



Information

Agronomy Facts No. 32

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2003 MARYLAND SOYBEAN VARIETY TESTS

Maryland soybean variety tests are conducted each year by the Maryland Agricultural Experiment Station, Department of Natural Resource Sciences and Landscape Architecture, to provide soybean growers with the latest information on agronomic performance of soybean varieties. Varieties are tested by maturity group as designated by the releasing organization. Varieties of Maturity Groups III, IV, and V are included in the tests because they are best adapted for production in Maryland. Late maturing varieties in Maturity Group IV were evaluated separately from the other varieties in Maturity Group IV and are listed as "IV-S" in the data tables. Entries in the 2003 test included Roundup Ready and standard varieties of public and private brands available to Maryland farmers. In addition, promising new varieties and advanced breeding lines are tested to compare their performance to that of widely grown varieties. Experimental lines from Arkansas (R 95-1705), Illinois (L 76), Iowa (A 26), Maryland (MD 96-5275, MD 96-5722, MD 97-6065, MD 97-6156, MD 97-6491, MD 98-5927, MD 99-173-11, MD 99-5144, MD 99-5433, MD 99-5458, MD 99-5464, MD 99-5720, MD 99-6226, MD 99-6701, MD 99-0053-1RR, MD 99-0312-2RR, MD 99-0533-3RR, MD 99-0687-3RR, MD 99-0700-2RR, MD 99-1051-2RR, MD 99-1098-2RR, MD 99-1353-2RR, MD 99-1411-1RR, MD 00-6599, MD 00-6605, MD 00-6612, MD 01-269RR, MD 01-272RR, MD 01-273RR, and Japan-L123), and Virginia (V 96-0340, 99VPI-67RR, 99VPI-120RR) were included in the 2003 tests. The suppliers of private varieties are listed in Table 1.

The Maryland tests are designed to evaluate varieties at several planting dates and on various soil types within the soybean production areas of the state. Recommended cultural practices were followed in the establishment of each test. Tillage, row spacing, seeding rates, and plot length varied between tests and locations as shown in Table 2. Seed yield was determined on center rows of each plot, and plots were trimmed to a uniform length just prior to harvest. Each plot was replicated three times in each test and location. Seed moisture was determined on each plot at harvest and seed yield was adjusted to a 13% moisture level. Plant height and lodging were determined at maturity when 95% of the pods on each variety had attained their mature color. The number of seeds per pound was determined from 100-seed weights made on each plot. The appearance of the seed from each plot was given a score from 1 (best) to 5 (worst) based on the amount of wrinkled or cracked seed coats present. Seed protein and oil content were determined on a seed sample of each entry at all locations. Equal amounts of seed from each of the three test plots at a location were combined and used for analysis. Composition data on each sample were determined by an Infratec model 1255 Feed and Food Analyzer, which reports percent protein and oil on a dry-weight basis.

The 2003 growing season was one of record or near record rainfall. Wet soil conditions delayed planting of all conventionally tilled plots. The earliest planted test was at Quantico in early June. Most tests were not planted until the end of June and early July due to the continued wet conditions. The monthly rainfall for each location is shown in Table 3. The tests at Queenstown are listed as full season and double cropped, however, the actual planting dates were more like double cropped tests. An early frost on October 3 hurt later maturing entries at Keedysville. A killing frost on October 22 affected later maturing entries in the tests at the Eastern Shore locations and Clarksville.

Results of the 2003 tests are reported in Tables 4-7 for the standard varieties and in Tables 10-15 for the Roundup Ready varieties. In each of these tables, varieties within maturity groups are listed in order of yield, highest to lowest. The highest overall test location mean yields were at Quantico for the Roundup Ready and the standard varieties.

A least significant difference (LSD) value is reported for each maturity group in every test where statistically significant differences in plant characteristics were observed among varieties. This number is a statistical test calculated at the 20 percent probability level to aid in comparing the differences among varieties in a maturity group. When two varieties are compared for a plant characteristic and the difference between them is greater than the calculated LSD value, the varieties are judged to be significantly different for that specific characteristic. The "NS" designation indicates that there are no statistically significant differences among the varieties in that maturity group for that specific characteristic. The coefficient of variation (CV) is a relative measure of the variation and is an indicator of the degree of precision for a particular test. For these soybean variety tests, CV values below 15% are an indication that the precision of the test is good in distinguishing differences in seed yield between varieties.

The performance of a variety for several years or at several locations in the same year gives a better indication of its yield potential and agronomic characteristics than do data from a single year. As an aid in assessing the performance of individual varieties in the test, a relative yield value was calculated. Tables 8 and 16 summarize the relative yields of the standard and Roundup Ready varieties, respectively, by expressing their yields as a percent of the mean yield of all varieties in that maturity group at each location. Therefore, a variety with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all varieties in that maturity group. In Tables 8 and 16, the relative yields of those varieties with an asterisk are not statistically different from the highest yielding variety in that maturity group in those tests where a significant difference between varieties was observed in the statistical analyses.

Two-year average yields of standard and Roundup Ready varieties previously entered in the test are shown in Tables 9 and 17, respectively. The multiple-year data provide additional information on a variety's yielding ability. Seed composition data are summarized for the standard and Roundup Ready varieties in Tables 18-21. The information provided here should be used as a guide and growers should select a variety with great care based on personal experience as well as other available information.

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Additional information:

Inclusion of entries in the Maryland Soybean Variety Tests does not constitute an endorsement or recommendation of a specific entry by the University of Maryland. Advertising statements by an individual company about the performance of its entries can be made as long as they are accurate statements about the data as published, with no reference to other companies' varieties. Statements similar to "See the official University of Maryland Soybean Variety Tests Agronomy Facts No. 32" and "Endorsement or recommendation by the University of Maryland is not implied" must accompany any information that is reproduced. Agronomy Facts No. 32 can be downloaded from the Department's webpage:

<http://www.nrsl.umd.edu/extension/crops/>

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Table 1. Suppliers of private soybean varieties tested in 2003.

| Supplier | Brand | Herbicide Reaction | Entry |
|--|------------------|-------------------------------------|---|
| Clark Seeds, Inc. Kenton, DE 19955 | CLARK | Roundup Ready | CL42RR, CL48RR |
| FS Seeds Acme, PA 15610 | SCHILLINGER | Roundup Ready | 393.RCP,413.RCP,431.RCS,443.R |
| Monsanto Dekalb, IL 60115 | ASGROW DEKALB | Roundup Ready " | AG3905, AG4201,AG4403,AG4502,AG4603 DKB44-51,DKB44-52,DKB46-51 |
| Royster-Clark, Inc. Collinsville, IL 62234 | VIGORO | Roundup Ready " | V38N4RR,V39N4RR,V382NRR,V40N3RR, V42N3RR,V47N3RR,V49N3RR |
| Seedway Emmaus, PA 18049 | SEEDWAY | Roundup Ready | SG3709,SG3905,SG4445 |
| Southern States Cooperative, Inc. Richmond, VA 23260 | S. STATES | Roundup Ready " " | RT3799N,RT3802N,RT3975,RT4098, RT4230N,RT446N,RT4502N,RT4810N, RT4930N,RT4980,RT5001N,RT5302N |
| Syngenta Seeds Landisville, PA 17543 | NK | Roundup Ready | S37-N4,S39-K6,S40-R9,S43-B1 |
| UniSouth Genetics, Inc. Nashville, TN 37211 | USG | Roundup Ready " " Standard | 7393nRR,7401nRR,7402nRR,7403nRR, 7423nRR,7440nRR,7489RR,7482nRR, 7499nRR,510nRR 5002T |

Table 2. The 2003 soybean variety test plot information.

WESTERN MARYLAND RESEARCH AND EDUCATION CENTER
Washington County - Keedysville, MD

Tests: Roundup Ready Maturity Groups III, IV, and IV-S
Planting Date: June 26
Row Spacing: 24 inches
Soil Type: Hagerstown silt loam
Soil Test: pH 6.8, P Index-Optimum, K Index -Excessive
Previous Crop: Corn
Fertilizer: None
Lime: None
Herbicide: 2 qt/A Touchdown plus Activator 90 on July 16
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft
Tillage: Conventional

CENTRAL MARYLAND RESEARCH AND EDUCATION CENTER - CLARKSVILLE FACILITY
Howard County – Clarksville, MD

Tests: Roundup Ready Maturity Groups III, IV, and IV-S
Planting Date: June 26
Row Spacing: 24 inches
Soil Type: Delanco silt loam
Soil Test: pH 6.7, P Index- Optimum, K Index- Optimum
Previous Crop: Corn
Fertilizer: 200 lbs/A 0-14-40
Lime: None
Herbicide: 1 qt/A Roundup plus Activator 90 on July 30
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft
Tillage: Conventional

Tests: Standard Varieties Maturity Groups III, IV, and IV-S
Planting Date: June 26
Row Spacing: 24 inches
Soil Type: Delanco silt loam
Soil Test: pH 6.7, P Index- Optimum, K Index- Optimum
Previous Crop: Corn
Fertilizer: 200 lbs/A 0-14-40
Lime: None
Herbicide: 2.5 pts/A Broadstrike + Dual
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft
Tillage: Conventional

Table 2. (Continued)

WYE RESEARCH AND EDUCATION CENTER
Queen Annes County - Queenstown, MD

Tests: Full Season Standard Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 30
Row Spacing: 24 inches
Soil Type: Matapeake silt loam
Soil Test: pH 6.3, P Index- Optimum, K Index- Optimum
Previous Crop: Corn
Fertilizer: None
Lime: None
Herbicide: Preemergence:1 pt/A Dual II Magnum and 1lb/A Lorox DF
Post emergence:1.5 pt/A Blazer, 1.5 pt/A Basagran on July 17
Insecticide: None
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft except Maturity Group V entries = 6 seeds/ft
Tillage: Conventional

Tests: Full Season Roundup Ready Varieties Groups III, IV, IV-S, and V
Planting Date: July 1
Row Spacing: 24 inches
Soil Type: Matapeake silt loam
Soil Test: pH 6.4, P Index- Excessive, K Index- Optimum
Previous Crop: Corn
Fertilizer: None
Lime: None
Herbicide: 33 oz/A Roundup WM on August 7
Insecticide: 3.2 oz/A Warrior on August 7
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft except Maturity Group V entries = 6 seeds/ft
Tillage: Conventional

Tests: Double Crop Roundup Ready Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: July 18
Row Spacing: 7.5 inches
Soil Type: Matapeake silt loam
Soil Test: pH 6.1, P Index- Optimum, K Index- Excessive
Previous Crop: Wheat
Fertilizer: None
Lime: None
Herbicide: 33 oz/A Roundup WM on July 28
Insecticide: None
Plots: 7 rows, 25 ft long
Seeding Rate: 3 seeds/ft
Tillage: None

Table 2 (Continued)

LOWER EASTERN SHORE RESEARCH AND EDUCATION CENTER- POPLAR HILL FACILITY
Wicomico County – Quantico, MD

Tests: Full Season Standard Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 27
Row Spacing: 24 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.2, P Index- Excessive, K Index- Optimum
Previous Crop: Corn
Fertilizer: 200 lbs/A of 0-15-30
Lime: None
Herbicide: Preemergence: 1.5 pt/A Dual 8E, 13 oz/A Lorox DF, 3 oz/A Canopy XL
Plots: 4 rows, 20 ft long
Seeding Rate: 6.5 seeds/ft except Maturity Group V entries= 6 seeds/ft
Tillage: Conventional

Tests: Full Season Roundup Ready Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 6
Row Spacing: 15 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.4, P Index- Excessive, K Index- Optimum
Previous Crop: No-tillage corn
Fertilizer: 200 lbs/A of 0-15-30
Lime: None
Herbicide: Early preemergence: 1 qt/A Roundup Ultra, 12 oz/A 2,4-D, 1 pt/A Dual 8E
Post emergence: 1 qt/A Roundup Ultra on June 27
Plots: 5 rows, 20 ft long
Seeding Rate: 4.9 seeds/ft
Tillage: None

Tests: Double Crop Standard Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: July 10
Row Spacing: 15 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.3, P Index- Optimum, K Index- Optimum
Previous Crop: Winter Barley
Fertilizer: None on soybeans
Lime: None on soybeans
Herbicide: Preemergence: 1.5 pt/A Roundup Ultra, 1.6 pt/A Dual 8E, 5 oz/A Canopy, 8 oz/A 2,4-DB
Post emergence: 1.5 pt/A Storm, 1 oz/A 2,4-DB, 3 oz/A Blazer + surfactant
Plots: 5 rows, 20 ft long
Seeding Rate: 6 seeds/ft
Tillage: None

Table 2 (Continued)

LOWER EASTERN SHORE RESEARCH AND EDUCATION CENTER- POPLAR HILL FACILITY
Wicomico County – Quantico, MD

Tests: Double Crop Roundup Ready Varieties Maturity Groups III, IV, IV-S, and V
 Planting Date: July 10
 Row Spacing: 15 inches
 Soil Type: Mattapex silt loam
 Soil Test: pH 6.3, P Index- Optimum, K Index- Optimum
 Previous Crop: Winter Barley
 Fertilizer: None on soybeans
 Lime: None on soybeans
 Herbicide: Preemergence: 1 qt/A Roundup Ultra
 Post emergence: 1 qt/A Roundup Ultra on July 31
 Plots: 5 rows, 20 ft long
 Seeding Rate: 6 seeds/ft
 Tillage: None

Table 3. Monthly precipitation (inches) during May through October at variety test locations.

| Location | May | June | July | Aug. | Sept. | Oct. | Total |
|-------------|------|------|------|------|-------|------|-------|
| Keedysville | 6.46 | 6.93 | 1.81 | 6.09 | 8.36 | 3.85 | 33.50 |
| Clarksville | 5.27 | 3.88 | 3.38 | 3.69 | 6.36 | 4.33 | 26.91 |
| Queenstown | 6.55 | 6.14 | 8.46 | 4.41 | 6.70 | 4.29 | 36.55 |
| Quantico | 4.87 | 5.72 | 3.13 | 4.71 | 6.49 | 3.10 | 28.02 |

