



Information

DEPARTMENT OF PLANT SCIENCE & LANDSCAPE ARCHITECTURE
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Agronomy Facts No. 32
Revised January 2008

2007 MARYLAND SOYBEAN VARIETY TESTS

Maryland soybean variety tests are conducted each year by the Maryland Agricultural Experiment Station, Department of Plant Science 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 2007 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 Illinois (IL 3309), Maryland (MD 99-6226, MD 00-5326, MD 00-6015, MD 01-206 RR, MD 01-5866, MD 01-6106, MD 02-651 RR, MD 02-5988, MD 03-5188, MD 03-5453, MD 03-5458, MD 03-5527, MD 03-5603, MD 03-5872, MD 03-6420, MD 04-40 RR, MD 04-5217, MD 04-5218, MD 04-5545, MD 04-5550, MD 04-5763, MD 04-5918, MD 04-6006, MD 04-6008, MD 04-6101, MD 05-5656, MD 05-6377, MD 05-6381, MD 05-6384), and Nebraska (U9842) were included in the 2007 tests. The suppliers of private varieties are listed in Table 1. Seed of the Asgrow Vistive varieties AG2921V and AG3521V were purchased for testing and were grown in the Maturity Group III standard variety tests.

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 2007 growing season was extremely dry. Rainfall was lower than normal from May through July at all test locations. Although rainfall increased in August and October at most locations, total rainfall remained below normal for the season. Monthly rainfall amounts for May through October for the test locations are shown in Table 3.

Results of the 2007 tests are reported in Tables 4-6 for the standard varieties and in Tables 8-12 for the Roundup Ready varieties. In each of these tables, varieties within maturity groups are listed in order of yield, highest to lowest. Yields of the tests at Clarksville are not reported because variation within the plot area due to drought caused large coefficient of variation values in the data analyses. Unfortunately, a post-emergence herbicide application in mid-July on the standard soybean varieties at Queenstown was made just prior to a prolonged dry period. The dry conditions limited the soybean plants' ability to recover from the herbicide's usual minor leaf injury and resulted in considerable leaf scorch and stunting of the plants. The highest overall test location mean yields were at Quantico for the standard varieties and Queenstown for the Roundup Ready 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 7 and 13 summarize the relative yields of the standard and Roundup Ready varieties, respectively, by expressing their yields as a percentage 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 7 and 13, 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 2006 test are shown in the data tables. The 2006 location average yield for each maturity group and the 2006 LSD value are included in the data tables to compare variety yield differences in both years. The multiple-year data provide additional information on a variety's yielding ability. 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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Acknowledgements:

The financial support of the Maryland Soybean Board and grants for equipment from the Maryland Grain Producers' Utilization Board, University of Maryland Agricultural Experiment Station, and the Maryland Crop Improvement Association are gratefully acknowledged. The contributions of B.L. Ikenberry, N. Hailegiorgies, M. Duvelsaint, A. Mensah, T. Conover, Jr., T.S. Ellis, F.R. Mulford, F.A. Senkbeil, M.A. Sultenfuss, P.R. Stafford, J.I. Streett, and D.M. Justice of the University of Maryland are recognized as being essential in the successful completion of these tests and are gratefully acknowledged.

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 by selecting 'Soybeans' on the Department's cropping system webpage and choosing the appropriate publication: <http://www.mdcrops.umd.edu/>.

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Table 1. Suppliers of private entries tested in 2007.

COMPANY	BRAND	HERBICIDE REACTION	ENTRY
Growmark FS Milford, DE 19963	FS HISOY SCHILLINGER	Roundup Ready "	3855, 395NRR, 432NRR, 476NRR 427.RC, 447.RC, 467.RC
Monsanto St. Louis, MO 63167	ASGROW	Roundup Ready "	AG3705, AG3803, AG4103, AG4404, AG4604
Seedway LLC Emmaus, PA 18049	SEEDWAY	Roundup Ready	SG3660, SG3775
Southern States Cooperative, Inc. Richmond, VA 23260	S.STATES	Roundup Ready " " " " Standard	RT3851N,RT3860,RT3871N,RT3951N, RT3971N,RT4151N,RT4370N,RT4440N, RT4451N,RT4470N,RT4551N,RT4760N, RT4777N,RT4808N,RT4981N,RT4996N, RT5160N SS385, SS435
UniSouth Genetics, Inc. Nashville, TN 37211	USG	Roundup Ready " " Standard	73A67, 73T77, 7384nRS, 7423nRS, 74A27,74A45,74A76,74D77,7494nRR, 75J32, 7515nRS, Allen 440nSTS, 5002T, 5601T

Table 2. The 2007 soybean variety test plot information.

