximately 21 days later as a preventative treatment for fungal diseases such as soybean rust. Soybean rust was detected in Tennessee again this year in early October but the appearance of the disease occurred too late in the growing stages of most soybeans to be a serious threat. Because of the large number of varieties in some tests and the field variation at each location, an incomplete block design was imposed *ex post facto* prior to data analysis in order to reduce the within-block field variability and the experimental error.

County Standard Tests: The County Standard Soybean Tests were conducted in 17 counties in Tennessee, and 3 in West Kentucky. The number of counties depended on the test (e.g., 10-17). The County Standard Tests were divided into **RR3, RR4 early (relative maturity 4.0-4.5), RR4 late (RM 4.6-4.9), and RR5 early (RM 5.0-5.5)**. Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Interpretation of Data

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first. **All yields presented have been adjusted to 13% moisture.** At the bottom of the tables, **LSD** values stand for **Least Significant Difference**. The mean yields of any two varieties being compared must differ by at least the amount shown (minimum) to be considered different in yielding ability at the 5% level of probability of significance. For example, given that the LSD for a test is 8.0 bu/a and the mean yield of Variety A was 30 bu/a and the mean yield of Variety B was 35 bu/a, then the two varieties are not statistically different in yield because the difference of 5 bu/a is less than the minimum of 8 bu/a required for them to be significant. Similarly, if the average yield of Variety C was 43 bu/a

then it is significantly higher yielding than both Variety B ($43 - 35 = 8 \text{ bu/a} = \text{LSD of } 8$) and Variety A ($43 - 30 = 13 \text{ bu/a} > \text{LSD of } 8$).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the error variation is of the overall test mean yield at that location. For example, a C.V. of 10% indicates that the size of the error variation is about 10% of the size of the test mean. Similarly, a C.V. of 30% indicates that the size of the error variation is nearly one-third as large as the test mean. A goal in conducting each yield test is to keep the C.V. as low as possible, preferably below 20%.

RESULTS

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

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

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

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

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

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

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

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

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

Protein & Oil on dry weight basis.

Table 4. Mean yields † of five Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

Table 5. Mean yields † and agronomic characteristics of five Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

Maturity = days after planting (DAP).

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

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

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

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

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

Table 9. Yields † and disease ratings § of four Maturity Group III Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2008.

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

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

Complete 2008 SCN ratings available Feb. 2009.

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

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

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

Varieties denoted with an asterisk (****) were in the top performing group in 2004 - 2007.

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

Table 10. Overall average yields † and moistures ‡ of four Maturity Group III Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and Research and Education Centers (n=7) in Tennessee in 2008.

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

Table 11 (continued)

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

† All yields are adjusted to 13% moisture.

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

Table 12. Mean yields † and agronomic characteristics of 42 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2008.

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

Table 12 (continued)

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

Table 15. Mean yields † of six Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2006 - 2008.

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

Table 16. Mean yields † and agronomic characteristics of six Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2006 - 2008.

| Brand | Variety ‡ | Avg. Yield ± Std Err. (n=18) | Moisture § (n=18) | Lodging (n=8) | Height (n=16) | Maturity (n=16) | Shattering (n=6) | Leaf | Seed | Protein (n=7) | Oil (n=7) |
|----------------|---------------|------------------------------------|----------------------|------------------|------------------|--------------------|---------------------|--------------------|------------------|------------------|--------------|
| | | | | | | | | Retention (n=2) | Quality (n=7) | | |
| | | bu/a | % | Score | in. | DAP | -----Score----- | ----- | ----- | % | % |
| Morsoy | RT 4485N (RR) | 46 ± 1 | 13.2 | 2.1 | 37 | 132 | 1.0 | 2.5 | 2.3 | 39.3 | 22.2 |
| USG | 74A45 (RR) | 43 ± 1 | 13.1 | 2.0 | 38 | 130 | 1.0 | 1.8 | 2.3 | 39.3 | 22.1 |
| Delta Grow | 4460 RR | 42 ± 1 | 13.2 | 2.0 | 37 | 131 | 1.0 | 2.1 | 2.3 | 38.7 | 22.2 |
| Dyna-Gro | 37A44 (RR) | 42 ± 1 | 14.0 | 1.9 | 36 | 131 | 1.0 | 2.6 | 2.4 | 38.5 | 22.3 |
| Delta Grow | 4150 RR | 42 ± 1 | 13.0 | 1.6 | 33 | 132 | 1.0 | 2.3 | 2.2 | 40.2 | 21.7 |
| Asgrow | DP 4546 RR | 42 ± 1 | 14.2 | 2.3 | 37 | 134 | 1.0 | 2.8 | 2.3 | 40.9 | 21.7 |
| Average | | 43 | 13.4 | 2.0 | 36 | 132 | 1.0 | 2.4 | 2.3 | 39.5 | 22.0 |

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

Variety denoted with an asterisk (*) was in the top performing group in 2007.