Table 4. Performance of standard soybean varieties planted at Clarksville.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|-----------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| MATURITY GROUP III | | | | | | |
| PUBLIC - APEX | 44.4 | 10-13 | 1.8 | 17 | 1.0 | 3079 |
| PUBLIC - GENERAL | 43.6 | 10-16 | 3.0 | 26 | 1.0 | 2722 |
| PUBLIC - MACON | 42.1 | 10-18 | 3.3 | 27 | 1.0 | 2669 |
| PUBLIC - IA 3014 | 35.1 | 10-16 | 3.3 | 29 | 1.0 | 3129 |
| EXPERIMENTAL - A 26 | 31.6 | 10-15 | 2.8 | 23 | 1.0 | 3210 |
| Mean | 39.4 | - | 2.9 | 24 | 1.0 | 2962 |
| LSD (0.20) | NS | - | 0.4 | 2 | NS | 71 |
| CV (%) | 6.4 | | | | | |
| MATURITY GROUP IV | | | | | | |
| EXPERIMENTAL - MD 96-5722 | 52.5 | 10-18 | 3.3 | 34 | 1.0 | 2609 |
| EXPERIMENTAL - L 76 | 48.8 | 10-21 | 3.0 | 29 | 1.0 | 2889 |
| PUBLIC - HS 93-4118 | 45.7 | 10-18 | 3.0 | 26 | 1.0 | 2948 |
| EXPERIMENTAL - MD 99-5720 | 44.1 | 10-19 | 3.5 | 30 | 1.0 | 3067 |
| EXPERIMENTAL - MD 97-6156 | 42.9 | 10-19 | 3.5 | 31 | 1.0 | 2698 |
| EXPERIMENTAL - MD 99-5144 | 40.8 | 10-25 | 3.2 | 28 | 1.0 | 3172 |
| PUBLIC - CORSICA | 38.9 | 10-16 | 2.7 | 25 | 1.0 | 3093 |
| PUBLIC - STRESSLAND | 38.3 | 10-20 | 3.5 | 32 | 1.0 | 3446 |
| EXPERIMENTAL - MD 99-173-11 | 23.6 | 10-22 | 3.7 | 24 | 1.0 | 3355 |
| Mean | 41.7 | - | 3.3 | 29 | 1.0 | 3031 |
| LSD (0.20) | 3.4 | - | 0.2 | 2 | NS | 119 |
| CV (%) | 7.5 | | | | | |
| MATURITY GROUP IV-S | | | | | | |
| EXPERIMENTAL - MD 97-6491 | 45.0 | 10-23 | 3.5 | 33 | 1.0 | 2774 |
| PUBLIC - KS 4602N | 44.2 | 10-23 | 3.0 | 30 | 1.0 | 2828 |
| PUBLIC - MD 4900 | 42.9 | 10-27 | 2.5 | 20 | 1.0 | 3405 |
| EXPERIMENTAL - MD 96-5275 | 38.6 | 10-27 | 3.0 | 25 | 1.0 | 3649 |
| PUBLIC - MANOKIN | 34.6 | 10-26 | 4.0 | 35 | 1.0 | 3719 |
| EXPERIMENTAL - MD 00-6605 | 32.9 | 10-29 | 3.3 | 31 | 1.0 | 3544 |
| EXPERIMENTAL - MD 00-6599 | 32.4 | 10-27 | 3.2 | 31 | 1.0 | 3150 |
| EXPERIMENTAL - MD 00-6612 | 32.1 | 10-29 | 3.2 | 29 | 1.0 | 3322 |
| EXPERIMENTAL - JAPAN-L123 | 25.7 | 10-18 | 1.8 | 12 | 1.0 | 2431 |
| Mean | 36.5 | - | 3.1 | 27 | 1.0 | 3202 |
| LSD (0.20) | 4.9 | - | 0.4 | 3 | NS | 89 |
| CV (%) | 12.2 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 5. Performance of standard soybean varieties planted at Queenstown.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|-----------------------------|----------------|------------------|-------------------|-------------------|------------------|-----------------|
| MATURITY GROUP III | | | | | | |
| PUBLIC - GENERAL | 44.9 | 10-11 | 2.3 | 24 | 1.0 | 2844 |
| PUBLIC - MACON | 42.9 | 10-11 | 2.5 | 23 | 1.0 | 2860 |
| PUBLIC - IA 3014 | 38.7 | 10-10 | 2.7 | 24 | 1.0 | 3312 |
| PUBLIC - APEX | 34.9 | 10-08 | 1.5 | 15 | 1.0 | 3385 |
| EXPERIMENTAL - A 26 | 33.2 | 10-10 | 2.5 | 21 | 1.0 | 3241 |
| Mean | 38.9 | - | 2.3 | 22 | 1.0 | 3129 |
| LSD (0.20) | 4.2 | - | 0.3 | 2 | NS | 153 |
| CV (%) | 9.4 | | | | | |
| MATURITY GROUP IV | | | | | | |
| EXPERIMENTAL - MD 96-5722 | 47.7 | 10-14 | 2.8 | 30 | 1.0 | 2436 |
| PUBLIC - STRESSLAND | 44.1 | 10-18 | 3.7 | 28 | 1.0 | 3183 |
| EXPERIMENTAL - MD 99-5144 | 44.0 | 10-17 | 3.5 | 25 | 1.0 | 2933 |
| EXPERIMENTAL - MD 99-5720 | 41.6 | 10-15 | 3.2 | 25 | 1.0 | 3045 |
| EXPERIMENTAL - L 76 | 41.3 | 10-16 | 2.8 | 26 | 1.0 | 2811 |
| EXPERIMENTAL - MD 97-6156 | 41.3 | 10-14 | 3.0 | 27 | 1.0 | 2648 |
| PUBLIC - HS 93-4118 | 39.5 | 10-13 | 2.7 | 23 | 1.0 | 2946 |
| PUBLIC - CORSICA | 37.9 | 10-09 | 2.8 | 22 | 1.0 | 2806 |
| EXPERIMENTAL - MD 99-173-11 | Poor germ | 10-16 | 3.5 | 20 | 1.0 | 3205 |
| Mean | 42.2 | - | 3.1 | 25 | 1.0 | 2890 |
| LSD (0.20) | NS | - | 0.5 | 3 | NS | 82 |
| CV (%) | 10.0 | | | | | |
| MATURITY GROUP IV-S | | | | | | |
| PUBLIC - MD 4900 | 46.6 | 10-22 | 2.5 | 19 | 1.0 | 3356 |
| PUBLIC - MD 97-6491 | 45.1 | 10-16 | 3.0 | 28 | 1.0 | 2940 |
| PUBLIC - MANOKIN | 42.4 | 10-22 | 3.3 | 28 | 1.0 | 3538 |
| PUBLIC - KS 4602N | 42.1 | 10-17 | 2.7 | 27 | 1.0 | 3215 |
| EXPERIMENTAL - MD 96-5275 | 41.9 | 10-22 | 2.7 | 20 | 1.0 | 3565 |
| EXPERIMENTAL - MD 00-6599 | 39.4 | 10-23 | 3.3 | 27 | 1.2 | 3079 |
| EXPERIMENTAL - MD 00-6612 | 38.2 | 10-23 | 3.3 | 26 | 1.0 | 3415 |
| EXPERIMENTAL - MD 00-6605 | 33.6 | 10-23 | 3.3 | 25 | 1.0 | 3657 |
| EXPERIMENTAL - JAPAN-L123 | 24.2 | 10-12 | 1.8 | 13 | 2.0 | 2847 |
| Mean | 39.3 | - | 2.9 | 24 | 1.1 | 3290 |
| LSD (0.20) | 4.1 | - | 0.3 | 2 | 0.1 | 148 |
| CV (%) | 9.5 | | | | | |

Table 5. (Continued) Queenstown - Standard Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-6226 | 49.9 | 10-25 | 2.7 | 23 | 1.0 | 2927 |
| EXPERIMENTAL - MD 97-6065 | 48.6 | 10-26 | 3.2 | 25 | 1.0 | 3240 |
| USG - 5002T | 47.4 | 10-25 | 3.3 | 22 | 1.0 | 2985 |
| PUBLIC - TN 5601T | 43.3 | 10-27 | 2.8 | 24 | 1.0 | 3362 |
| PUBLIC - KS 5502N | 43.0 | 10-30 | 2.3 | 25 | 1.0 | 3681 |
| PUBLIC - HUTCHESON | 42.7 | 10-26 | 2.8 | 22 | 1.0 | 2878 |
| PUBLIC - HOLLADAY | 42.5 | 10-22 | 2.3 | 18 | 1.0 | 3515 |
| PUBLIC - ESSEX | 40.7 | 10-23 | 2.5 | 19 | 1.0 | 3456 |
| EXPERIMENTAL - V 96-340 | 40.5 | 10-26 | 2.0 | 21 | 1.0 | 2764 |
| EXPERIMENTAL - MD 98-5927 | 40.1 | 10-27 | 3.0 | 21 | 1.0 | 2830 |
| EXPERIMENTAL - R 95-1705 | 39.5 | 10-28 | 3.0 | 26 | 1.0 | 2719 |
| EXPERIMENTAL - MD 99-5458 | 35.6 | 10-23 | 3.3 | 21 | 1.0 | 3259 |
| EXPERIMENTAL - MD 99-5433 | 34.4 | 10-23 | 3.5 | 22 | 1.0 | 3311 |
| EXPERIMENTAL - MD 99-6701 | 33.8 | 10-23 | 3.5 | 24 | 1.0 | 3369 |
| EXPERIMENTAL - MD 99-5464 | 32.9 | 10-22 | 3.5 | 21 | 1.0 | 3417 |
| Mean | 41.0 | - | 2.9 | 22 | 1.0 | 3181 |
| LSD (0.20) | 2.7 | - | 0.4 | 2 | NS | 139 |
| CV (%) | 6.1 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 6. Performance of standard soybean varieties planted full season at Quantico.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|-----------------------------|----------------|------------------|-------------------|-------------------|------------------|-----------------|
| MATURITY GROUP III | | | | | | |
| PUBLIC - APEX | 41.5 | 10-06 | 1.7 | 13 | 1.0 | 3075 |
| PUBLIC - GENERAL | 40.8 | 10-11 | 2.8 | 22 | 1.0 | 2877 |
| PUBLIC - IA 3014 | 38.4 | 10-10 | 3.3 | 22 | 1.0 | 3238 |
| PUBLIC - MACON | 38.1 | 10-09 | 3.2 | 22 | 1.0 | 2860 |
| EXPERIMENTAL - A 26 | 33.4 | 10-10 | 3.0 | 20 | 1.0 | 2890 |
| Mean | 38.5 | - | 2.8 | 20 | 1.0 | 2988 |
| LSD (0.20) | 2.4 | - | 0.3 | 1 | NS | 106 |
| CV (%) | 5.5 | | | | | |
| MATURITY GROUP IV | | | | | | |
| EXPERIMENTAL - MD 96-5722 | 45.8 | 10-14 | 3.0 | 26 | 1.0 | 2633 |
| EXPERIMENTAL - MD 99-5144 | 45.8 | 10-17 | 3.0 | 23 | 1.0 | 3094 |
| EXPERIMENTAL - MD 99-5720 | 44.8 | 10-16 | 3.0 | 23 | 1.0 | 2965 |
| PUBLIC - CORSICA | 44.2 | 10-10 | 2.8 | 22 | 1.0 | 2920 |
| PUBLIC - STRESSLAND | 44.0 | 10-17 | 3.0 | 27 | 1.0 | 3319 |
| PUBLIC - HS 93-4118 | 43.5 | 10-14 | 3.3 | 24 | 1.0 | 3024 |
| EXPERIMENTAL - L 76 | 42.9 | 10-15 | 3.2 | 26 | 1.0 | 2766 |
| EXPERIMENTAL - MD 97-6156 | 41.0 | 10-16 | 3.0 | 24 | 1.0 | 2643 |
| EXPERIMENTAL - MD 99-173-11 | Poor germ | 10-13 | 3.0 | 23 | 1.2 | 3204 |
| Mean | 43.8 | - | 3.0 | 24 | 1.0 | 2952 |
| LSD (0.20) | NS | - | 0.2 | 2 | NS | 57 |
| CV (%) | 9.7 | | | | | |
| MATURITY GROUP IV-S | | | | | | |
| EXPERIMENTAL - MD 96-5275 | 48.2 | 10-19 | 2.7 | 20 | 1.0 | 3165 |
| PUBLIC - MANOKIN | 46.9 | 10-20 | 3.3 | 21 | 1.0 | 3250 |
| PUBLIC - MD 4900 | 46.8 | 10-19 | 2.3 | 17 | 1.0 | 3058 |
| PUBLIC - KS 4602N | 45.5 | 10-18 | 2.7 | 25 | 1.2 | 2684 |
| EXPERIMENTAL - MD 97-6491 | 44.9 | 10-17 | 2.7 | 26 | 1.0 | 2568 |
| EXPERIMENTAL - MD 00-6612 | 40.5 | 10-22 | 3.0 | 26 | 1.2 | 2884 |
| EXPERIMENTAL - MD 00-6605 | 37.8 | 10-23 | 3.2 | 27 | 1.0 | 3059 |
| EXPERIMENTAL - MD 00-6599 | 36.4 | 10-23 | 3.0 | 25 | 1.8 | 2729 |
| EXPERIMENTAL - JAPAN-L123 | 26.5 | 10-11 | 2.3 | 14 | 2.0 | 2432 |
| Mean | 41.5 | - | 2.8 | 22 | 1.2 | 2870 |
| LSD (0.20) | 3.4 | - | 0.3 | 3 | 0.2 | 75 |
| CV (%) | 7.5 | | | | | |

Table 6. (Continued) Quantico - Full Season, Standard Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-6226 | 51.9 | 10-22 | 2.8 | 22 | 1.0 | 2801 |
| USG - 5002T | 51.8 | 10-23 | 2.8 | 21 | 1.0 | 2940 |
| PUBLIC - ESSEX | 51.4 | 10-21 | 2.5 | 22 | 1.0 | 3042 |
| EXPERIMENTAL - MD 97-6065 | 51.1 | 10-24 | 3.0 | 25 | 1.0 | 3079 |
| PUBLIC - TN 5601T | 51.0 | 10-25 | 2.5 | 24 | 1.0 | 3176 |
| EXPERIMENTAL - V 96-340 | 50.6 | 10-22 | 2.3 | 19 | 1.0 | 2707 |
| PUBLIC - HUTCHESON | 48.9 | 10-23 | 2.5 | 21 | 1.0 | 2737 |
| PUBLIC - HOLLADAY | 47.8 | 10-20 | 2.8 | 19 | 1.0 | 3136 |
| EXPERIMENTAL - MD 98-5927 | 47.0 | 10-25 | 2.8 | 22 | 1.0 | 2612 |
| PUBLIC - KS 5502N | 46.4 | 10-27 | 2.8 | 24 | 1.0 | 3481 |
| EXPERIMENTAL - R 95-1705 | 43.2 | 10-25 | 2.7 | 25 | 1.0 | 2579 |
| EXPERIMENTAL - MD 99-5433 | 39.8 | 10-22 | 3.3 | 22 | 1.5 | 3173 |
| EXPERIMENTAL - MD 99-5464 | 37.7 | 10-22 | 3.5 | 22 | 1.0 | 3086 |
| EXPERIMENTAL - MD 99-6701 | 36.7 | 10-23 | 3.3 | 18 | 1.0 | 3115 |
| EXPERIMENTAL - MD 99-5458 | 36.5 | 10-22 | 3.2 | 22 | 1.7 | 3105 |
| Mean | 46.1 | - | 2.9 | 22 | 1.1 | 2985 |
| LSD (0.20) | 3.4 | - | 0.2 | 2 | 0.1 | 114 |
| CV (%) | 6.9 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 7. Performance of standard soybean varieties double cropped at Quantico.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|-----------------------------|----------------|------------------|-------------------|-------------------|------------------|-----------------|
| MATURITY GROUP III | | | | | | |
| PUBLIC - APEX | 49.5 | - | 1.7 | 17 | 1.0 | 3105 |
| PUBLIC - IA 3014 | 48.5 | - | 2.7 | 26 | 1.0 | 3063 |
| EXPERIMENTAL - A 26 | 44.9 | - | 2.0 | 21 | 1.0 | 3038 |
| PUBLIC - MACON | 44.5 | - | 2.2 | 25 | 1.0 | 2708 |
| PUBLIC - GENERAL | 44.0 | - | 2.0 | 24 | 1.0 | 2669 |
| Mean | 46.3 | - | 2.1 | 23 | 1.0 | 2916 |
| LSD (0.20) | NS | - | 0.3 | 1 | NS | 142 |
| CV (%) | 10.7 | | | | | |
| MATURITY GROUP IV | | | | | | |
| EXPERIMENTAL - MD 96-5722 | 55.3 | - | 2.5 | 28 | 1.0 | 2574 |
| PUBLIC - STRESSLAND | 55.2 | - | 2.8 | 30 | 1.0 | 3259 |
| PUBLIC - CORSICA | 50.1 | - | 2.5 | 25 | 1.0 | 2740 |
| EXPERIMENTAL - MD 99-5720 | 50.0 | - | 2.8 | 27 | 1.0 | 2909 |
| PUBLIC - HS 93-4118 | 47.2 | - | 2.8 | 25 | 1.0 | 2816 |
| EXPERIMENTAL - L 76 | 45.7 | - | 2.5 | 27 | 1.0 | 2854 |
| EXPERIMENTAL - MD 97-6156 | 42.9 | - | 2.7 | 27 | 1.0 | 2968 |
| EXPERIMENTAL - MD 99-5144 | 41.2 | - | 2.3 | 27 | 1.0 | 3122 |
| EXPERIMENTAL - MD 99-173-11 | Poor germ | - | 3.3 | 24 | 1.0 | 3339 |
| Mean | 48.5 | - | 2.7 | 27 | 1.0 | 2953 |
| LSD (0.20) | 3.5 | - | 0.4 | 2 | NS | 137 |
| CV (%) | 6.5 | | | | | |
| MATURITY GROUP IV-S | | | | | | |
| PUBLIC - MD 4900 | 48.7 | - | 2.2 | 19 | 1.0 | 3086 |
| PUBLIC - KS 4602N | 48.2 | - | 2.0 | 27 | 1.0 | 2671 |
| EXPERIMENTAL -MD 00-6605 | 43.6 | - | 2.8 | 29 | 1.0 | 3354 |
| EXPERIMENTAL - MD 97-6491 | 42.9 | - | 2.0 | 28 | 1.0 | 2757 |
| EXPERIMENTAL - MD 00-6612 | 42.7 | - | 2.8 | 29 | 1.0 | 3203 |
| PUBLIC - MANOKIN | 41.7 | - | 3.2 | 25 | 1.0 | 3491 |
| EXPERIMENTAL - MD 00-6599 | 38.7 | - | 2.7 | 27 | 2.0 | 3143 |
| EXPERIMENTAL - MD 96-5275 | 37.0 | - | 2.2 | 22 | 1.0 | 3523 |
| EXPERIMENTAL - JAPAN-L123 | 22.5 | - | 2.2 | 17 | 2.0 | 2258 |
| Mean | 40.7 | - | 2.4 | 25 | 1.2 | 3054 |
| LSD (0.20) | 4.5 | - | 0.3 | 2 | NS | 105 |
| CV (%) | 10.1 | | | | | |