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

Tests: Roundup Ready Maturity Groups III, IV, and IV-S
Planting Date: May 31
Row Spacing: 24 inches
Soil Type: Hagerstown silt loam
Soil Test: pH 6.3, P Level- 47 M, K Level- 119 M
Previous Crop: Corn
Fertilizer: None
Lime: None
Herbicide: Pre-Plant:1 Qt/A Gromoxone+ 8 oz/A Salvo (May 8),1 Qt/A Credit Extrac(June 8)
Post: 1 Qt/A Credit Extrac (July 3)
Plots: 4 rows, 20 feet long
Seeding Rate: 6.5 seeds/foot
Tillage: Conventional

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

Tests: Roundup Ready Maturity Groups III, IV, and IV-S
Tests: Standard Varieties Maturity Groups III, IV, and IV-S
Planting Date: June 6

Seed yields are not reported because of plot variability due to drought.

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

Tests: Full Season Standard Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 11
Row Spacing: 24 inches
Soil Type: Matapeake silt loam
Soil Test: pH 6.1, P Index- 57, K Index- 75
Previous Crop: Corn
Fertilizer: 10 Gal/A 23-18-0 starter
Lime: None
Herbicide: Preemergence:1.5 Pt/A Dual Magnum, 0.8 Lb/A Lorox DF
Post:1.5 Pt/A Basagran,1.5 Pt/A Blazer,surfactant
Plots: 4 rows, 20 feet long
Seeding Rate: 6.5 seeds/foot except Maturity Group V entries= 6 seeds/foot
Tillage: Conventional

Table 2. (Continued) Plot Information.

WYE RESEARCH & EDUCATION CENTER
Queen Annes County – Queenstown, MD

Tests: Full Season Roundup Ready Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 8
Row Spacing: 24 inches
Soil Type: Matapeake silt loam
Soil Test: pH 6.1, P Index- 124, K Index- 111
Previous Crop: Corn
Fertilizer: None
Lime: None
Herbicide: Preemergence:1.5 Pt/A Dual Magnum
Post:1.5 Qt/A Glyphos Xtra on July 13
Plots: 4 rows, 20 feet long
Seeding Rate: 6.5 seeds/foot except Maturity Group V entries= 6 seeds/foot
Tillage: Conventional

Tests: Double Crop Roundup Ready Varieties Maturity Groups III, IV, IV-S,and V
Planting Date: June 29
Row Spacing: 7.5 inches
Soil Type: Matapeake silt loam
Soil Test: pH 5.9, P Index- 111, K Index- 77
Previous Crop: Wheat
Fertilizer: None on soybeans
Lime: None
Herbicide: 1.5 Qt/A Glyphos Xtra
Plots: 7 rows, 25 feet long
Seeding Rate: 3 seeds/foot
Tillage: None

Table 2. (Continued) Plot information

LOWER EASTERN SHORE RESEARCH & 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 7
Row Spacing: 24 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.3, P Index- Very High, K Index- High
Previous Crop: Corn
Fertilizer: 600 Lbs/A of 2-4-12 liquid fertilizer
Lime: 1 Ton/A
Herbicide: Preemergence: 1.5Pt/A Dual 8E, 12 Oz/A Lorox DF, 3 Oz/A Canopy XL
Post emergence: 1.5 Pt/A Storm, 1 Oz/A 2,4-DB, 3 Oz/A Blazer + Surfactant
Plots: 4 rows, 20 feet long
Seeding Rate: 6.5 seeds/foot except Maturity Group V entries= 6 seeds/foot
Tillage: Conventional

Tests: Full Season Roundup Ready Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: May 25
Row Spacing: 20 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.4, P Index- Very High, K Index- High
Previous Crop: No Tillage Corn
Fertilizer: 600 Lbs/A of 2-4-12 liquid fertilizer
Lime: 1 Ton/A
Herbicide: Preplant: 1 Qt/A Roundup Ultra Max, 12 Oz/A 2,4-D Ester, 1 Pt/A Dual 8E
Post: 1 Qt/A Roundup Ultra Max
Plots: 4 rows, 20 feet long
Seeding Rate: 6.5 seeds/foot
Tillage: None