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

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

Table 18. Yields † and disease ratings § of 14 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2008.

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

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

Complete 2008 SCN ratings available Feb. 2009.

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

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

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

Varieties denoted with an asterisk (*) were in the top performing group in 2007.

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

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

Table 20 (continued)

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

Table 20 (continued)

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

† All yields are adjusted to 13% moisture.

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

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

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

Table 21 (continued)

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

Table 21 (continued)

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

† All yields are adjusted to 13% moisture.

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

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

Maturity = days after planting (DAP).

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

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

Protein & Oil on dry weight basis.

Table 22. Mean yields † of 42 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

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

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

Table 23 (continued)

| Brand | Variety ‡ | Avg. Yield | Moisture § | Lodging | Height | Maturity | Shattering | Leaf Retention | Seed Quality | Protein | Oil |
|----------------|-----------------|----------------------|-------------|------------|-----------|------------|-----------------|----------------|--------------|-------------|-------------|
| | | ± Std Err. (n=14) | (n=14) | (n=6) | (n=13) | (n=13) | (n=6) | (n=2) | (n=3) | (n=3) | (n=3) |
| | | bu/a | % | Score | in. | DAP | -----Score----- | | % | % | |
| USG | 74A76 (RR) | 38 ± 1 | 12.3 | 1.9 | 35 | 143 | 1.3 | 1.6 | 2.2 | 40.3 | 20.9 |
| Southern Cross | Hiram (RR) | 38 ± 1 | 12.4 | 1.7 | 31 | 147 | 1.3 | 2.3 | 2.1 | 39.7 | 21.5 |
| Progeny | 4706 RR | 37 ± 1 | 12.2 | 2.0 | 35 | 142 | 1.2 | 1.5 | 2.0 | 40.1 | 21.0 |
| Asgrow | AG4605 (RR/STS) | 37 ± 1 | 12.6 | 1.5 | 29 | 144 | 1.3 | 1.7 | 2.4 | 39.4 | 21.8 |
| Asgrow | AG4703 (RR) | 37 ± 1 | 12.7 | 1.7 | 30 | 144 | 1.1 | 2.1 | 2.1 | 40.5 | 20.7 |
| Average | | 41 | 12.6 | 1.8 | 34 | 147 | 1.2 | 2.1 | 2.4 | 40.3 | 21.4 |

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of

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

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

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

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

Table 27. Yields † and disease ratings § of 28 late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2008

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Complete 2008 SCN ratings available Feb. 2009.

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

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

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

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

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

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

Varieties denoted with an asterisk (*) were in the top performing group in 2007.

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

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

Table 29 (continued)

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

† All yields are adjusted to 13% moisture.

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

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

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

Table 30 (continued)

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

Maturity = days after planting (DAP).

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

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

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

Protein & Oil on dry weight basis.

Table 31. Mean yields † of 30 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