Table 7. (Continued) Quantico - Double Crop, Standard Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| MATURITY GROUP V | | | | | | |
| PUBLIC - ESSEX | 45.9 | - | 2.8 | 21 | 1.0 | 3328 |
| USG - 5002T | 45.4 | - | 3.0 | 21 | 1.0 | 3151 |
| EXPERIMENTAL - MD 99-6226 | 44.7 | - | 2.7 | 25 | 1.0 | 2794 |
| PUBLIC - HOLLADAY | 44.4 | - | 2.5 | 21 | 1.0 | 3465 |
| EXPERIMENTAL - V 96-340 | 42.6 | - | 2.2 | 23 | 1.2 | 3045 |
| PUBLIC - TN 5601T | 41.5 | - | 2.3 | 24 | 1.0 | 3536 |
| EXPERIMENTAL - MD 98-5927 | 41.3 | - | 3.0 | 25 | 1.2 | 2749 |
| EXPERIMENTAL - MD 99-5458 | 40.0 | - | 2.8 | 26 | 1.0 | 3168 |
| PUBLIC - KS 5502N | 39.9 | - | 2.8 | 25 | 1.3 | 3591 |
| PUBLIC - HUTCHESON | 39.3 | - | 2.5 | 26 | 1.0 | 2968 |
| EXPERIMENTAL - R 95-1705 | 37.7 | - | 2.7 | 25 | 1.0 | 2663 |
| EXPERIMENTAL - MD 97-6065 | 37.7 | - | 3.0 | 24 | 1.2 | 3488 |
| EXPERIMENTAL - MD 99-5464 | 36.7 | - | 3.2 | 23 | 1.0 | 3338 |
| EXPERIMENTAL - MD 99-6701 | 34.7 | - | 2.8 | 22 | 1.0 | 3248 |
| EXPERIMENTAL - MD 99-5433 | 28.9 | - | 2.3 | 21 | 1.5 | 3296 |
| Mean | 40.1 | - | 2.7 | 23 | 1.1 | 3189 |
| LSD (0.20) | 4.5 | - | 0.4 | 3 | 0.2 | 98 |
| CV (%) | 10.5 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 8. Relative yields of standard soybean varieties compared to the mean yield of all varieties in that maturity group at each location in 2003.

| BRAND - ENTRY | Clarksville | Queenstown | Quantico | |
|----------------------------------|----------------------------------|-------------|-------------|-------------|
| | | | Full Season | Double Crop |
| MATURITY GROUP III | | | | |
| | Relative Yield, % of Mean | | | |
| PUBLIC - APEX | 113* | 90 | 108* | 107* |
| EXPERIMENTAL - A 26 | 80 | 85 | 87 | 97 |
| PUBLIC - GENERAL | 111 | 115* | 106* | 95 |
| PUBLIC - IA 3014 | 89 | 99 | 100 | 105 |
| PUBLIC - MACON | 107 | 110* | 99 | 96 |
| Location/Group Mean Yield | 39.4 | 38.9 | 38.5 | 46.3 |
| MATURITY GROUP IV | | | | |
| PUBLIC - CORSICA | 93 | 90 | 101 | 103 |
| PUBLIC - HS 93-4118 | 109 | 94 | 99 | 97 |
| EXPERIMENTAL - L 76 | 117 | 98 | 98 | 94 |
| EXPERIMENTAL - MD 96-5722 | 126* | 113* | 105* | 114* |
| EXPERIMENTAL - MD 97-6156 | 103 | 98 | 94 | 89 |
| EXPERIMENTAL - MD 99-173-11 | 57 | 100 | 96 | 100 |
| EXPERIMENTAL - MD 99-5144 | 98 | 104 | 105* | 85 |
| EXPERIMENTAL - MD 99-5720 | 106 | 99 | 102 | 103 |
| PUBLIC - STRESSLAND | 92 | 105 | 101 | 114* |
| Location/Group Mean Yield | 41.7 | 42.2 | 43.8 | 48.5 |
| MATURITY GROUP IV-S | | | | |
| EXPERIMENTAL - JAPAN-L123 | 70 | 61 | 64 | 55 |
| PUBLIC - KS 4602N | 121* | 107 | 110* | 118* |
| PUBLIC - MANOKIN | 95 | 108 | 113* | 103 |
| PUBLIC - MD 4900 | 118* | 119* | 113* | 120* |
| EXPERIMENTAL - MD 96-5275 | 106 | 107 | 116* | 91 |
| EXPERIMENTAL - MD 97-6491 | 123* | 115* | 108* | 105 |
| EXPERIMENTAL - MD 00-6599 | 89 | 100 | 88 | 95 |
| EXPERIMENTAL - MD 00-6605 | 90 | 86 | 91 | 107 |
| EXPERIMENTAL - MD 00-6612 | 88 | 97 | 98 | 105 |
| Location/Group Mean Yield | 36.5 | 39.3 | 41.5 | 40.7 |

Table 8. (Continued) Relative Yields, Standard Soybean Varieties

| BRAND - ENTRY | Clarksville | Queenstown | Quantic | |
|----------------------------------|----------------------------------|-------------|-------------|-------------|
| | | | Full Season | Double Crop |
| MATURITY GROUP V | Relative Yield, % of Mean | | | |
| PUBLIC - ESSEX | - | 99 | 112* | 114* |
| PUBLIC - HOLLADAY | - | 104 | 104 | 111* |
| PUBLIC - HUTCHESON | - | 104 | 106* | 98 |
| PUBLIC - KS 5502N | - | 105 | 101 | 100 |
| EXPERIMENTAL - MD 97-6065 | - | 119* | 111* | 94 |
| EXPERIMENTAL - MD 98-5927 | - | 98 | 102 | 103 |
| EXPERIMENTAL - MD 99-5433 | - | 84 | 86 | 72 |
| EXPERIMENTAL - MD 99-5458 | - | 87 | 79 | 100 |
| EXPERIMENTAL - MD 99-5464 | - | 80 | 82 | 92 |
| EXPERIMENTAL - MD 99-6226 | - | 122* | 113* | 112* |
| EXPERIMENTAL - MD 99-6701 | - | 82 | 80 | 87 |
| EXPERIMENTAL - R 95-1705 | - | 96 | 94 | 94 |
| PUBLIC - TN 5601T | - | 106 | 111* | 104* |
| USG - 5002T | - | 116* | 112* | 113* |
| EXPERIMENTAL - V 96-340 | - | 99 | 110* | 106* |
| Location/Group Mean Yield | - | 41.0 | 46.1 | 40.1 |

*Yield is not significantly different from the highest yielding entry in this maturity group at this location.

Actual variety yield can be obtained by converting the relative yield to a decimal percentage and multiplying this value by the location/group mean yield. A variety with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all of those varieties in that maturity group.

Table 9. Two-year average yields of standard varieties grown at three locations in Maryland, 2002-2003.

| BRAND - ENTRY | Clarksville | Queenstown | Quantico | |
|----------------------------|-------------------------|------------|-------------|-------------|
| | | | Full Season | Double Crop |
| MATURITY GROUP III | | | | |
| | Seed Yield, Bu/A | | | |
| PUBLIC - APEX | 47.1 | 28.3 | - | 44.7 |
| PUBLIC - GENERAL | 46.9 | 35.2 | 49.0* | 41.8 |
| PUBLIC - IA 3014 | 43.3 | 31.7 | - | 42.7 |
| PUBLIC - MACON | 44.2 | 32.9 | 47.6* | 41.9 |
| MATURITY GROUP IV | | | | |
| PUBLIC - CORSICA | 46.6 | 38.4 | 51.6* | 45.6 |
| PUBLIC - HS 93-4118 | 49.7 | 39.3 | 52.2* | 44.3 |
| EXPERIMENTAL - MD 96-5722 | 53.8 | 43.3 | 55.2* | 48.5 |
| EXPERIMENTAL - MD 97-6156 | 41.9* | 38.8 | 48.4* | 41.8 |
| PUBLIC - STRESSLAND | 47.0 | 40.8 | 51.4* | 48.6 |
| MATURITY GROUP IV-S | | | | |
| EXPERIMENTAL - JAPAN-L123 | 31.9 | 27.9 | 28.8 | 28.3 |
| PUBLIC - KS 4602N | 51.5 | 41.6 | 34.1 | 44.4 |
| PUBLIC - MANOKIN | 43.1 | 43.1 | 39.8 | 42.1 |
| PUBLIC - MD 4900 | 53.4 | 48.2 | 42.4 | 49.0 |
| EXPERIMENTAL - MD 96-5275 | 46.9 | 41.5 | 41.3 | 40.1 |
| EXPERIMENTAL - MD 97-6491 | 49.8 | 42.3 | 31.1 | 40.7 |
| MATURITY GROUP V | | | | |
| PUBLIC - ESSEX | - | 37.4 | 42.9 | 44.7 |
| PUBLIC - HOLLADAY | - | 42.3 | 44.4 | 45.1 |
| PUBLIC - HUTCHESON | - | 39.2 | 42.0 | 41.3 |
| PUBLIC - KS 5502N | - | 42.7 | 44.0 | 42.2 |
| EXPERIMENTAL - MD 97-6065 | - | 46.7 | 46.8 | 40.6 |
| EXPERIMENTAL - MD 98-5927 | - | 40.7 | 43.0 | 41.9 |
| EXPERIMENTAL - R 95-1705 | - | 36.5 | 39.3 | 35.8 |
| PUBLIC - TN 5601T | - | 42.2 | 46.1 | 41.9 |
| EXPERIMENTAL - V 96-340 | - | 40.8 | 45.9 | 42.2 |

*No 2002 data. Mean = Average of 2001 and 2003 data where available.

Table 10. Performance of Roundup Ready soybean varieties planted at Keedysville.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| NK - S37-N4 | 57.6 | - | 2.7 | 28 | 1.0 | 2954 |
| SCHILLINGER - 393.RCP | 56.7 | - | 2.3 | 28 | 1.0 | 3038 |
| USG - 7393nRR | 56.2 | - | 2.8 | 26 | 1.0 | 2750 |
| SEEDWAY - SG3709 | 56.0 | - | 1.7 | 26 | 1.0 | 3369 |
| SEEDWAY - SG3905 | 55.5 | - | 2.8 | 25 | 1.0 | 2794 |
| VIGORO - V39N4RR | 55.3 | - | 2.8 | 25 | 1.0 | 2711 |
| VIGORO - V38N4RR | 54.6 | - | 2.5 | 26 | 1.0 | 3114 |
| VIGORO - V382NRR | 52.8 | - | 2.3 | 26 | 1.0 | 3567 |
| NK - S39-K6 | 52.2 | - | 2.0 | 24 | 1.0 | 3087 |
| ASGROW - AG3905 | 49.3 | - | 2.3 | 24 | 1.0 | 2897 |
| S.STATES - RT3802N | 48.0 | - | 3.0 | 29 | 1.0 | 3379 |
| S.STATES - RT3799N | 47.2 | - | 2.3 | 27 | 1.0 | 3059 |
| S.STATES - RT3975 | 44.3 | - | 2.7 | 26 | 1.0 | 3129 |
| Maturity Group III Mean | 52.8 | - | 2.5 | 26 | 1.0 | 3065 |
| LSD (0.20) | 3.6 | - | 0.4 | 2 | NS | 81 |
| CV (%) | 6.3 | | | | | |
| SCHILLINGER - 431.RCS | 55.4 | - | 2.2 | 30 | 1.0 | 3195 |
| ASGROW - AG4502 | 54.9 | - | 2.7 | 27 | 1.0 | 2900 |
| NK - S40-R9 | 54.8 | - | 2.8 | 30 | 1.5 | 3083 |
| USG - 7402nRR | 54.0 | - | 2.5 | 31 | 1.0 | 2818 |
| ASGROW - AG4201 | 53.7 | - | 2.3 | 29 | 1.0 | 3158 |
| USG - 7401nRR | 53.4 | - | 3.0 | 28 | 1.0 | 2653 |
| S.STATES - RT4098 | 53.2 | - | 2.5 | 29 | 1.0 | 3256 |
| USG - 7403nRR | 52.9 | - | 1.7 | 25 | 1.5 | 2785 |
| ASGROW - AG4403 | 52.2 | - | 2.3 | 30 | 1.0 | 3781 |
| CLARK - CL42RR | 52.0 | - | 2.7 | 30 | 1.0 | 3661 |
| VIGORO - V40N3RR | 51.8 | - | 1.7 | 25 | 1.0 | 2658 |
| S.STATES - RT4230N | 51.8 | - | 3.3 | 30 | 1.0 | 2924 |
| EXPERIMENTAL - MD 99-0053-1RR | 51.1 | - | 3.5 | 35 | 1.2 | 3044 |
| VIGORO - V42N3RR | 50.9 | - | 1.8 | 27 | 1.2 | 2539 |
| DEKALB - DKB44-51 | 50.4 | - | 2.3 | 28 | 1.0 | 3696 |
| DEKALB - DKB44-52 | 49.2 | - | 2.7 | 28 | 1.3 | 3068 |
| SCHILLINGER - 443.R | 48.5 | - | 2.0 | 24 | 1.0 | 3420 |
| SCHILLINGER - 413.RCP | 48.4 | - | 2.2 | 26 | 1.0 | 3110 |
| USG - 7423nRR | 48.1 | - | 1.5 | 23 | 1.0 | 2651 |
| EXPERIMENTAL - MD 99-0533-3RR | 47.9 | - | 2.7 | 26 | 1.0 | 4029 |
| S.STATES - RT446N | 47.9 | - | 2.5 | 29 | 1.0 | 3150 |
| SEEDWAY - SG4445 | 47.8 | - | 2.5 | 30 | 1.0 | 3649 |
| S.STATES - RT4502N | 47.1 | - | 3.0 | 33 | 1.0 | 3377 |
| NK - S43-B1 | 47.0 | - | 2.5 | 26 | 1.0 | 3272 |
| USG - 7440nRR | 46.5 | - | 2.0 | 29 | 1.0 | 3729 |
| EXPERIMENTAL - MD 99-0312-2RR | 45.8 | - | 3.3 | 31 | 1.0 | 3498 |
| Maturity Group IV Mean | 50.6 | - | 2.5 | 28 | 1.1 | 3196 |
| LSD (0.20) | 3.7 | - | 0.4 | 3 | 0.1 | 95 |
| CV (%) | 6.9 | | | | | |