Tests: Double Crop Standard Varieties Maturity Groups III, IV, IV-S, and V
Planting Date: June 22
Row Spacing: 15 inches
Soil Type: Mattapex silt loam
Soil Test: pH 6.4, P Index- Very High, K Index- High
Previous Crop: Winter barley
Fertilizer: None on soybeans
Lime: None on soybeans
Herbicide: Preemergence: 1.5 Pt/A Roundup Ultra Max, 1.6 Pt/A Dual, 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 feet long
Seeding Rate: 6 seeds/foot
Tillage: None

Table 2. (Continued) Plot information

LOWER EASTERN SHORE RESEARCH & 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: June 22
 Row Spacing: 15 inches
 Soil Type: Mattapex silt loam
 Soil Test: pH 6.4, P Index- Very High, K Index- High
 Previous Crop: Winter barley
 Fertilizer: None on soybeans
 Lime: None on soybeans
 Herbicide: Preemergence: 1.5 Pt/A Roundup Ultra Max, 1.6 Pt/A Dual, 5 Oz/A Canopy, 8 Oz/A 2,4-DB
 Post: 1 Qt/A Roundup Ultra Max
 Plots: 5 rows, 20 feet long
 Seeding Rate: 6 seeds/foot
 Tillage: None

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

Location	May	June	July	Aug.	Sept.	Oct.	Total
Keedysville	1.61	1.55	0.83	5.66	1.13	3.21	13.99
Clarksville	0.51	3.13	1.84	2.62	0.95	4.32	13.37
Queenstown	1.41	2.79	1.41	4.28	1.36	5.31	16.56
Quantico	0.93	3.12	1.72	2.10	3.39	3.60	14.86

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

BRAND - ENTRY	Seed Yield, Bu/A			2007			
	2007	2006	2-Year	Maturity Date	Height, Inches	Lodging Score*	
	MATURITY GROUP III						
EXPERIMENTAL - U9842	39.3	42.1	40.7	9-28	18	1.0	
S.STATES - SS385	39.1	42.8	41.0	9-27	24	1.2	
PUBLIC - MACON	24.6	36.8	30.7	9-26	16	1.3	
PUBLIC - IA 3023	23.7	32.5	28.1	9-25	17	1.0	
EXPERIMENTAL - MD 03-5188	23.0	35.5	29.3	9-25	20	1.2	
EXPERIMENTAL - MD 03-5453	20.3	32.8	26.6	9-23	17	1.0	
EXPERIMENTAL - MD 03-5872	18.7	28.7	23.7	9-26	17	1.0	
EXPERIMENTAL - MD 05-6377	17.6	-	-	9-25	16	1.2	
EXPERIMENTAL - MD 03-5458	16.1	30.2	23.2	9-23	15	1.0	
EXPERIMENTAL - MD 04-5918	15.7	-	-	9-23	14	1.0	
*ASGROW - AG 2921V (GP II)	29.1	-	-	9-24	18	1.0	
*ASGROW - AG 3521V	35.3	-	-	9-26	19	1.0	
	MEAN	25.2	34.3	29.8	-	18	1.1
	LSD (0.20)	2.9	4.6	-	-	2	ns
	CV (%)	10.7	12.5	-	-	-	-
*Supplemental entries with modified oil traits							
MATURITY GROUP IV							
S.STATES - SS435	47.4	48.2	47.8	10-02	23	1.0	
EXPERIMENTAL - MD 04-5217	39.3	-	-	9-26	23	1.5	
EXPERIMENTAL - IL 3309	37.5	42.1	39.8	9-28	19	1.0	
PUBLIC - LS 93-0375	36.1	39.9	38.0	9-29	23	1.2	
USG - 440nSTS	34.7	41.1	37.9	9-28	23	1.0	
PUBLIC - MONOCACY	32.8	42.8	37.8	9-27	23	1.0	
PUBLIC - HS 93-4118	32.7	38.3	35.5	9-28	20	1.0	
EXPERIMENTAL - MD 02-5988	31.4	35.5	33.5	9-28	25	1.2	
EXPERIMENTAL - MD 04-6006	27.5	37.0	32.3	9-27	17	1.2	
EXPERIMENTAL - MD 05-6381	26.7	-	-	9-27	21	1.0	
EXPERIMENTAL - MD 04-5550	25.2	-	-	9-29	19	1.3	
EXPERIMENTAL - MD 04-5545	23.4	-	-	9-26	19	1.0	
EXPERIMENTAL - MD 03-5603	23.1	-	-	10-01	23	1.0	
	MEAN	32.1	38.6	35.4	-	21	1.1
	LSD (0.20)	3.3	3.6	-	-	2	0.2
	CV (%)	9.6	8.7	-	-	-	-