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

| Brand | Variety ‡ | Avg. Yield | | | | | Shattering | Leaf | Seed | Protein | Oil |
|--------------------------|--------------------|----------------------|----------------------|------------------|-----------------|-------------------|-----------------|--------------------|------------------|-------------|-------------|
| | | ± Std Err. (n=10) | Moisture § (n=10) | Lodging (n=5) | Height (n=9) | Maturity (n=7) | | Retention (n=1) | Quality (n=3) | | |
| | | bu/a | % | Score | in. | DAP | -----Score----- | | % | % | |
| Delta Grow | 5450 RR | 48 ± 1 | 15.5 | 1.7 | 35 | 157 | 1.0 | 1.3 | 2.3 | 42.4 | 20.0 |
| Delta King | DK 52-K6 (RR) | 48 ± 1 | 13.8 | 1.8 | 36 | 151 | 1.0 | 1.1 | 1.6 | 44.4 | 19.8 |
| FFR | 5663 RR | 47 ± 1 | 14.3 | 2.4 | 34 | 150 | 1.0 | 1.0 | 2.2 | 43.8 | 20.0 |
| Schillinger Seed | 557 RC | 46 ± 1 | 13.2 | 1.7 | 34 | 150 | 1.0 | 1.2 | 2.1 | 43.0 | 19.9 |
| NK | S 52-F2 Brand (RR) | 45 ± 1 | 13.4 | 1.8 | 34 | 147 | 1.0 | 1.1 | 2.0 | 43.8 | 20.0 |
| USG | 7553nRS | 45 ± 1 | 13.0 | 1.6 | 36 | 148 | 1.0 | 1.1 | 2.1 | 42.5 | 20.7 |
| Dyna-Gro | 33X55 (RR) | 45 ± 1 | 13.9 | 1.6 | 36 | 151 | 1.0 | 1.1 | 1.8 | 44.8 | 19.7 |
| Dyna-Gro | 33P54 (RR) | 44 ± 1 | 14.5 | 1.4 | 32 | 151 | 1.0 | 1.8 | 2.9 | 41.6 | 21.2 |
| Hornbeck | HBK R 5525 (RR) | 44 ± 1 | 14.2 | 1.8 | 37 | 150 | 1.0 | 1.0 | 2.4 | 43.3 | 20.1 |
| Delta Grow | 5300 RR | 43 ± 1 | 13.4 | 1.9 | 35 | 147 | 1.0 | 1.3 | 2.1 | 42.7 | 20.0 |
| Dyna-Gro | 33B52 (RR) | 42 ± 1 | 13.2 | 2.0 | 34 | 147 | 1.0 | 1.0 | 1.9 | 41.4 | 21.0 |
| Dyna-Gro | 31R54 (RR) | 42 ± 1 | 13.5 | 1.8 | 35 | 150 | 1.0 | 1.2 | 1.8 | 44.7 | 19.3 |
| Midwest Premium Genetics | MPG 5505nRR (STS) | 42 ± 1 | 13.2 | 1.6 | 35 | 146 | 1.0 | 1.1 | 2.0 | 41.6 | 21.0 |
| Hornbeck | HBK RS 5227 (RR) | 42 ± 1 | 13.2 | 1.8 | 35 | 148 | 1.0 | 1.1 | 1.8 | 42.0 | 20.3 |
| Midwest Premium Genetics | MPG 5308nRR | 41 ± 1 | 13.6 | 2.2 | 38 | 148 | 1.1 | 1.1 | 2.7 | 41.5 | 21.1 |
| USG | 75J32 (RR) | 41 ± 1 | 13.4 | 1.5 | 35 | 148 | 1.0 | 1.1 | 2.6 | 43.2 | 20.0 |
| KS | KS 5507NRR | 41 ± 1 | 14.4 | 2.0 | 33 | 150 | 1.0 | 1.1 | 2.4 | 40.5 | 19.9 |
| Hornbeck | HBK R 5226 (RR) | 41 ± 1 | 13.8 | 2.7 | 34 | 148 | 1.0 | 1.0 | 1.9 | 43.3 | 19.9 |
| Midwest Premium Genetics | MPG 5407nRR | 40 ± 1 | 13.9 | 1.7 | 41 | 149 | 1.3 | 2.2 | 3.4 | 42.6 | 21.0 |
| Dyna-Gro | V51N7RS | 40 ± 1 | 13.2 | 2.0 | 36 | 147 | 1.1 | 1.2 | 1.9 | 41.8 | 20.7 |
| Delta Grow | 5470 RR | 40 ± 1 | 14.4 | 1.8 | 39 | 152 | 1.0 | 1.8 | 3.3 | 43.0 | 20.7 |
| Dairyland | 8512 RR | 40 ± 1 | 14.0 | 1.6 | 40 | 150 | 1.0 | 1.7 | 3.3 | 42.8 | 20.7 |
| USG | 75J47 (RR) | 40 ± 1 | 14.4 | 1.6 | 34 | 149 | 1.0 | 1.4 | 2.8 | 41.7 | 20.9 |
| Progeny | 5115 RR | 39 ± 1 | 13.8 | 1.8 | 39 | 144 | 1.1 | 1.1 | 3.0 | 41.7 | 21.8 |
| Asgrow | DK5068 (RR) | 38 ± 1 | 13.4 | 2.0 | 36 | 142 | 1.6 | 1.1 | 3.6 | 43.0 | 21.0 |
| Delta Grow | 5160 RR/STS | 38 ± 1 | 13.4 | 2.0 | 37 | 140 | 1.9 | 1.0 | 3.0 | 42.5 | 21.6 |
| USG | 7515nRS | 38 ± 1 | 13.3 | 2.0 | 37 | 140 | 2.1 | 1.0 | 3.1 | 42.5 | 21.8 |
| Southern Cross | Damascus (RR/STS) | 37 ± 1 | 13.9 | 1.8 | 37 | 141 | 1.4 | 1.0 | 3.1 | 42.3 | 21.1 |
| Dairyland | 8509 RR | 36 ± 1 | 13.4 | 2.4 | 38 | 140 | 2.2 | 1.0 | 2.7 | 42.3 | 20.9 |
| Progeny | 5107 RR | 36 ± 1 | 13.5 | 2.1 | 37 | 143 | 1.4 | 1.3 | 2.7 | 43.1 | 20.8 |
| Average | | 42 | 13.7 | 1.9 | 36 | 147 | 1.2 | 1.2 | 2.5 | 42.7 | 20.6 |