Table 10. (Continued) Keedysville - Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| VIGORO - V47N3RR | 51.8 | - | 2.2 | 27 | 1.0 | 3290 |
| S.STATES - RT4980 | 51.3 | - | 3.0 | 32 | 1.0 | 3526 |
| CLARK - CL48RR | 50.9 | - | 3.2 | 28 | 1.0 | 3475 |
| DEKALB - DKB46-51 | 50.8 | - | 2.3 | 28 | 1.0 | 3412 |
| USG - 7482nRR | 49.7 | - | 2.2 | 29 | 1.0 | 3280 |
| VIGORO - V49N3RR | 48.8 | - | 2.7 | 28 | 1.0 | 3240 |
| USG - 7489RR | 48.6 | - | 3.0 | 29 | 1.0 | 3572 |
| ASGROW - AG4603 | 45.3 | - | 2.0 | 26 | 1.0 | 3536 |
| USG - 7499nRR | 43.7 | - | 2.8 | 27 | 1.0 | 3348 |
| S.STATES - RT4810N | 42.4 | - | 2.5 | 28 | 1.0 | 3482 |
| EXPERIMENTAL - MD 99-1098-2RR | 38.9 | - | 3.0 | 27 | 1.0 | 4419 |
| EXPERIMENTAL - MD 99-1353-2RR | 30.2 | - | 3.3 | 27 | 1.0 | 5120 |
| S.STATES - RT4930N | 28.1 | - | 3.3 | 30 | 1.0 | 3770 |
| Maturity Group IV-S Mean | 44.7 | - | 2.7 | 28 | 1.0 | 3652 |
| LSD (0.20) | 4.4 | - | 0.3 | 2 | NS | 105 |
| CV (%) | 9.2 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 11. Performance of Roundup Ready soybean varieties planted at Clarksville.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| SEEDWAY - SG3905 | 49.0 | 10-20 | 3.5 | 29 | 1.0 | 2337 |
| SCHILLINGER - 393.RCP | 47.1 | 10-19 | 2.8 | 29 | 1.0 | 2707 |
| USG - 7393nRR | 46.7 | 10-23 | 3.3 | 29 | 1.0 | 2289 |
| SEEDWAY - SG3709 | 46.3 | 10-18 | 1.5 | 27 | 1.2 | 2978 |
| VIGORO - V382NRR | 46.3 | 10-20 | 3.0 | 29 | 1.0 | 3232 |
| VIGORO - V39N4RR | 46.2 | 10-22 | 3.3 | 30 | 1.0 | 2312 |
| NK - S37-N4 | 45.8 | 10-21 | 3.2 | 30 | 1.5 | 2587 |
| NK - S39-K6 | 45.5 | 10-19 | 2.3 | 26 | 1.0 | 2701 |
| VIGORO - V38N4RR | 45.1 | 10-19 | 3.3 | 27 | 1.0 | 2723 |
| ASGROW - AG3905 | 43.1 | 10-22 | 2.2 | 26 | 1.0 | 2639 |
| S.STATES - RT3802N | 40.7 | 10-17 | 3.0 | 30 | 1.0 | 3016 |
| S.STATES - RT3975 | 40.1 | 10-21 | 3.2 | 29 | 1.0 | 2728 |
| S.STATES - RT3799N | 38.9 | 10-20 | 3.2 | 28 | 1.0 | 2744 |
| Maturity Group III Mean | 44.7 | - | 2.9 | 28 | 1.1 | 2692 |
| LSD (0.20) | 3.3 | - | 0.4 | NS | 0.1 | 78 |
| CV (%) | 6.8 | | | | | |
| SCHILLINGER - 431.RCS | 50.1 | 10-25 | 2.5 | 29 | 1.0 | 2952 |
| S.STATES - RT4098 | 47.0 | 10-22 | 3.0 | 29 | 1.0 | 3115 |
| USG - 7403nRR | 46.9 | 10-19 | 2.2 | 27 | 1.0 | 2690 |
| ASGROW - AG4502 | 46.7 | 10-25 | 3.5 | 29 | 1.0 | 2817 |
| NK - S43-B1 | 46.7 | 10-21 | 3.3 | 30 | 1.0 | 3040 |
| ASGROW - AG4201 | 46.0 | 10-26 | 3.2 | 32 | 1.0 | 2802 |
| S.STATES - RT4230N | 45.8 | 10-26 | 3.5 | 30 | 1.0 | 2788 |
| S.STATES - RT446N | 45.7 | 10-22 | 3.3 | 31 | 1.0 | 2800 |
| NK - S40-R9 | 45.7 | 10-24 | 3.5 | 33 | 1.0 | 2836 |
| EXPERIMENTAL - MD 99-0312-2RR | 45.6 | 10-25 | 3.5 | 31 | 1.0 | 3102 |
| VIGORO - V40N3RR | 45.4 | 10-20 | 2.2 | 25 | 1.0 | 2559 |
| CLARK - CL42RR | 44.7 | 10-20 | 3.5 | 30 | 1.0 | 3498 |
| USG - 7402nRR | 44.4 | 10-21 | 2.7 | 30 | 1.0 | 2573 |
| VIGORO - V42N3RR | 44.4 | 10-20 | 1.5 | 25 | 1.0 | 2405 |
| USG - 7423nRR | 44.3 | 10-20 | 1.8 | 24 | 1.0 | 2493 |
| USG - 7401nRR | 43.7 | 10-22 | 3.5 | 28 | 1.0 | 2515 |
| ASGROW - AG4403 | 43.7 | 10-25 | 2.7 | 31 | 1.0 | 3500 |
| SCHILLINGER - 443.R | 43.6 | 10-26 | 2.0 | 28 | 1.0 | 3187 |
| DEKALB - DKB44-51 | 43.3 | 10-24 | 2.8 | 32 | 1.0 | 3454 |
| USG - 7440nRR | 43.0 | 10-26 | 2.7 | 30 | 1.0 | 3545 |
| DEKALB - DKB44-52 | 42.8 | 10-25 | 3.3 | 28 | 1.0 | 2675 |
| SCHILLINGER - 413.RCP | 42.6 | 10-22 | 3.0 | 27 | 1.0 | 2713 |
| EXPERIMENTAL - MD 99-0053-1RR | 42.0 | 10-25 | 3.5 | 33 | 1.0 | 2905 |
| S.STATES - RT4502N | 41.9 | 10-28 | 3.2 | 33 | 1.0 | 3138 |
| SEEDWAY - SG4445 | 40.2 | 10-25 | 2.2 | 29 | 1.0 | 3559 |
| EXPERIMENTAL - MD 99-0533-3RR | 39.5 | 10-26 | 3.5 | 33 | 1.0 | 3709 |
| Maturity Group IV Mean | 44.5 | - | 2.9 | 30 | 1.0 | 2976 |
| LSD (0.20) | 3.5 | - | 0.3 | 2 | NS | 91 |
| CV (%) | 7.5 | | | | | |

Table 11. (Continued) Clarksville - Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| CLARK - CL48RR | 45.7 | 10-27 | 3.5 | 33 | 1.0 | 2927 |
| S.STATES - RT4980 | 45.4 | 10-27 | 3.3 | 30 | 1.0 | 3190 |
| ASGROW - AG4603 | 45.3 | 10-27 | 2.3 | 28 | 1.0 | 3005 |
| DEKALB - DKB46-51 | 45.0 | 10-26 | 2.7 | 29 | 1.0 | 2886 |
| USG - 7489RR | 44.9 | 10-26 | 3.3 | 30 | 1.0 | 3241 |
| VIGORO - V47N3RR | 44.7 | 10-27 | 2.5 | 26 | 1.0 | 2947 |
| USG - 7482nRR | 44.6 | 10-26 | 2.8 | 28 | 1.0 | 2896 |
| S.STATES - RT4810N | 43.3 | 10-27 | 2.5 | 28 | 1.0 | 3114 |
| USG - 7499nRR | 43.0 | 10-28 | 2.7 | 26 | 1.0 | 3031 |
| EXPERIMENTAL - MD 99-1098-2RR | 41.1 | 10-28 | 2.3 | 24 | 1.0 | 3353 |
| VIGORO - V49N3RR | 40.4 | 10-27 | 2.2 | 26 | 1.0 | 2847 |
| EXPERIMENTAL - MD 99-1353-2RR | 36.1 | 10-28 | 3.2 | 23 | 1.0 | 4014 |
| S.STATES - RT4930N | 30.8 | 11-01 | 2.5 | 23 | 1.0 | 2998 |
| Maturity Group IV-S Mean | 42.3 | - | 2.8 | 27 | 1.0 | 3111 |
| LSD (0.20) | 3.0 | - | 0.4 | 2 | NS | 74 |
| CV (%) | 6.7 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 12. Performance of Roundup Ready soybean varieties planted full season at Queenstown.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| SEEDWAY - SG3905 | 50.2 | 10-15 | 3.3 | 24 | 1.0 | 2483 |
| VIGORO - V38N4RR | 49.5 | 10-12 | 3.2 | 26 | 1.0 | 2872 |
| VIGORO - V39N4RR | 48.5 | 10-14 | 3.3 | 24 | 1.0 | 2427 |
| NK - S39-K6 | 48.4 | 10-15 | 2.7 | 26 | 1.0 | 2733 |
| SCHILLINGER - 393.RCP | 48.3 | 10-13 | 3.0 | 25 | 1.0 | 2821 |
| S.STATES - RT3975 | 48.1 | 10-14 | 3.0 | 25 | 1.0 | 2925 |
| ASGROW - AG3905 | 46.4 | 10-13 | 2.7 | 23 | 1.0 | 2827 |
| NK - S37-N4 | 46.1 | 10-12 | 3.2 | 27 | 1.0 | 2914 |
| USG - 7393nRR | 45.9 | 10-14 | 3.2 | 24 | 1.0 | 2513 |
| S.STATES - RT3802N | 45.1 | 10-13 | 3.3 | 29 | 1.0 | 2837 |
| SEEDWAY - SG3709 | 44.5 | 10-11 | 2.0 | 25 | 1.0 | 3475 |
| VIGORO - V382NRR | 44.5 | 10-13 | 3.3 | 25 | 1.0 | 3639 |
| S.STATES - RT3799N | 44.3 | 10-14 | 3.2 | 24 | 1.0 | 2684 |
| Maturity Group III Mean | 46.9 | - | 3.0 | 25 | 1.0 | 2858 |
| LSD (0.20) | 2.7 | - | 0.3 | NS | NS | 158 |
| CV (%) | 5.4 | | | | | |
| SCHILLINGER - 431.RCS | 55.2 | 10-16 | 2.8 | 30 | 1.0 | 3155 |
| S.STATES - RT4230N | 53.8 | 10-22 | 3.3 | 27 | 1.0 | 2661 |
| CLARK - CL42RR | 53.7 | 10-17 | 3.5 | 32 | 1.0 | 3464 |
| USG - 7440nRR | 53.7 | 10-22 | 2.8 | 30 | 1.0 | 3207 |
| USG - 7423nRR | 53.5 | 10-18 | 2.3 | 24 | 1.0 | 2583 |
| ASGROW - AG4201 | 52.8 | 10-22 | 3.2 | 29 | 1.0 | 2882 |
| USG - 7402nRR | 52.2 | 10-17 | 3.2 | 31 | 1.0 | 2820 |
| NK - S43-B1 | 52.1 | 10-15 | 2.8 | 27 | 1.0 | 3067 |
| ASGROW - AG4403 | 51.7 | 10-22 | 2.7 | 28 | 1.0 | 3370 |
| DEKALB - DKB44-52 | 51.5 | 10-22 | 3.2 | 25 | 1.0 | 2465 |
| ASGROW - AG4502 | 51.0 | 10-22 | 3.0 | 26 | 1.0 | 2812 |
| VIGORO - V42N3RR | 50.7 | 10-17 | 2.2 | 25 | 1.0 | 2458 |
| SEEDWAY - SG4445 | 50.7 | 10-22 | 2.5 | 29 | 1.0 | 3411 |
| EXPERIMENTAL - MD 99-0312-2RR | 50.6 | 10-19 | 3.0 | 28 | 1.0 | 3069 |
| USG - 7401nRR | 49.5 | 10-16 | 3.5 | 25 | 1.0 | 2600 |
| USG - 7403nRR | 49.1 | 10-16 | 2.0 | 24 | 1.0 | 3072 |
| NK - S40-R9 | 49.1 | 10-16 | 3.2 | 31 | 1.0 | 3111 |
| DEKALB - DKB44-51 | 48.9 | 10-22 | 2.3 | 29 | 1.0 | 3295 |
| EXPERIMENTAL - MD 99-0053-1RR | 48.2 | 10-19 | 3.3 | 29 | 1.0 | 2953 |
| S.STATES - RT4502N | 48.2 | 10-22 | 3.3 | 31 | 1.0 | 2930 |
| SCHILLINGER - 443.R | 47.8 | 10-22 | 2.0 | 25 | 1.0 | 3051 |
| S.STATES - RT4098 | 47.7 | 10-14 | 3.2 | 27 | 1.0 | 3202 |
| EXPERIMENTAL - MD 99-0533-3RR | 46.6 | 10-21 | 3.3 | 28 | 1.0 | 3475 |
| S.STATES - RT446N | 46.3 | 10-16 | 3.3 | 32 | 1.0 | 2878 |
| VIGORO - V40N3RR | 45.6 | 10-18 | 2.0 | 23 | 1.0 | 2715 |
| SCHILLINGER - 413.RCP | 43.8 | 10-14 | 2.5 | 28 | 1.0 | 3011 |
| Maturity Group IV Mean | 50.2 | - | 2.9 | 28 | 1.0 | 2989 |
| LSD (0.20) | 3.7 | - | 0.3 | 2 | NS | 123 |
| CV (%) | 7.0 | | | | | |