Table 4. (Continued) Queenstown - Standard Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			2007			
	2007	2006	2-Year	Maturity Date	Height, Inches	Lodging Score*	
	MATURITY GROUP IV-S						
EXPERIMENTAL - MD 01-5866	41.0	52.0	46.5	10-12	21	1.0	
PUBLIC - MANOKIN	35.9	47.5	41.7	10-07	25	2.3	
PUBLIC - KS 4602N	32.8	44.3	38.6	9-30	23	1.3	
EXPERIMENTAL - MD 00-6015	30.3	46.4	38.4	10-05	15	1.0	
EXPERIMENTAL - MD 00-5326	29.4	53.3	41.4	10-07	23	1.0	
EXPERIMENTAL - MD 04-6101	24.4	-	-	9-29	16	1.0	
EXPERIMENTAL - MD 03-6420	22.7	45.6	34.2	10-06	23	1.5	
PUBLIC - MD 4900	21.7	48.4	35.1	10-04	14	1.0	
EXPERIMENTAL - MD 05-5656	21.4	-	-	10-08	28	2.8	
EXPERIMENTAL - MD 04-5763	17.1	-	-	9-27	20	1.0	
EXPERIMENTAL - MD 03-5527	16.4	-	-	9-28	19	1.0	
EXPERIMENTAL - MD 04-6008	14.6	-	-	9-28	20	1.0	
EXPERIMENTAL - MD 05-6384	14.0	-	-	9-29	20	1.0	
	MEAN	24.7	43.8	34.3	-	21	1.3
	LSD (0.20)	3.9	3.5	-	-	3	0.3
	CV (%)	14.6	7.5	-	-	-	-
MATURITY GROUP V							
PUBLIC - KS 5502N	41.3	43.8	42.6	10-16	25	1.3	
USG - 5601T	36.3	40.3	38.3	10-15	22	1.2	
EXPERIMENTAL - MD 04-5218	33.8	-	-	10-05	17	1.0	
EXPERIMENTAL - MD 01-6106	32.0	46.2	39.1	10-12	22	1.2	
EXPERIMENTAL - MD 99-6226	29.6	41.0	35.3	10-10	17	1.2	
PUBLIC - HUTCHESON	26.6	37.8	32.2	10-12	21	1.0	
USG - 5002T	24.5	33.0	28.8	10-08	17	1.0	
PUBLIC - HOLLADAY	22.4	31.7	27.1	10-05	17	1.0	
PUBLIC - TEEJAY	21.2	36.9	29.1	10-12	18	1.0	
PUBLIC - ESSEX	21.1	29.2	25.2	10-05	17	1.0	
	MEAN	28.9	37.7	33.3	-	19	1.1
	LSD (0.20)	3.4	3.9	-	-	1	ns
	CV (%)	10.7	9.5	-	-	-	-

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

Table 5. Performance of standard soybean varieties planted full season at Quantico.