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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

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

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

Milan REC = Research and Education Center at Milan

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

Table 36. Yields † and disease ratings § of 18 early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2008.

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

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

Complete 2008 SCN ratings available Feb. 2009.

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

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

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

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

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

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

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

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

Table 41. Mean yields † and agronomic characteristics of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

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

Protein & Oil on dry weight basis.

Table 46. Mean yields † of nine Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=8) in Tennessee for two years, 2007 - 2008.

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

† All yields are adjusted to 13% moisture.

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

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

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

Table 50 (continued)

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

‡ Protein & Oil on dry weight basis.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

† All yields are adjusted to 13% moisture.

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

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

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

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

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

Protein & Oil on dry weight basis.

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

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

Table 56 (continued)

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

Table 56 (continued)

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

Table 56 (continued)

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

Table 56 (continued)

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

Table 56 (continued)

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

Table 56 (continued)

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

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

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

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

Most information supplied by companies.

RR3 = Roundup Ready 3

R5E = Roundup Ready Early Group 5

R4E = Roundup Ready Early Group 4

R5L = Roundup Ready Late Group 5

R4L = Roundup Ready Late Group 4

CV4, CV5 = Conventional Group 4 & 5

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

| Company | Contact | Phone | Email | Web site | Address |
|---|-----------------------------------|------------------------------|--|--|--|
| AgVenture D&M | Gary Allerkamp | 270-756-8783 | ageaav@aol.com | www.agventure.com | P.O. Box 794, Elizabethtown, KY 42702 |
| | Kenny Kingins | 270-293-5467 | kwkingins@yahoo.com | | 6331 St. Rd. 121 S., Murray, KY 42071 |
| University of Arkansas | Pengyin Chen | 479-575-7564 | tishibi@uark.edu | | Dept of Crop, Soil & Env. Sciences 115 Plant Science Bldg Fayetteville, AK 72701 |
| Monsanto (Asgrow) | | 800-335-2676 | | www.asgrow.com | |
| Cullum Seeds (Armor, Delta King) | Lane Dill | 877-822-7333 | | www.cullumseeds.com | P.O. Box 178, Fisher, AR 72429 |
| | Jimmy Wray | 901-233-0274 270-832-3843 | lanedill@jwrayseeds.com jimmywray@jwrayseeds.com | | 6497 Turner Landing Rd., LaCenter, KY 42056 |
| Croplan Genetics/Land o Lakes | Jesse Witt | 256-221-5932 | JBWitt@landolakes.com | www.croplangenetics.com | DSM Middle & East TN |
| | Keith Saum | 731-610-7006 | | | DSM West TN |
| | Darrin Holder | 270-207-0190 | | | Agronomist |
| Crow's Hybrid Corn Company | Carl Gardner | 731-431-6839 | carl.gardner@crowshybrid.com | www.crowshybrid.com | 3395 Leatherwood Rd, Williamsport, TN 38487 |
| Dairyland Seed Co | Lanny Warren | 731-234-2921 | lanny.warren@charter.net | www.dairylandseed.com | 208 South Thompson St., Union City, TN 38261 |
| Delta Grow Seed | Lee Hughes | 800-530-7933 | leehughes19@hotmail.com | www.deltagrow.com | P O Box 219, England, AR 72046 |
| Crop Production Services (Dyna-Gro) | Brandon Sheridan | 901-277-3638 | brandon.sheridan@uap.com | www.dynagroseed.com | 57 Germantown Ct Suite 200, Cordova, TN 38018 |
| | Steve Johnson | 731-885-5121 | sjohnson@agriumretail.com | | 530 N. Fifth St/ P O Box 40, Union City, TN 38281 |
| Eagle Seed | Brad Doyle | 970-684-7377 | brad@eagleseed.com | www.eagleseed.com | 8496 Swan Pond Rd, Weiner, AR 72479 |
| Tennessee Farmers Coop (FFR) | Jim Payne | 901-652-0903 | jpayne@ourcoop.com | www.ourcoop.com | West TN |
| | Andy Rowsey | 731-225-2032 | | | West TN |
| | Curtis Yates | 865-567-8174 | | | East TN |
| | Bobby Hooper | 615-390-7587 | | | West & Middle TN |
| | Chris Morris | 615-218-7963 | | | East & Middle TN |
| Hornbeck Seed Co | James Thomas | 870-946-2087 | jthomas@hbkseed.com | www.hbkseed.com | P O Box 472, 210 Drier Rd, DeWitt, AR 72042 |
| Kansas State University | Bill Schapaugh | 785-770-7906 | wts@ksu.edu | | Agronomy Department 2004 Throckmorton Manhattan, KS 66506 |
| University of Missouri | Grover Shannon | 573-379-5431 | shannong@missouri.edu | | |
| Midwest Premium Genetics (MPV Brand) | Mark Turner (Turner Seeds Inc) | 615-641-7333 | | www.m-pride.com | P O Box 739, Laverne, TN 37086-0739 |
| Cache River Valley Seed (Morsoy) | Andy Morris | 901-674-0768 | | www.crvseed.com | Highway 226 East, Cash, AR 72421 |
| | James Crawford | 870-974-2310 | | | Cash, AR 72421 |