Table 12. (Continued) Queenstown - Full Season, Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| CLARK - CL48RR | 53.6 | 10-23 | 3.5 | 35 | 1.0 | 2789 |
| S.STATES - RT4980 | 51.3 | 10-24 | 3.3 | 33 | 1.0 | 2818 |
| EXPERIMENTAL - MD 99-1098-2RR | 51.1 | 10-23 | 3.3 | 24 | 1.0 | 3065 |
| DEKALB - DKB46-51 | 50.3 | 10-22 | 3.0 | 32 | 1.2 | 2878 |
| USG - 7489RR | 50.1 | 10-24 | 3.2 | 33 | 1.0 | 2789 |
| VIGORO - V49N3RR | 48.7 | 10-22 | 3.2 | 28 | 1.0 | 2737 |
| USG - 7482nRR | 48.6 | 10-24 | 2.8 | 30 | 1.0 | 2658 |
| VIGORO - V47N3RR | 48.4 | 10-19 | 3.2 | 31 | 1.0 | 2915 |
| USG - 7499nRR | 48.3 | 10-23 | 3.0 | 30 | 1.0 | 2885 |
| S.STATES - RT4810N | 48.2 | 10-23 | 3.0 | 32 | 1.0 | 2860 |
| S.STATES - RT4930N | 45.8 | 10-27 | 2.5 | 27 | 1.0 | 2462 |
| ASGROW - AG4603 | 45.6 | 10-19 | 2.5 | 29 | 1.0 | 2922 |
| EXPERIMENTAL - MD 99-1353-2RR | 44.2 | 10-23 | 2.8 | 21 | 1.0 | 3331 |
| Maturity Group IV-S Mean | 48.8 | - | 3.0 | 30 | 1.0 | 2854 |
| LSD (0.20) | 2.4 | - | 0.3 | 2 | NS | 84 |
| CV (%) | 4.6 | | | | | |
| EXPERIMENTAL - MD 99-1411-1RR | 48.9 | 10-28 | 2.8 | 26 | 1.0 | 3311 |
| USG - 510nRR | 47.4 | 10-27 | 2.8 | 32 | 1.0 | 3060 |
| EXPERIMENTAL - MD 99-1051-2RR | 45.4 | 10-28 | 3.5 | 33 | 1.0 | 2884 |
| EXPERIMENTAL - MD 99-0687-3RR | 45.1 | 10-26 | 3.3 | 26 | 1.0 | 2857 |
| EXPERIMENTAL - MD 99-0700-2RR | 44.8 | 10-26 | 2.7 | 26 | 1.0 | 2972 |
| S.STATES - RT5302N | 44.8 | 11-01 | 2.5 | 28 | 1.0 | 2841 |
| S.STATES - RT5001N | 43.8 | 10-27 | 3.0 | 29 | 1.0 | 2862 |
| EXPERIMENTAL - 99VPI-120 RR | 42.3 | 11-02 | 2.7 | 22 | 1.0 | 2930 |
| EXPERIMENTAL - 99VPI-67 RR | 42.3 | 10-31 | 2.5 | 28 | 1.0 | 2957 |
| EXPERIMENTAL - MD 01-273 RR | 40.6 | 10-26 | 3.2 | 23 | 1.0 | 3445 |
| EXPERIMENTAL - MD 01-269 RR | 36.3 | 11-01 | 4.0 | 32 | 1.0 | 2940 |
| EXPERIMENTAL - MD 01-272 RR | 35.3 | 10-27 | 4.0 | 30 | 1.0 | 3246 |
| Maturity Group V Mean | 43.1 | - | 3.1 | 28 | 1.0 | 3025 |
| LSD (0.20) | 2.6 | - | 0.4 | 2 | NS | 106 |
| CV (%) | 5.6 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 13. Performance of Roundup Ready soybean varieties double cropped at Queenstown.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| VIGORO - V39N4RR | 45.7 | - | 2.8 | 25 | 1.0 | 2250 |
| USG - 7393nRR | 45.6 | - | 2.8 | 24 | 1.0 | 2203 |
| SEEDWAY - SG3905 | 44.3 | - | 3.0 | 26 | 1.0 | 2152 |
| SCHILLINGER - 393.RCP | 44.3 | - | 2.8 | 25 | 1.0 | 2444 |
| NK - S39-K6 | 44.0 | - | 2.2 | 26 | 1.0 | 2549 |
| SEEDWAY - SG3709 | 43.7 | - | 2.0 | 23 | 1.0 | 2854 |
| ASGROW - AG3905 | 43.7 | - | 2.0 | 23 | 1.0 | 2285 |
| VIGORO - V38N4RR | 42.6 | - | 2.3 | 26 | 1.0 | 2516 |
| S.STATES - RT3975 | 41.8 | - | 2.7 | 27 | 1.0 | 2571 |
| VIGORO - V382NRR | 41.5 | - | 2.5 | 26 | 1.0 | 2921 |
| NK - S37-N4 | 40.5 | - | 2.5 | 26 | 1.0 | 2751 |
| S.STATES - RT3799N | 37.1 | - | 2.0 | 23 | 1.0 | 2322 |
| S.STATES - RT3802N | 35.3 | - | 2.7 | 26 | 1.0 | 2512 |
| Maturity Group III Mean | 42.3 | - | 2.5 | 25 | 1.0 | 2487 |
| LSD (0.20) | 2.5 | - | 0.3 | 2 | NS | 87 |
| CV (%) | 5.4 | - | | | | |
| DEKALB - DKB44-51 | 47.4 | - | 2.2 | 26 | 1.0 | 2933 |
| NK - S40-R9 | 46.8 | - | 2.8 | 30 | 1.0 | 2613 |
| NK - S43-B1 | 46.1 | - | 2.3 | 28 | 1.0 | 2676 |
| DEKALB - DKB44-52 | 45.9 | - | 2.2 | 26 | 1.0 | 2401 |
| USG - 7423nRR | 45.9 | - | 1.7 | 22 | 1.0 | 2280 |
| EXPERIMENTAL - MD 99-0312-2RR | 44.5 | - | 3.0 | 29 | 1.0 | 2653 |
| USG - 7402nRR | 44.5 | - | 3.0 | 29 | 1.0 | 2465 |
| S.STATES - RT4098 | 44.5 | - | 2.5 | 25 | 1.0 | 2790 |
| EXPERIMENTAL - MD 99-0533-3RR | 44.4 | - | 3.3 | 29 | 1.0 | 3094 |
| ASGROW - AG4403 | 44.3 | - | 2.2 | 26 | 1.0 | 2859 |
| USG - 7403nRR | 44.2 | - | 1.7 | 24 | 1.0 | 2521 |
| CLARK - CL42RR | 44.2 | - | 2.8 | 26 | 1.0 | 2860 |
| ASGROW - AG4502 | 43.9 | - | 2.0 | 28 | 1.0 | 2339 |
| ASGROW - AG4201 | 43.8 | - | 2.3 | 28 | 1.0 | 2479 |
| VIGORO - V40N3RR | 43.5 | - | 1.5 | 23 | 1.0 | 2299 |
| S.STATES - RT4230N | 43.4 | - | 2.8 | 28 | 1.0 | 2428 |
| SCHILLINGER - 431.RCS | 43.2 | - | 2.0 | 26 | 1.0 | 2767 |
| SEEDWAY - SG4445 | 42.9 | - | 2.0 | 27 | 1.0 | 2954 |
| EXPERIMENTAL - MD 99-0053-1RR | 42.8 | - | 3.3 | 32 | 1.0 | 2375 |
| USG - 7440nRR | 42.6 | - | 2.5 | 27 | 1.0 | 2841 |
| USG - 7401nRR | 42.5 | - | 3.0 | 26 | 1.0 | 2284 |
| S.STATES - RT446N | 42.4 | - | 2.3 | 28 | 1.0 | 2674 |
| SCHILLINGER - 443.R | 42.4 | - | 1.8 | 25 | 1.0 | 2635 |
| VIGORO - V42N3RR | 42.3 | - | 1.5 | 24 | 1.0 | 2195 |
| SCHILLINGER - 413.RCP | 40.3 | - | 2.0 | 25 | 1.0 | 2588 |
| S.STATES - RT4502N | 38.2 | - | 2.8 | 29 | 1.0 | 2527 |
| Maturity Group IV Mean | 43.7 | - | 2.4 | 27 | 1.0 | 2597 |
| LSD (0.20) | 2.7 | - | 0.3 | 2 | NS | 67 |
| CV (%) | 5.8 | - | | | | |

Table 13. (Continued) Queenstown - Double Crop, Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| S.STATES - RT4980 | 46.8 | - | 3.0 | 29 | 1.0 | 2496 |
| DEKALB - DKB46-51 | 43.2 | - | 3.0 | 30 | 1.0 | 2372 |
| USG - 7489RR | 42.2 | - | 3.7 | 28 | 1.0 | 2468 |
| CLARK - CL48RR | 41.9 | - | 3.2 | 30 | 1.0 | 2444 |
| ASGROW - AG4603 | 41.8 | - | 2.7 | 27 | 1.0 | 2471 |
| S.STATES - RT4810N | 40.6 | - | 3.1 | 28 | 1.0 | 2641 |
| EXPERIMENTAL - MD 99-1098-2RR | 40.1 | - | 2.2 | 22 | 1.0 | 2860 |
| VIGORO - V47N3RR | 40.0 | - | 3.8 | 29 | 1.0 | 2331 |
| EXPERIMENTAL - MD 99-1353-2RR | 40.0 | - | 3.3 | 21 | 1.0 | 3117 |
| USG - 7482nRR | 40.0 | - | 3.0 | 27 | 1.0 | 2349 |
| USG - 7499nRR | 39.7 | - | 2.8 | 27 | 1.0 | 2594 |
| S.STATES - RT4930N | 39.0 | - | 2.7 | 25 | 1.0 | 2243 |
| VIGORO - V49N3RR | 35.4 | - | 3.2 | 25 | 1.0 | 2461 |
| Maturity Group IV-S Mean | 40.8 | - | 3.0 | 27 | 1.0 | 2527 |
| LSD (0.20) | 2.4 | - | NS | 2 | NS | 123 |
| CV (%) | 5.6 | - | | | | |
| EXPERIMENTAL - MD 99-0687-3RR | 43.4 | - | 2.5 | 27 | 1.0 | 2544 |
| USG - 510nRR | 42.0 | - | 2.0 | 28 | 1.0 | 2890 |
| EXPERIMENTAL - MD 99-1051-2RR | 41.8 | - | 2.3 | 30 | 1.0 | 2706 |
| EXPERIMENTAL - MD 99-0700-2RR | 40.8 | - | 2.2 | 24 | 1.0 | 2666 |
| EXPERIMENTAL - MD 99-1411-1RR | 39.7 | - | 2.0 | 25 | 1.0 | 3217 |
| S.STATES - RT5302N | 38.4 | - | 2.0 | 25 | 1.0 | 2858 |
| S.STATES - RT5001N | 37.7 | - | 2.3 | 30 | 1.0 | 2855 |
| EXPERIMENTAL - 99VPI-120 RR | 37.6 | - | 2.2 | 29 | 1.0 | 3062 |
| EXPERIMENTAL - 99VPI-67 RR | 34.6 | - | 2.2 | 25 | 1.0 | 3047 |
| EXPERIMENTAL - MD 01-272 RR | 30.7 | - | 3.5 | 27 | 1.0 | 2887 |
| EXPERIMENTAL - MD 01-273 RR | 29.8 | - | 2.3 | 19 | 1.0 | 2793 |
| EXPERIMENTAL - MD 01-269 RR | 26.1 | - | 3.5 | 31 | 1.0 | 2787 |
| Maturity Group V Mean | 36.9 | - | 2.4 | 27 | 1.0 | 2859 |
| LSD (0.20) | 2.8 | - | 0.3 | 4 | NS | 117 |
| CV (%) | 7.1 | - | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 14. Performance of Roundup Ready soybean varieties planted full season at Quantico.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| ASGROW - AG3905 | 71.2 | 10-13 | 2.8 | 29 | 1.0 | 2795 |
| SEEDWAY - SG3709 | 69.8 | 10-09 | 2.8 | 29 | 1.0 | 3408 |
| USG - 7393nRR | 68.1 | 10-13 | 3.5 | 30 | 1.0 | 2669 |
| SCHILLINGER - 393.RCP | 67.0 | 10-12 | 3.5 | 31 | 1.0 | 2965 |
| SEEDWAY - SG3905 | 66.7 | 10-11 | 3.5 | 32 | 1.0 | 2511 |
| VIGORO - V38N4RR | 65.9 | 10-13 | 3.5 | 32 | 1.0 | 2903 |
| NK - S39-K6 | 64.8 | 10-13 | 2.8 | 31 | 1.0 | 2739 |
| S.STATES - RT3802N | 64.6 | 10-13 | 3.5 | 33 | 1.0 | 2966 |
| NK - S37-N4 | 64.3 | 10-15 | 3.0 | 30 | 1.0 | 2784 |
| VIGORO - V382NRR | 64.1 | 10-08 | 3.7 | 31 | 1.0 | 3749 |
| VIGORO - V39N4RR | 63.6 | 10-11 | 3.5 | 31 | 1.2 | 2576 |
| S.STATES - RT3799N | 63.2 | 10-12 | 3.5 | 32 | 1.0 | 2774 |
| S.STATES - RT3975 | 62.7 | 10-14 | 3.2 | 30 | 1.0 | 3174 |
| Maturity Group III Mean | 65.9 | - | 3.3 | 31 | 1.0 | 2924 |
| LSD (0.20) | NS | - | 0.2 | 2 | NS | 97 |
| CV (%) | 8.4 | | | | | |
| SEEDWAY - SG4445 | 69.8 | 10-15 | 3.3 | 34 | 1.0 | 3225 |
| USG - 7440nRR | 66.8 | 10-17 | 3.5 | 34 | 1.0 | 3271 |
| SCHILLINGER - 431.RCS | 66.1 | 10-14 | 2.7 | 28 | 1.0 | 3141 |
| SCHILLINGER - 443.R | 65.8 | 10-17 | 2.3 | 28 | 1.0 | 3137 |
| NK - S40-R9 | 65.6 | 10-16 | 3.0 | 32 | 1.0 | 2743 |
| USG - 7402nRR | 65.6 | 10-15 | 2.7 | 31 | 1.0 | 2712 |
| S.STATES - RT4098 | 64.9 | 10-13 | 3.2 | 26 | 1.0 | 3158 |
| VIGORO - V40N3RR | 64.9 | 10-16 | 2.2 | 25 | 1.2 | 2563 |
| S.STATES - RT4230N | 64.8 | 10-17 | 3.2 | 31 | 1.0 | 2786 |
| DEKALB - DKB44-51 | 64.4 | 10-16 | 3.3 | 33 | 1.0 | 3180 |
| USG - 7401nRR | 64.3 | 10-13 | 3.5 | 28 | 1.0 | 2442 |
| ASGROW - AG4403 | 63.9 | 10-16 | 3.2 | 33 | 1.0 | 3536 |
| USG - 7423nRR | 63.8 | 10-16 | 2.5 | 24 | 1.3 | 2497 |
| USG - 7403nRR | 62.2 | 10-14 | 2.2 | 25 | 1.0 | 2789 |
| DEKALB - DKB44-52 | 62.1 | 10-18 | 3.3 | 30 | 1.0 | 2554 |
| ASGROW - AG4502 | 62.0 | 10-17 | 2.8 | 29 | 1.2 | 2705 |
| ASGROW - AG4201 | 61.5 | 10-17 | 2.5 | 30 | 1.0 | 3054 |
| CLARK - CL42RR | 61.3 | 10-14 | 3.3 | 31 | 1.0 | 3428 |
| EXPERIMENTAL - MD 99-0533-3RR | 60.9 | 10-17 | 3.7 | 30 | 1.0 | 3481 |
| S.STATES - RT446N | 60.9 | 10-18 | 3.2 | 32 | 1.0 | 2889 |
| S.STATES - RT4502N | 60.1 | 10-18 | 3.2 | 35 | 1.0 | 2893 |
| NK - S43-B1 | 58.2 | 10-18 | 3.2 | 28 | 1.3 | 2896 |
| EXPERIMENTAL - MD 99-0053-1RR | 57.9 | 10-16 | 3.3 | 32 | 1.0 | 2807 |
| VIGORO - V42N3RR | 57.3 | 10-17 | 2.2 | 22 | 1.0 | 2389 |
| EXPERIMENTAL - MD 99-0312-2RR | 57.0 | 10-17 | 3.5 | 31 | 1.0 | 3108 |
| SCHILLINGER - 413.RCP | 55.9 | 10-12 | 2.7 | 28 | 1.0 | 3058 |
| Maturity Group IV Mean | 62.6 | - | 3.0 | 30 | 1.0 | 2940 |
| LSD (0.20) | 4.8 | - | 0.3 | 2 | 0.1 | 88 |
| CV (%) | 7.3 | | | | | |

Table 14. (Continued) Quantico - Full Season, Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|----------------|------------------|-------------------|-------------------|------------------|-----------------|
| CLARK - CL48RR | 66.2 | 10-19 | 3.6 | 38 | 1.0 | 3012 |
| USG - 7499nRR | 62.6 | 10-20 | 3.5 | 34 | 1.0 | 3048 |
| EXPERIMENTAL - MD 99-1098-2RR | 61.7 | 10-18 | 1.7 | 18 | 1.0 | 3428 |
| S.STATES - RT4980 | 61.4 | 10-20 | 3.8 | 35 | 1.0 | 3026 |
| DEKALB - DKB46-51 | 61.3 | 10-19 | 3.3 | 32 | 1.0 | 3164 |
| USG - 7489RR | 61.1 | 10-20 | 3.9 | 33 | 1.0 | 2909 |
| USG - 7482nRR | 59.4 | 10-22 | 3.5 | 30 | 1.0 | 2900 |
| S.STATES - RT4930N | 59.2 | 10-21 | 2.7 | 21 | 1.0 | 2831 |
| ASGROW - AG4603 | 58.6 | 10-18 | 3.0 | 31 | 1.0 | 3132 |
| EXPERIMENTAL - MD 99-1353-2RR | 55.7 | 10-18 | 2.8 | 21 | 1.0 | 3759 |
| S.STATES - RT4810N | 55.7 | 10-19 | 3.2 | 34 | 1.0 | 3050 |
| VIGORO - V47N3RR | 55.7 | 10-18 | 3.0 | 29 | 1.0 | 3033 |
| VIGORO - V49N3RR | 55.3 | 10-20 | 3.5 | 30 | 1.0 | 3074 |
| Maturity Group IV-S Mean | 59.5 | - | 3.2 | 30 | 1.0 | 3105 |
| LSD (0.20) | 4.0 | - | 0.2 | 2 | NS | 137 |
| CV (%) | 6.2 | | | | | |
| S.STATES - RT5001N | 61.0 | 10-22 | 2.2 | 28 | 1.0 | 3311 |
| EXPERIMENTAL - MD 99-0687-3RR | 60.6 | 10-21 | 2.2 | 21 | 1.0 | 3136 |
| EXPERIMENTAL - 99VPI-120 RR | 59.4 | 10-25 | 2.7 | 23 | 1.0 | 3136 |
| S.STATES - RT5302N | 58.4 | 10-21 | 2.5 | 25 | 1.0 | 2941 |
| USG - 510nRR | 58.0 | 10-22 | 2.0 | 23 | 1.0 | 3369 |
| EXPERIMENTAL - 99VPI-67 RR | 56.7 | 10-23 | 2.8 | 26 | 1.0 | 3446 |
| EXPERIMENTAL - MD 99-0700-2RR | 56.5 | 10-21 | 2.2 | 19 | 1.0 | 3221 |
| EXPERIMENTAL - MD 99-1411-1RR | 56.0 | 10-22 | 2.0 | 22 | 1.0 | 3846 |
| EXPERIMENTAL - MD 99-1051-2RR | 54.4 | 10-25 | 3.9 | 32 | 1.0 | 3045 |
| EXPERIMENTAL - MD 01-273 RR | 47.7 | 10-21 | 2.5 | 19 | 1.0 | 3483 |
| EXPERIMENTAL - MD 01-269 RR | 41.1 | 10-25 | 4.0 | 33 | 1.0 | 3003 |
| EXPERIMENTAL - MD 01-272 RR | 33.6 | 10-23 | 4.0 | 29 | 1.0 | 3268 |
| Maturity Group V Mean | 53.6 | - | 2.7 | 25 | 1.0 | 3267 |
| LSD (0.20) | 4.2 | - | 0.3 | 3 | NS | 114 |
| CV (%) | 7.2 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 15. Performance of Roundup Ready soybean varieties double cropped at Quantico.