BRAND - ENTRY	Seed Yield, Bu/A			Maturity Date	2007		
	2007	2006	2-Year		Height, Inches	Lodging Score*	
MATURITY GROUP III							
EXPERIMENTAL - U9842	45.5	58.4	52.0	9-22	26	1.2	
S.STATES - SS385	42.8	60.8	51.8	9-25	31	1.3	
EXPERIMENTAL - MD 03-5453	36.8	56.4	46.6	9-18	26	1.0	
PUBLIC - IA 3023	35.1	55.8	45.5	9-16	22	1.0	
PUBLIC - MACON	31.3	49.9	40.6	9-22	23	1.5	
EXPERIMENTAL - MD 03-5458	30.7	52.9	41.8	9-18	27	1.3	
EXPERIMENTAL - MD 05-6377	30.6	-	-	9-22	27	1.0	
EXPERIMENTAL - MD 04-5918	30.3	-	-	9-14	23	1.0	
EXPERIMENTAL - MD 03-5188	28.3	56.0	42.2	9-22	34	1.2	
EXPERIMENTAL - MD 03-5872	28.0	48.3	38.2	9-22	24	1.2	
*ASGROW - AG 2921V (GP II)	41.5	-	-	9-17	23	1.0	
*ASGROW - AG 3521V	46.9	-	-	9-24	28	1.3	
	MEAN	35.8	52.7	44.3	-	26	1.2
	LSD (0.20)	7.0	3.4	-	-	2	ns
	CV (%)	18.1	5.9	-	-	-	-
*Supplemental entries with modified oil traits							
MATURITY GROUP IV							
EXPERIMENTAL - MD 04-5545	45.0	-	-	9-24	31	1.3	
EXPERIMENTAL - IL 3309	43.9	52.4	48.2	9-24	25	1.2	
EXPERIMENTAL - MD 04-5217	42.3	-	-	9-23	27	1.0	
USG - 440nSTS	42.1	58.3	50.2	9-26	29	1.3	
PUBLIC - MONOCACY	41.2	57.6	49.4	9-24	31	1.0	
PUBLIC - LS 93-0375	40.5	47.2	43.9	9-25	29	1.2	
EXPERIMENTAL - MD 04-6006	39.9	55.8	47.9	9-23	25	1.2	
PUBLIC - HS 93-4118	39.5	58.7	49.1	9-21	25	1.0	
EXPERIMENTAL - MD 04-5550	39.4	-	-	9-22	28	1.0	
EXPERIMENTAL - MD 02-5988	38.9	60.4	49.7	9-24	32	1.0	
S.STATES - SS435	38.7	64.1	51.4	9-28	30	1.3	
EXPERIMENTAL - MD 05-6381	34.7	-	-	9-25	28	1.2	
EXPERIMENTAL - MD 03-5603	31.1	-	-	9-30	33	1.0	
	MEAN	39.8	55.8	47.8	-	29	1.1
	LSD (0.20)	3.8	5.2	-	-	2	ns
	CV (%)	9.0	8.6	-	-	-	-

Table 5. (Continued) Quantico - Full Season, Standard Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			2007			
	2007	2006	2-Year	Maturity Date	Height, Inches	Lodging Score*	
MATURITY GROUP IV-S							
EXPERIMENTAL - MD 00-6015	49.3	60.1	54.7	10-05	25	1.0	
PUBLIC - KS 4602N	41.9	58.0	50.0	9-28	31	1.2	
PUBLIC - MD 4900	41.3	59.8	50.6	10-04	25	1.2	
EXPERIMENTAL - MD 00-5326	41.0	62.7	51.9	10-05	32	1.3	
EXPERIMENTAL - MD 03-6420	40.5	52.9	46.7	10-04	35	1.5	
EXPERIMENTAL - MD 03-5527	40.2	-	-	9-25	30	1.2	
EXPERIMENTAL - MD 05-5656	37.6	-	-	10-07	39	3.7	
EXPERIMENTAL - MD 04-6101	36.7	-	-	9-28	28	1.0	
EXPERIMENTAL - MD 04-5763	36.4	-	-	9-22	30	1.5	
EXPERIMENTAL - MD 04-6008	36.0	-	-	9-26	35	1.5	
EXPERIMENTAL - MD 01-5866	35.6	58.6	47.1	10-06	28	1.2	
PUBLIC - MANOKIN	33.2	55.4	44.3	10-05	32	1.8	
EXPERIMENTAL - MD 05-6384	32.8	-	-	9-26	32	1.5	
	MEAN	38.7	54.0	46.4	-	31	1.5
	LSD (0.20)	ns	3.6	-	-	2	0.4
	CV (%)	16.4	6.3	-	-	-	-
MATURITY GROUP V							
PUBLIC - TEEJAY	50.4	60.7	55.6	10-10	27	1.2	
EXPERIMENTAL - MD 99-6226	47.6	60.7	54.2	10-10	27	1.0	
USG - 5002T	47.2	62.0	54.6	10-05	28	1.3	
PUBLIC - ESSEX	46.8	51.1	49.0	10-08	25	1.0	
USG - 5601T	46.2	67.5	56.9	10-10	32	2.5	
EXPERIMENTAL - MD 01-6106	45.5	60.6	53.1	10-10	29	1.0	
PUBLIC - HOLLADAY	45.1	59.2	52.2	10-05	24	1.0	
PUBLIC - KS 5502N	43.4	57.2	50.3	10-12	31	1.2	
PUBLIC - HUTCHESON	42.8	57.7	50.3	10-10	28	1.2	
EXPERIMENTAL - MD 04-5218	37.8	-	-	10-05	26	1.0	
	MEAN	45.3	59.6	52.5	-	28	1.2
	LSD (0.20)	ns	2.7	-	-	2	0.3
	CV (%)	13.2	4.2	-	-	-	-