Table 57 (continued)

| Company | Contact | Phone | Email | Web site | Address |
|---------------------------------------|---|--|--|--|--|
| Syngenta (NK Brand) | Jameson Wade | 270-293-7942 | | www.nk-us.com | 7500 Olson Memorial Hwy, Golden Valley, MN 55427 |
| North Carolina State Univ. | Andrea Cardinal Joe Burton | 919-513-0913 919-513-1481 | andrea_cardinal@ncsu.com joe_burton@ncsu.com | | |
| Pioneer Hi-Bred Int. | Michael Hughes | 800-331-2475 | michael.hughes@pioneer.com | www.pioneer.com | 700 Boulevard South, Suite 302, Huntsville, AL 35802 |
| Erwin Keith Seed Inc (Progeny) | Brian Murray | 870-238-2079 | bmurray@progenyag.com | www.progenyag.com | 1529 Hwy 193, Wynne, AR 72396 |
| Schillinger Seed Inc | Jim Craig Cory Nikkel | 800-264-4433 515-225-1166 | cnikkel@schillingerseed.com | www.schillingerseed.com | P O Box 1088, Stuttgart, AR 72160 |
| Miles Farm Supply (Southern Cross) | Scott Janes | 888-786-4537 | scojan@milesmore.com | www.milesmore.com | P O Box 22879, Owensboro, KY 42304 |
| Steyer Seeds | Phil Coffman Tom Jones Joe Steyer | 270-832-7362 270-213-0020 800-231-4274 | joesteyer@yahoo.com | www.steyerseeds.com | Clay, KY Sebree, KY 6154 N. Co. Rd. 33, Tiffin, OH 44883 |
| Stine | Stratton Seed Co. | 870-673-4433 | jcraig@strattonseed.com | www.stinseed.com | P O Box 1088, Stuttgart, AR 72160 |
| University of Tennessee | Vince Pantalone | 865-974-8801 | vpantalo@utk.edu | | Dept. of Plant Sciences, Ellington 252 2431 Joe Johnson Drive Knoxville, TN 37996-4561 |
| Terral Seed Inc | Larry Mullen | 318-559-2840 | terralseed@terralseed.com | www.terralseed.com | P O Box 826, Lake Providence, LA 71254 |
| Trisler Seeds Inc (Trisoy) | Derrel Wegner | 270-853-2360 | derrel.wegner@trisler.com | www.trisler.com | 200 Sullivan Ave., Paducah, KY 42003 |
| USDA-ARS | Prakash Arelli | 731-425-4741 | parelli@ars.usda.gov | | 605 Airways Blvd, Jackson, TN 38301 |
| Unisouth Genetics (USG) | Stacy Burwick | 615-242-3397 | sburwick@usgseed.com | www.usgseed.com | 2640-C Nolensville Rd., Nashville, TN 37211 |
| Virginia Tech | David Whitt | 804-746-4884 | dwhitt@vt.edu | www.virginiacrop.org | Virginia Crop Improvement Assoc. 9142 Atlee Station Rd Mechanicsville, VA 23116 |