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|--------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| SCHILLINGER - 393.RCP | 50.3 | - | 3.0 | 25 | 1.0 | 2800 |
| SEEDWAY - SG3905 | 49.4 | - | 2.8 | 26 | 1.0 | 2433 |
| USG - 7393nRR | 48.5 | - | 2.8 | 25 | 1.2 | 2461 |
| NK - S39-K6 | 47.3 | - | 1.7 | 27 | 1.0 | 2998 |
| VIGORO - V39N4RR | 47.0 | - | 2.8 | 26 | 1.2 | 2512 |
| VIGORO - V382NRR | 46.9 | - | 2.7 | 25 | 1.0 | 3320 |
| S.STATES - RT3975 | 46.2 | - | 2.8 | 27 | 1.0 | 2946 |
| ASGROW - AG3905 | 45.5 | - | 2.0 | 25 | 1.0 | 2624 |
| S.STATES - RT3802N | 44.2 | - | 2.8 | 28 | 1.0 | 2984 |
| VIGORO - V38N4RR | 43.2 | - | 2.2 | 23 | 1.0 | 3018 |
| S.STATES - RT3799N | 43.2 | - | 2.7 | 27 | 1.2 | 2755 |
| SEEDWAY - SG3709 | 43.1 | - | 1.8 | 24 | 1.0 | 3272 |
| NK - S37-N4 | 42.2 | - | 2.3 | 24 | 1.0 | 3112 |
| Maturity Group III Mean | 45.9 | - | 2.5 | 25 | 1.0 | 2864 |
| LSD (0.20) | NS | - | 0.4 | 2 | NS | 80 |
| CV (%) | 9.4 | | | | | |
| ASGROW - AG4502 | 51.4 | - | 2.2 | 25 | 1.0 | 2908 |
| USG - 7440nRR | 50.4 | - | 2.5 | 29 | 1.0 | 3601 |
| USG - 7402nRR | 49.9 | - | 2.2 | 26 | 1.7 | 2769 |
| USG - 7403nRR | 49.6 | - | 1.3 | 24 | 1.5 | 2927 |
| DEKALB - DKB44-52 | 49.2 | - | 2.5 | 24 | 1.0 | 2785 |
| SEEDWAY - SG4445 | 49.1 | - | 2.5 | 26 | 1.0 | 3572 |
| SCHILLINGER - 431.RCS | 49.0 | - | 1.8 | 23 | 1.0 | 3329 |
| EXPERIMENTAL - MD 99-0312-2RR | 49.0 | - | 3.0 | 28 | 1.0 | 3353 |
| DEKALB - DKB44-51 | 48.5 | - | 2.2 | 27 | 1.0 | 3651 |
| USG - 7401nRR | 47.2 | - | 2.8 | 25 | 1.2 | 2639 |
| S.STATES - RT4230N | 47.2 | - | 2.3 | 26 | 1.0 | 2921 |
| VIGORO - V40N3RR | 46.7 | - | 1.5 | 22 | 1.5 | 2762 |
| EXPERIMENTAL - MD 99-0533-3RR | 46.6 | - | 2.7 | 26 | 1.0 | 3802 |
| ASGROW - AG4403 | 45.7 | - | 1.8 | 27 | 1.0 | 3718 |
| VIGORO - V42N3RR | 45.6 | - | 1.8 | 24 | 1.7 | 2537 |
| CLARK - CL42RR | 45.4 | - | 2.7 | 29 | 1.0 | 3615 |
| EXPERIMENTAL - MD 99-0053-1RR | 45.0 | - | 3.0 | 27 | 1.0 | 2983 |
| S.STATES - RT446N | 45.0 | - | 2.5 | 27 | 1.0 | 2910 |
| S.STATES - RT4098 | 44.8 | - | 2.2 | 25 | 1.0 | 3312 |
| SCHILLINGER - 413.RCP | 44.6 | - | 2.2 | 26 | 1.0 | 2952 |
| ASGROW - AG4201 | 44.1 | - | 2.2 | 28 | 1.2 | 3032 |
| NK - S40-R9 | 44.0 | - | 2.3 | 25 | 1.0 | 3094 |
| SCHILLINGER - 443.R | 43.9 | - | 1.8 | 26 | 1.0 | 3202 |
| USG - 7423nRR | 43.9 | - | 1.3 | 20 | 1.7 | 2683 |
| NK - S43-B1 | 43.6 | - | 2.5 | 27 | 1.0 | 3060 |
| S.STATES - RT4502N | 42.8 | - | 3.3 | 31 | 1.2 | 2972 |
| Maturity Group IV Mean | 46.6 | - | 2.3 | 26 | 1.1 | 3119 |
| LSD (0.20) | 3.7 | - | 0.5 | 2 | 0.1 | 109 |
| CV (%) | 7.6 | | | | | |

Table 15. (Continued) Quantico - Double Crop, Roundup Ready Soybean Varieties

| BRAND - ENTRY | Yield, Bu/A | Maturity Date | Lodging Score* | Height, Inches | Seed Quality* | Seeds/ Pound |
|---------------------------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|
| VIGORO - V47N3RR | 54.2 | - | 2.3 | 28 | 1.0 | 3212 |
| CLARK - CL48RR | 52.7 | - | 2.7 | 33 | 1.0 | 3219 |
| USG - 7482nRR | 50.1 | - | 3.5 | 30 | 1.0 | 2916 |
| EXPERIMENTAL - MD 99-1098-2RR | 49.8 | - | 2.7 | 24 | 1.0 | 3660 |
| USG - 7489RR | 48.3 | - | 3.0 | 30 | 1.0 | 3288 |
| USG - 7499nRR | 47.7 | - | 3.0 | 28 | 1.0 | 3241 |
| DEKALB - DKB46-51 | 46.7 | - | 2.0 | 26 | 1.0 | 3232 |
| S.STATES - RT4980 | 46.5 | - | 3.2 | 30 | 1.0 | 3378 |
| S.STATES - RT4810N | 45.8 | - | 1.8 | 25 | 1.0 | 3253 |
| VIGORO - V49N3RR | 45.3 | - | 2.3 | 24 | 1.0 | 3073 |
| ASGROW - AG4603 | 44.9 | - | 2.3 | 27 | 1.0 | 3287 |
| S.STATES - RT4930N | 43.8 | - | 2.8 | 28 | 1.0 | 2659 |
| EXPERIMENTAL - MD 99-1353-2RR | 43.6 | - | 3.3 | 24 | 1.0 | 4102 |
| Maturity Group IV-S Mean | 47.7 | - | 2.7 | 28 | 1.0 | 3271 |
| LSD (0.20) | 3.0 | - | 0.5 | 3 | NS | 108 |
| CV (%) | 5.9 | | | | | |
| USG - 510nRR | 44.1 | - | 3.3 | 32 | 1.0 | 3315 |
| EXPERIMENTAL - MD 99-0687-3RR | 42.7 | - | 3.2 | 26 | 1.0 | 3205 |
| EXPERIMENTAL - MD 99-1411-1RR | 42.3 | - | 3.3 | 27 | 1.0 | 3867 |
| EXPERIMENTAL - MD 99-1051-2RR | 41.8 | - | 2.5 | 30 | 1.0 | 3492 |
| EXPERIMENTAL - 99VPI-67 RR | 40.3 | - | 3.3 | 28 | 1.0 | 3778 |
| EXPERIMENTAL - 99VPI-120 RR | 39.6 | - | 2.7 | 28 | 1.0 | 3684 |
| S.STATES - RT5302N | 39.2 | - | 3.2 | 28 | 1.0 | 3218 |
| S.STATES - RT5001N | 38.1 | - | 3.5 | 33 | 1.0 | 3234 |
| EXPERIMENTAL - MD 99-0700-2RR | 37.0 | - | 3.3 | 24 | 1.0 | 3306 |
| EXPERIMENTAL - MD 01-273 RR | 34.3 | - | 3.6 | 22 | 1.0 | 4191 |
| EXPERIMENTAL - MD 01-272 RR | 31.3 | - | 3.8 | 28 | 1.0 | 4215 |
| EXPERIMENTAL - MD 01-269 RR | 27.7 | - | 3.9 | 30 | 1.0 | 3671 |
| Maturity Group V Mean | 38.2 | - | 3.3 | 28 | 1.0 | 3598 |
| LSD (0.20) | 3.7 | - | 0.5 | 3 | NS | 154 |
| CV (%) | 9.1 | | | | | |

*Lodging Score: 1=all plants erect, to 5=all plants down

*Seed Quality: 1=excellent (no moldy, cracked, or wrinkled seeds), to 5=poor

Table 16. Relative yields of Roundup Ready soybean varieties compared to the mean of all varieties in that maturity group at each location in 2003.

| BRAND - ENTRY | Keedys- | Clarks- | Queenstown | | Quantico | |
|----------------------------------|-------------|----------------------------------|-------------|-------------|-------------|-------------|
| | ville | ville | FS | DC | FS | DC |
| MATURITY GROUP III | | Relative Yield, % of Mean | | | | |
| ASGROW - AG3905 | 93 | 96 | 99 | 103* | 108* | 99 |
| NK - S37-N4 | 109* | 103* | 98 | 96 | 98 | 92 |
| NK - S39-K6 | 99 | 102 | 103* | 104* | 98 | 103 |
| SCHILLINGER - 393.RCP | 107* | 105* | 103* | 105* | 102 | 109* |
| SEEDWAY - SG3709 | 106* | 103* | 95 | 103* | 106 | 94 |
| SEEDWAY - SG3905 | 105* | 110* | 107* | 105* | 101 | 108 |
| S.STATES - RT3799N | 89 | 87 | 94 | 88 | 96 | 94 |
| S.STATES - RT3802N | 91 | 91 | 96 | 83 | 98 | 96 |
| S.STATES - RT3975 | 84 | 90 | 103* | 99 | 95 | 101 |
| USG - 7393nRR | 106* | 105* | 98 | 108* | 103 | 106 |
| VIGORO - V38N4RR | 103* | 101 | 106* | 101 | 100 | 94 |
| VIGORO - V39N4RR | 105* | 103* | 103* | 108* | 97 | 102 |
| VIGORO - V382NRR | 100 | 103* | 95 | 98 | 97 | 102 |
| Location/Group Mean Yield | 52.8 | 44.7 | 46.9 | 42.3 | 65.9 | 45.9 |
| MATURITY GROUP IV | | | | | | |
| ASGROW - AG4201 | 106* | 103 | 105* | 100 | 98 | 95 |
| ASGROW - AG4403 | 103* | 98 | 103* | 101 | 102 | 98 |
| ASGROW - AG4502 | 109* | 105* | 102 | 100 | 99 | 110* |
| CLARK - CL42RR | 103* | 100 | 107* | 101 | 98 | 97 |
| DEKALB - DKB44-51 | 100 | 97 | 97 | 108* | 103 | 104* |
| DEKALB - DKB44-52 | 97 | 96 | 102* | 105* | 99 | 106* |
| EXPERIMENTAL - MD 99-0053-1RR | 101 | 94 | 96 | 98 | 92 | 97 |
| EXPERIMENTAL - MD 99-0312-2RR | 90 | 103 | 101 | 102 | 91 | 105* |
| EXPERIMENTAL - MD 99-0533-3RR | 95 | 89 | 93 | 102 | 97 | 100 |
| NK - S40-R9 | 108* | 103 | 98 | 107* | 105* | 94 |
| NK - S43-B1 | 93 | 105* | 104* | 105* | 93 | 94 |
| SCHILLINGER - 413.RCP | 96 | 96 | 87 | 92 | 89 | 96 |
| SCHILLINGER - 431.RCS | 110* | 113* | 110* | 99 | 106* | 105* |
| SCHILLINGER - 443.R | 96 | 98 | 95 | 97 | 105* | 94 |
| SEEDWAY - SG4445 | 95 | 90 | 101 | 98 | 112* | 105* |
| S.STATES - RT4098 | 105* | 106* | 95 | 102 | 104 | 96 |
| S.STATES - RT4230N | 102* | 103 | 107* | 99 | 103 | 101 |
| S.STATES - RT446N | 95 | 103 | 92 | 97 | 97 | 96 |
| S.STATES - RT4502N | 93 | 94 | 96 | 87 | 96 | 92 |
| USG - 7401nRR | 105* | 98 | 99 | 97 | 103 | 101 |
| USG - 7402nRR | 107* | 100 | 104* | 102 | 105* | 107* |
| USG - 7403nRR | 104* | 105* | 98 | 101 | 99 | 106* |
| USG - 7423nRR | 95 | 100 | 107* | 105* | 102 | 94 |
| USG - 7440nRR | 92 | 97 | 107* | 97 | 107* | 108* |
| VIGORO - V40N3RR | 102* | 102 | 91 | 99 | 104 | 100 |
| VIGORO - V42N3RR | 101 | 100 | 101 | 97 | 92 | 98 |
| Location/Group Mean Yield | 50.6 | 44.5 | 50.2 | 43.7 | 62.6 | 46.6 |

Table 16. (Continued) Relative Yields - Roundup Ready Soybean Varieties

| BRAND - ENTRY | Keedys- ville | Clarks- ville | Queenstown | | Quantico | |
|----------------------------------|----------------------------------|------------------|-------------|-------------|-------------|-------------|
| | | | FS | DC | FS | DC |
| MATURITY GROUP IV-S | Relative Yield, % of Mean | | | | | |
| ASGROW - AG4603 | 101 | 107* | 93 | 103 | 99 | 94 |
| CLARK - CL48RR | 114* | 108* | 110* | 103 | 111* | 111* |
| DEKALB - DKB46-51 | 114* | 106* | 103 | 106 | 103 | 98 |
| EXPERIMENTAL - MD 99-1098-2RR | 87 | 97 | 105* | 98 | 104 | 104 |
| EXPERIMENTAL - MD 99-1353-2RR | 68 | 85 | 90 | 98 | 94 | 91 |
| S.STATES - RT4810N | 95 | 102* | 99 | 99 | 94 | 96 |
| S.STATES - RT4930N | 63 | 73 | 94 | 95 | 99 | 92 |
| S.STATES - RT4980 | 115* | 107* | 105* | 115* | 103 | 98 |
| USG - 7489RR | 109* | 106* | 103 | 103 | 103 | 101 |
| USG - 7482nRR | 111* | 105* | 100 | 98 | 100 | 105 |
| USG -7499nRR | 98 | 102* | 99 | 97 | 105* | 100 |
| VIGORO - V47N3RR | 116* | 106* | 99 | 98 | 94 | 114* |
| VIGORO - V49N3RR | 109* | 96 | 100 | 87 | 93 | 95 |
| Location/Group Mean Yield | 44.7 | 42.3 | 48.8 | 40.8 | 59.5 | 47.7 |
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-0687-3RR | - | - | 105 | 118* | 113* | 112* |
| EXPERIMENTAL - MD 99-0700-2RR | - | - | 104 | 111* | 105 | 97 |
| EXPERIMENTAL - MD 99-1051-2RR | - | - | 105 | 113* | 101 | 110* |
| EXPERIMENTAL - MD 99-1411-1RR | - | - | 113* | 108 | 105 | 111* |
| S.STATES - RT5001N | - | - | 102 | 102 | 114* | 100 |
| S.STATES - RT5302N | - | - | 104 | 104 | 109* | 103 |
| USG - 510nRR | - | - | 110* | 114* | 108* | 116* |
| EXPERIMENTAL - 99VPI-67 RR | - | - | 98 | 94 | 106 | 105 |
| EXPERIMENTAL - 99VPI-120 RR | - | - | 98 | 102 | 111* | 104 |
| EXPERIMENTAL - MD 01-269 RR | - | - | 84 | 71 | 77 | 72 |
| EXPERIMENTAL - MD 01-272 RR | - | - | 82 | 83 | 63 | 82 |
| EXPERIMENTAL - MD 01-273 RR | - | - | 94 | 81 | 89 | 90 |
| Location/Group Mean Yield | - | - | 43.1 | 36.9 | 53.6 | 38.2 |

FS=Full Season, DC=Double Crop

*Yield is not significantly different from the highest yielding entry in this maturity group at this location.

Actual variety yield can be obtained by converting the relative yield to a decimal percentage and multiplying this value by the location/group mean yield. A variety with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all of those varieties in that maturity group.

Table 17. Two-year average yields of Roundup Ready soybean varieties grown at four Maryland locations, 2002-2003.

| BRAND - ENTRY | Keedys- | Clarks- | Queenstown | | Quantico | |
|-------------------------------|---------|---------|-------------------------|------|----------|------|
| | ville | ville | FS | DC | FS | DC |
| MATURITY GROUP III | | | Seed Yield, Bu/A | | | |
| NK - S39-K6 | 52.8 | 50.7 | 38.1 | 30.9 | - | 38.1 |
| S.STATES - RT3799N | 52.2 | 45.4 | 36.0 | 28.2 | 67.7* | 38.6 |
| S.STATES - RT3802N | 48.9 | 45.7 | 37.7 | 26.8 | - | 40.5 |
| S.STATES - RT3975 | 51.2 | 45.4 | 36.5 | 28.9 | 65.9* | 39.5 |
| VIGORO - V382NRR | 54.7 | 50.1 | 36.5 | 31.5 | 66.2* | 42.1 |
| MATURITY GROUP IV | | | | | | |
| ASGROW - AG4201 | 52.1 | 50.7 | 46.7 | 34.3 | 36.4 | 41.8 |
| ASGROW - AG4403 | 51.3 | 49.4 | 44.7 | 34.9 | 43.8 | 42.1 |
| CLARK - CL42RR | 52.7 | 48.1 | 46.6 | 38.9 | 43.5 | 40.8 |
| DEKALB - DKB44-51 | 49.9 | 48.0 | 43.0 | 39.2 | 43.7 | 44.0 |
| NK - S40-R9 | 53.4 | 51.5 | 42.3 | 34.0 | 42.8 | 38.2 |
| S.STATES - RT4098 | 55.0 | 48.8 | 43.4 | 34.9 | 38.9 | 41.4 |
| S.STATES - RT446N | 49.0 | 47.9 | 43.4 | 35.9 | 43.0 | 41.4 |
| S.STATES - RT4502N | 49.8 | 46.4 | 46.6 | 32.7 | 43.5 | 42.1 |
| USG - 7402nRR | 53.5 | 48.9 | 46.1 | 33.9 | 40.8 | 43.0 |
| USG - 7403nRR | 57.3 | 47.2 | 46.5 | 32.9 | 37.1 | 41.2 |
| USG - 7440nRR | 48.3 | 47.6 | 50.2 | 35.4 | 45.7 | 45.8 |
| MATURITY GROUP IV-S | | | | | | |
| ASGROW - AG4603 | 47.8 | 48.2 | 42.0 | 34.7 | 43.1 | 44.9 |
| CLARK - CL48RR | 53.5 | 49.3 | 49.8 | 35.4 | 46.6 | 49.1 |
| EXPERIMENTAL - MD 99-1098-2RR | 46.5 | 49.6 | 48.8 | 33.9 | 50.9 | 45.0 |
| S.STATES - RT4810N | 47.6 | 49.1 | 44.6 | 33.1 | 42.4 | 44.1 |
| S.STATES - RT4980 | 54.5 | 50.4 | 45.0 | 37.5 | 46.7 | 44.1 |
| USG - 7489RR | 52.3 | 50.4 | 49.6 | 34.0 | 46.9 | 46.5 |
| USG - 7482nRR | 51.2 | 49.5 | 46.0 | 33.9 | 43.9 | 45.1 |
| VIGORO - V49N3RR | 52.3 | 48.3 | 46.3 | 31.3 | 41.9 | 42.3 |
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-0687-3RR | - | - | 42.1 | 34.4 | 47.4 | 39.9 |
| S.STATES - RT5001N | - | - | 39.9 | 32.1 | 44.4 | 38.2 |
| S.STATES - RT5302N | - | - | 38.0 | 31.6 | 47.6 | 38.7 |
| EXPERIMENTAL - 99VPI-67 RR | - | - | 34.5 | 32.4 | 44.7 | 37.3 |
| EXPERIMENTAL - 99VPI-120 RR | - | - | 36.6 | 32.7 | 47.1 | 37.3 |

*No 2002 data. Mean = Average of 2001 and 2003 data where available.

Table 18. Seed protein content of standard soybean varieties grown at three Maryland locations, 2003.

| BRAND - ENTRY | Clarksville | Queenstown | Quantico | |
|-----------------------------|-------------|------------|-------------------|-------------|
| | | | Full Season | Double Crop |
| MATURITY GROUP III | | | Protein, % | |
| PUBLIC - APEX | 37.1 | 40.4 | 39.6 | 38.3 |
| EXPERIMENTAL - A 26 | 37.2 | 38.6 | 38.3 | 39.2 |
| PUBLIC - GENERAL | 40.6 | 41.2 | 41.3 | 39.1 |
| PUBLIC - IA 3014 | 37.1 | 37.5 | 38.5 | 37.5 |
| PUBLIC - MACON | 38.8 | 39.8 | 39.5 | 36.8 |
| MATURITY GROUP IV | | | | |
| PUBLIC - CORSICA | 41.0 | 41.0 | 41.7 | 41.5 |
| PUBLIC - HS 93-4118 | 37.7 | 37.8 | 39.9 | 39.6 |
| EXPERIMENTAL - L 76 | 39.4 | 40.3 | 40.7 | 39.4 |
| EXPERIMENTAL - MD 96-5722 | 39.3 | 39.1 | 40.4 | 40.1 |
| EXPERIMENTAL - MD 97-6156 | 39.5 | 40.3 | 41.1 | 40.5 |
| EXPERIMENTAL - MD 99-173-11 | 40.4 | 39.7 | 40.0 | 40.8 |
| EXPERIMENTAL - MD 99-5144 | 41.0 | 40.4 | 41.1 | 40.6 |
| EXPERIMENTAL - MD 99-5720 | 39.4 | 39.0 | 39.9 | 40.3 |
| PUBLIC - STRESSLAND | 39.4 | 41.6 | 40.3 | 41.5 |
| MATURITY GROUP IV-S | | | | |
| EXPERIMENTAL - JAPAN-L123 | 40.6 | 41.5 | 41.1 | 40.7 |
| PUBLIC - KS 4602N | 40.7 | 40.2 | 40.6 | 41.9 |
| PUBLIC - MANOKIN | 41.0 | 40.4 | 41.3 | 40.9 |
| PUBLIC - MD 4900 | 40.1 | 39.1 | 38.6 | 38.8 |
| EXPERIMENTAL - MD 96-5275 | 42.8 | 41.6 | 41.7 | 41.0 |
| EXPERIMENTAL - MD 97-6491 | 42.0 | 43.6 | 43.1 | 41.2 |
| EXPERIMENTAL - MD 00-6599 | 43.7 | 44.0 | 43.9 | 43.7 |
| EXPERIMENTAL - MD 00-6605 | 42.9 | 42.0 | 43.2 | 41.8 |
| EXPERIMENTAL - MD 00-6612 | 42.4 | 42.9 | 40.7 | 42.5 |
| MATURITY GROUP V | | | | |
| PUBLIC - ESSEX | - | 44.9 | 42.6 | 43.1 |
| PUBLIC - HOLLADAY | - | 41.2 | 39.1 | 38.8 |
| PUBLIC - HUTCHESON | - | 41.2 | 41.1 | 41.9 |
| PUBLIC - KS 5502N | - | 40.2 | 40.2 | 38.4 |
| EXPERIMENTAL - MD 97-6065 | - | 41.0 | 40.5 | 40.0 |
| EXPERIMENTAL - MD 98-5927 | - | 42.3 | 39.4 | 38.6 |
| EXPERIMENTAL - MD 99-5433 | - | 43.2 | 42.2 | 43.6 |
| EXPERIMENTAL - MD 99-5458 | - | 43.1 | 42.2 | 42.6 |
| EXPERIMENTAL - MD 99-5464 | - | 42.2 | 41.7 | 42.4 |
| EXPERIMENTAL - MD 99-6226 | - | 41.1 | 40.5 | 39.7 |
| EXPERIMENTAL - MD 99-6701 | - | 42.6 | 41.5 | 41.4 |
| EXPERIMENTAL - R 95-1705 | - | 47.3 | 47.0 | 46.7 |
| PUBLIC - TN 5601T | - | 43.0 | 42.3 | 41.8 |
| USG - 5002T | - | 42.1 | 40.8 | 39.5 |
| EXPERIMENTAL - V 96-340 | - | 41.7 | 40.1 | 41.2 |

Table 19. Seed oil content of standard soybean varieties grown at three Maryland locations, 2003.

| BRAND - ENTRY | Clarksville | Queenstown | Quantico | |
|-----------------------------|-------------|------------|---------------|-------------|
| | | | Full Season | Double Crop |
| MATURITY GROUP III | | | Oil, % | |
| PUBLIC - APEX | 21.4 | 19.8 | 21.1 | 22.0 |
| EXPERIMENTAL - A 26 | 21.0 | 20.6 | 20.7 | 22.1 |
| PUBLIC - GENERAL | 20.4 | 19.6 | 20.4 | 22.6 |
| PUBLIC - IA 3014 | 20.7 | 19.9 | 20.0 | 21.3 |
| PUBLIC - MACON | 20.8 | 19.7 | 20.2 | 22.2 |
| MATURITY GROUP IV | | | | |
| PUBLIC - CORSICA | 20.4 | 19.2 | 19.8 | 20.9 |
| PUBLIC - HS 93-4118 | 20.1 | 19.6 | 20.0 | 20.2 |
| EXPERIMENTAL - L 76 | 19.9 | 20.0 | 20.8 | 20.6 |
| EXPERIMENTAL - MD 96-5722 | 20.0 | 19.5 | 20.6 | 21.1 |
| EXPERIMENTAL - MD 97-6156 | 20.0 | 19.3 | 20.2 | 20.6 |
| EXPERIMENTAL - MD 99-173-11 | 17.8 | 20.9 | 19.8 | 20.0 |
| EXPERIMENTAL - MD 99-5144 | 19.5 | 21.0 | 20.5 | 21.0 |
| EXPERIMENTAL - MD 99-5720 | 20.6 | 21.3 | 21.5 | 21.2 |
| PUBLIC - STRESSLAND | 20.4 | 19.3 | 20.4 | 20.3 |
| MATURITY GROUP IV-S | | | | |
| EXPERIMENTAL - JAPAN-L123 | 19.5 | 17.9 | 18.0 | 20.8 |
| PUBLIC - KS 4602N | 20.1 | 20.3 | 20.3 | 20.2 |
| PUBLIC - MANOKIN | 18.2 | 20.1 | 19.3 | 18.5 |
| PUBLIC - MD 4900 | 20.1 | 19.5 | 20.0 | 20.4 |
| EXPERIMENTAL - MD 96-5275 | 17.6 | 18.7 | 19.7 | 19.3 |
| EXPERIMENTAL - MD 97-6491 | 18.9 | 18.4 | 18.9 | 20.9 |
| EXPERIMENTAL - MD 00-6599 | 17.1 | 18.2 | 19.0 | 18.2 |
| EXPERIMENTAL - MD 00-6605 | 17.6 | 18.5 | 19.1 | 19.7 |
| EXPERIMENTAL - MD 00-6612 | 18.5 | 18.6 | 21.7 | 19.2 |
| MATURITY GROUP V | | | | |
| PUBLIC - ESSEX | - | 18.5 | 19.7 | 19.1 |
| PUBLIC - HOLLADAY | - | 20.0 | 20.4 | 19.5 |
| PUBLIC - HUTCHESON | - | 20.9 | 20.7 | 19.6 |
| PUBLIC - KS 5502N | - | 19.8 | 19.4 | 19.5 |
| EXPERIMENTAL - MD 97-6065 | - | 20.3 | 19.9 | 19.3 |
| EXPERIMENTAL - MD 98-5927 | - | 18.1 | 19.3 | 19.9 |
| EXPERIMENTAL - MD 99-5433 | - | 18.2 | 18.5 | 16.8 |
| EXPERIMENTAL - MD 99-5458 | - | 17.9 | 18.1 | 16.6 |
| EXPERIMENTAL - MD 99-5464 | - | 18.1 | 18.6 | 16.7 |
| EXPERIMENTAL - MD 99-6226 | - | 20.8 | 20.0 | 20.1 |
| EXPERIMENTAL - MD 99-6701 | - | 17.9 | 17.9 | 17.6 |
| EXPERIMENTAL - R 95-1705 | - | 17.5 | 17.9 | 17.2 |
| PUBLIC - TN 5601T | - | 19.5 | 19.0 | 19.3 |
| USG - 5002T | - | 19.8 | 20.3 | 19.2 |
| EXPERIMENTAL - V 96-340 | - | 19.7 | 20.9 | 18.6 |

Table 20. Protein content of Roundup Ready soybean varieties grown at four Maryland locations, 2003.

| BRAND - ENTRY | Keedys- ville | Clarks- ville | Queenstown | | Quantico | |
|-------------------------------|------------------|------------------|-------------------|------|----------|------|
| | | | FS | DC | FS | DC |
| MATURITY GROUP III | | | Protein, % | | | |
| ASGROW - AG3905 | 40.0 | 40.1 | 40.5 | 41.4 | 40.4 | 40.5 |
| NK - S37-N4 | 40.5 | 40.7 | 40.8 | 42.7 | 42.2 | 42.0 |
| NK - S39-K6 | 41.0 | 40.1 | 40.9 | 42.0 | 41.1 | 41.0 |
| SCHILLINGER - 393.RCP | 38.9 | 38.8 | 40.2 | 41.3 | 39.6 | 40.6 |
| SEEDWAY - SG3709 | 40.8 | 39.3 | 40.5 | 40.2 | 40.1 | 39.8 |
| SEEDWAY - SG3905 | 40.4 | 39.5 | 40.6 | 40.8 | 39.1 | 40.5 |
| S.STATES - RT3799N | 39.6 | 39.2 | 39.6 | 40.9 | 40.3 | 40.5 |
| S.STATES - RT3802N | 41.3 | 40.9 | 42.2 | 44.1 | 41.3 | 41.1 |
| S.STATES - RT3975 | 40.9 | 41.1 | 42.9 | 43.3 | 41.7 | 41.8 |
| USG - 7393nRR | 39.3 | 39.4 | 41.1 | 40.7 | 39.0 | 41.5 |
| VIGORO - V38N4RR | 36.6 | 39.5 | 40.8 | 41.1 | 41.4 | 40.5 |
| VIGORO - V39N4RR | 39.8 | 39.9 | 41.4 | 40.4 | 39.2 | 40.5 |
| VIGORO - V382NRR | 38.8 | 38.9 | 40.6 | 40.9 | 40.0 | 40.8 |
| MATURITY GROUP IV | | | | | | |
| ASGROW - AG4201 | 40.3 | 40.7 | 41.3 | 42.4 | 38.9 | 41.2 |
| ASGROW - AG4403 | 38.7 | 38.3 | 39.8 | 40.5 | 38.9 | 39.5 |
| ASGROW - AG4502 | 40.5 | 42.1 | 41.3 | 42.4 | 41.0 | 41.9 |
| CLARK - CL42RR | 40.2 | 40.5 | 41.1 | 41.9 | 40.7 | 40.6 |
| DEKALB - DKB44-51 | 38.1 | 39.8 | 39.3 | 41.0 | 38.7 | 39.4 |
| DEKALB - DKB44-52 | 41.7 | 42.6 | 44.0 | 44.1 | 41.2 | 42.1 |
| EXPERIMENTAL - MD 99-0053-1RR | 42.4 | 42.7 | 42.3 | 44.1 | 42.1 | 42.1 |
| EXPERIMENTAL - MD 99-0312-2RR | 40.9 | 41.3 | 41.3 | 43.1 | 41.4 | 41.5 |
| EXPERIMENTAL - MD 99-0533-3RR | 41.4 | 41.1 | 42.7 | 43.8 | 41.6 | 42.7 |
| NK - S40-R9 | 40.6 | 44.7 | 42.1 | 42.4 | 40.1 | 40.7 |
| NK - S43-B1 | 40.8 | 40.5 | 41.6 | 42.0 | 40.0 | 41.2 |
| SCHILLINGER - 413.RCP | 41.4 | 39.9 | 41.0 | 40.1 | 39.7 | 41.2 |
| SCHILLINGER - 431.RCS | 40.1 | 40.0 | 40.4 | 41.4 | 39.2 | 40.6 |
| SCHILLINGER - 443.R | 39.6 | 39.7 | 39.4 | 40.1 | 40.9 | 40.5 |
| SEEDWAY - SG4445 | 38.9 | 38.9 | 40.5 | 40.6 | 38.3 | 39.8 |
| S.STATES - RT4098 | 39.0 | 39.2 | 40.1 | 40.5 | 39.1 | 41.0 |
| S.STATES - RT4230N | 40.3 | 41.0 | 40.9 | 41.3 | 39.6 | 40.1 |
| S.STATES - RT446N | 41.9 | 36.9 | 42.6 | 42.0 | 40.7 | 42.4 |
| S.STATES - RT4502N | 41.1 | 41.2 | 42.4 | 42.3 | 40.7 | 41.5 |
| USG - 7401nRR | 40.1 | 40.4 | 41.2 | 41.2 | 38.8 | 40.1 |
| USG - 7402nRR | 40.8 | 40.6 | 40.8 | 40.7 | 39.8 | 39.8 |
| USG - 7403nRR | 41.1 | 40.7 | 43.2 | 40.1 | 40.7 | 40.2 |
| USG - 7423nRR | 39.9 | 40.4 | 40.8 | 41.4 | 38.9 | 40.6 |
| USG - 7440nRR | 38.1 | 39.4 | 40.5 | 40.6 | 37.8 | 40.1 |
| VIGORO - V40N3RR | 41.3 | 39.9 | 41.3 | 42.2 | 40.4 | 42.2 |
| VIGORO - V42N3RR | 40.2 | 40.5 | 40.4 | 41.6 | 39.2 | 40.4 |

Table 20. (Continued) Protein Content - Roundup Ready Soybean Varieties

| BRAND – ENTRY | Keedys- ville | Clarks- ville | Queenstown | | Quantico | |
|-------------------------------|------------------|------------------|-------------------|------|----------|------|
| | | | FS | DC | FS | DC |
| MATURITY GROUP IV-S | | | Protein, % | | | |
| ASGROW - AG4603 | 40.0 | 41.4 | 41.0 | 40.6 | 38.9 | 41.1 |
| CLARK - CL48RR | 38.6 | 40.4 | 40.4 | 42.4 | 39.0 | 39.9 |
| DEKALB - DKB46-51 | 40.2 | 41.3 | 41.7 | 42.6 | 42.2 | 41.7 |
| EXPERIMENTAL - MD 99-1098-2RR | 39.7 | 40.0 | 40.3 | 41.1 | 37.5 | 40.0 |
| EXPERIMENTAL - MD 99-1353-2RR | 40.7 | 42.0 | 41.2 | 41.3 | 39.4 | 40.7 |
| S.STATES - RT4810N | 40.7 | 41.3 | 40.2 | 41.4 | 40.6 | 40.4 |
| S.STATES - RT4930N | 42.7 | 42.2 | 43.2 | 43.0 | 42.3 | 42.5 |
| S.STATES - RT4980 | 39.6 | 40.2 | 40.8 | 40.6 | 41.2 | 41.3 |
| USG - 7489RR | 39.3 | 40.1 | 40.3 | 40.3 | 39.4 | 40.4 |
| USG - 7482nRR | 42.1 | 42.6 | 42.4 | 43.1 | 41.7 | 43.6 |
| USG - 7499nRR | 40.7 | 41.3 | 40.7 | 41.3 | 40.1 | 40.2 |
| VIGORO - V47N3RR | 41.2 | 41.5 | 42.1 | 41.9 | 41.5 | 41.3 |
| VIGORO - V49N3RR | 42.5 | 41.5 | 42.6 | 42.3 | 42.0 | 40.8 |
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-0687-3RR | - | - | 41.2 | 40.5 | 41.4 | 41.1 |
| EXPERIMENTAL - MD 99-0700-2RR | - | - | 42.8 | 42.0 | 43.4 | 43.0 |
| EXPERIMENTAL - MD 99-1051-2RR | - | - | 42.2 | 41.0 | 40.6 | 41.4 |
| EXPERIMENTAL - MD 99-1411-1RR | - | - | 41.0 | 41.2 | 39.3 | 40.0 |
| S.STATES - RT5001N | - | - | 43.1 | 41.2 | 41.9 | 43.6 |
| S.STATES - RT5302N | - | - | 42.1 | 40.9 | 41.9 | 41.4 |
| USG - 510nRR | - | - | 42.0 | 41.5 | 41.6 | 40.8 |
| EXPERIMENTAL - 99VPI-67 RR | - | - | 42.3 | 41.7 | 40.5 | 41.2 |
| EXPERIMENTAL - 99VPI-120 RR | - | - | 42.1 | 42.4 | 41.4 | 42.1 |
| EXPERIMENTAL - MD 01-269 RR | - | - | 43.9 | 42.9 | 42.5 | 44.2 |
| EXPERIMENTAL - MD 01-272 RR | - | - | 43.1 | 42.9 | 43.2 | 42.0 |
| EXPERIMENTAL - MD 01-273 RR | - | - | 42.9 | 42.0 | 42.7 | 41.9 |

FS=Full Season, DC=Double Crop

Table 21. Oil content of Roundup Ready soybean varieties grown at four Maryland locations, 2003.

| BRAND - ENTRY | Keedys- ville | Clarks- ville | Queenstown | | Quantico | |
|-------------------------------|------------------|------------------|---------------|------|----------|------|
| | | | FS | DC | FS | DC |
| MATURITY GROUP III | | | Oil, % | | | |
| ASGROW - AG3905 | 19.9 | 19.7 | 20.4 | 19.5 | 20.9 | 20.8 |
| NK - S37-N4 | 20.0 | 19.7 | 21.4 | 19.5 | 19.9 | 18.8 |
| NK - S39-K6 | 22.2 | 20.3 | 20.4 | 19.6 | 20.9 | 20.3 |
| SCHILLINGER - 393.RCP | 21.2 | 21.3 | 20.7 | 20.3 | 22.0 | 20.8 |
| SEEDWAY - SG3709 | 20.8 | 20.2 | 19.6 | 20.1 | 21.0 | 19.9 |
| SEEDWAY - SG3905 | 21.9 | 20.4 | 21.6 | 20.9 | 21.7 | 20.9 |
| S.STATES - RT3799N | 20.3 | 20.1 | 21.0 | 21.6 | 20.9 | 20.2 |
| S.STATES - RT3802N | 18.9 | 19.8 | 19.9 | 18.8 | 20.2 | 21.8 |
| S.STATES - RT3975 | 21.7 | 22.0 | 19.6 | 18.9 | 20.1 | 19.8 |
| USG - 7393nRR | 20.5 | 20.4 | 21.4 | 21.4 | 21.6 | 21.0 |
| VIGORO - V38N4RR | 20.4 | 21.1 | 20.6 | 20.8 | 22.6 | 20.4 |
| VIGORO - V39N4RR | 21.1 | 21.5 | 21.1 | 20.9 | 21.7 | 21.6 |
| VIGORO - V382NRR | 20.0 | 20.7 | 19.8 | 20.8 | 20.2 | 20.2 |
| MATURITY GROUP IV | | | | | | |
| ASGROW - AG4201 | 20.8 | 19.2 | 19.4 | 19.2 | 20.7 | 20.1 |
| ASGROW - AG4403 | 19.5 | 19.9 | 20.7 | 20.0 | 20.9 | 20.0 |
| ASGROW - AG4502 | 19.5 | 18.3 | 19.9 | 19.8 | 21.8 | 19.7 |
| CLARK - CL42RR | 19.3 | 19.0 | 20.2 | 20.3 | 19.4 | 19.1 |
| DEKALB - DKB44-51 | 20.2 | 19.3 | 20.6 | 19.9 | 21.9 | 20.3 |
| DEKALB - DKB44-52 | 19.1 | 18.3 | 18.6 | 18.2 | 22.2 | 19.4 |
| EXPERIMENTAL - MD 99-0053-1RR | 19.9 | 18.8 | 21.7 | 18.3 | 20.0 | 20.4 |
| EXPERIMENTAL - MD 99-0312-2RR | 19.6 | 19.9 | 20.6 | 18.9 | 22.8 | 19.5 |
| EXPERIMENTAL - MD 99-0533-3RR | 18.4 | 18.0 | 19.5 | 18.4 | 19.6 | 18.4 |
| NK - S40-R9 | 20.4 | 21.1 | 19.6 | 18.9 | 20.7 | 20.5 |
| NK - S43-B1 | 18.6 | 19.9 | 19.9 | 19.7 | 19.5 | 19.4 |
| SCHILLINGER - 413.RCP | 22.6 | 20.0 | 20.3 | 20.4 | 21.6 | 20.4 |
| SCHILLINGER - 431.RCS | 19.7 | 19.3 | 19.6 | 19.9 | 21.6 | 20.8 |
| SCHILLINGER - 443.R | 20.3 | 19.8 | 20.9 | 20.9 | 22.0 | 19.7 |
| SEEDWAY - SG4445 | 20.1 | 19.4 | 20.7 | 20.0 | 21.5 | 20.4 |
| S.STATES - RT4098 | 20.7 | 20.6 | 20.6 | 20.2 | 21.8 | 21.9 |
| S.STATES - RT4230N | 20.5 | 20.2 | 19.9 | 19.3 | 21.0 | 21.1 |
| S.STATES - RT446N | 18.9 | 23.2 | 18.9 | 19.6 | 21.3 | 19.5 |
| S.STATES - RT4502N | 19.3 | 18.9 | 19.9 | 19.5 | 20.5 | 19.5 |
| USG - 7401nRR | 21.9 | 19.9 | 21.3 | 22.2 | 22.1 | 20.6 |
| USG - 7402nRR | 21.9 | 20.4 | 21.0 | 20.4 | 21.7 | 19.9 |
| USG - 7403nRR | 20.3 | 20.1 | 18.8 | 20.7 | 20.5 | 19.7 |
| USG - 7423nRR | 20.1 | 19.5 | 20.2 | 19.4 | 20.4 | 20.0 |
| USG - 7440nRR | 20.4 | 19.7 | 21.4 | 20.1 | 21.5 | 20.3 |
| VIGORO - V40N3RR | 21.3 | 19.8 | 19.9 | 19.8 | 20.4 | 20.4 |
| VIGORO - V42N3RR | 20.2 | 20.1 | 20.1 | 18.9 | 20.5 | 20.3 |

Table 21. (Continued) Oil Content – Roundup Ready Soybean Varieties

| BRAND – ENTRY | Keedys- | Clarks- | Queenstown | | Quantico | |
|-------------------------------|---------|---------|---------------|------|----------|------|
| | ville | ville | FS | DC | FS | DC |
| MATURITY GROUP IV-S | | | Oil, % | | | |
| ASGROW - AG4603 | 20.3 | 22.5 | 22.0 | 19.3 | 20.7 | 18.7 |
| CLARK - CL48RR | 19.7 | 20.1 | 21.3 | 18.1 | 23.0 | 20.4 |
| DEKALB - DKB46-51 | 19.6 | 18.8 | 19.7 | 19.6 | 19.3 | 18.9 |
| EXPERIMENTAL - MD 99-1098-2RR | 17.7 | 17.4 | 18.7 | 18.7 | 20.5 | 18.1 |
| EXPERIMENTAL - MD 99-1353-2RR | 16.2 | 15.6 | 19.2 | 19.7 | 20.5 | 17.8 |
| S.STATES - RT4810N | 17.7 | 22.1 | 19.9 | 19.2 | 20.5 | 19.0 |
| S.STATES - RT4930N | 16.0 | 16.3 | 18.4 | 18.3 | 19.3 | 17.2 |
| S.STATES - RT4980 | 20.4 | 19.7 | 20.7 | 20.9 | 22.2 | 22.3 |
| USG - 7489RR | 20.3 | 19.1 | 21.2 | 21.9 | 22.0 | 19.3 |
| USG - 7482nRR | 18.5 | 18.3 | 19.5 | 19.2 | 20.2 | 18.0 |
| USG -7499nRR | 18.8 | 18.4 | 19.2 | 19.3 | 20.1 | 18.0 |
| VIGORO - V47N3RR | 18.7 | 18.8 | 19.3 | 19.7 | 20.3 | 18.8 |
| VIGORO - V49N3RR | 19.3 | 19.0 | 18.6 | 19.1 | 20.4 | 19.4 |
| MATURITY GROUP V | | | | | | |
| EXPERIMENTAL - MD 99-0687-3RR | - | - | 19.5 | 18.8 | 20.1 | 18.4 |
| EXPERIMENTAL - MD 99-0700-2RR | - | - | 19.3 | 18.7 | 19.5 | 17.6 |
| EXPERIMENTAL - MD 99-1051-2RR | - | - | 18.9 | 17.9 | 19.7 | 17.6 |
| EXPERIMENTAL - MD 99-1411-1RR | - | - | 21.8 | 18.3 | 19.5 | 17.2 |
| S.STATES - RT5001N | - | - | 18.3 | 19.2 | 18.6 | 16.5 |
| S.STATES - RT5302N | - | - | 18.5 | 20.6 | 19.0 | 17.4 |
| USG - 510nRR | - | - | 19.8 | 19.9 | 19.1 | 18.4 |
| EXPERIMENTAL - 99VPI-67 RR | - | - | 20.0 | 19.7 | 20.7 | 18.8 |
| EXPERIMENTAL - 99VPI-120 RR | - | - | 20.1 | 18.3 | 20.2 | 18.7 |
| EXPERIMENTAL - MD 01-269 RR | - | - | 17.9 | 17.0 | 18.6 | 15.1 |
| EXPERIMENTAL - MD 01-272 RR | - | - | 18.0 | 17.3 | 19.2 | 15.9 |
| EXPERIMENTAL - MD 01-273 RR | - | - | 17.2 | 18.4 | 18.6 | 15.9 |

FS=Full Season, DC=Double Crop