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

Table 6. Performance of standard soybean varieties double cropped at Quantico.

BRAND - ENTRY	Seed Yield, Bu/A			2007		
	2007	2006	2-Year	Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP III						
PUBLIC - MACON	38.3	47.4	42.9	10-01	26	1.2
S.STATES - SS385	36.8	57.1	47.0	10-05	28	1.0
EXPERIMENTAL - MD 03-5453	36.2	50.6	43.4	10-05	26	1.0
EXPERIMENTAL - U9842	34.9	49.5	42.2	10-04	25	1.3
PUBLIC - IA 3023	34.3	50.7	42.5	10-03	24	1.2
EXPERIMENTAL - MD 03-5188	33.5	47.8	40.7	10-02	33	2.0
EXPERIMENTAL - MD 03-5458	31.5	45.6	38.6	10-02	27	1.3
EXPERIMENTAL - MD 05-6377	31.4	-	-	10-04	27	1.3
EXPERIMENTAL - MD 03-5872	29.4	43.6	36.5	10-05	24	1.3
EXPERIMENTAL - MD 04-5918	28.8	-	-	10-01	22	1.0
*ASGROW - AG 2921V (GP II)	30.3	-	-	10-01	18	1.0
*ASGROW - AG 3521V	37.0	-	-	10-02	23	1.0
MEAN	33.3	48.9	41.1	-	25	1.2
LSD (0.20)	4.4	3.8	-	-	2	0.2
CV (%)	12.3	7.2	-	-	-	-
*Supplemental entries with modified oil traits						
MATURITY GROUP IV						
S.STATES - SS435	42.0	60.4	51.2	10-07	29	1.0
PUBLIC - MONOCACY	39.5	57.1	48.3	10-05	28	1.2
PUBLIC - HS 93-4118	38.0	57.9	48.0	10-04	26	1.2
EXPERIMENTAL - MD 04-6006	37.2	49.5	43.4	10-05	29	1.5
EXPERIMENTAL - MD 02-5988	36.6	51.9	44.3	10-05	29	1.8
USG - 440nSTS	35.9	58.3	47.1	10-05	28	1.5
EXPERIMENTAL - MD 04-5217	35.6	-	-	10-05	31	2.2
EXPERIMENTAL - IL 3309	35.4	54.5	45.0	10-02	26	1.2
EXPERIMENTAL - MD 04-5545	35.4	-	-	10-06	25	1.5
PUBLIC - LS 93-0375	35.1	51.3	43.2	10-04	28	1.0
EXPERIMENTAL - MD 05-6381	33.3	-	-	10-05	26	1.0
EXPERIMENTAL - MD 04-5550	32.0	-	-	10-04	27	1.2
EXPERIMENTAL - MD 03-5603	31.4	-	-	10-11	32	1.2
MEAN	36.0	54.1	45.1	-	28	1.3
LSD (0.20)	ns	3.3	-	-	2	0.4
CV (%)	11.8	5.6	-	-	-	-

Table 6. (Continued) Quantico - Double Cropped, Standard Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			Maturity Date	2007	
	2007	2006	2-Year		Height, Inches	Lodging Score*
MATURITY GROUP IV-S						
EXPERIMENTAL - MD 00-5326	39.3	58.1	48.7	10-12	31	2.3
PUBLIC - MD 4900	36.7	59.1	47.9	10-15	30	1.8
EXPERIMENTAL - MD 00-6015	34.0	58.7	46.4	10-14	25	1.7
PUBLIC - KS 4602N	33.7	52.1	42.9	10-12	29	1.5
PUBLIC - MANOKIN	32.8	56.6	44.7	10-15	35	2.8
EXPERIMENTAL - MD 01-5866	32.0	54.7	43.4	10-17	28	1.8
EXPERIMENTAL - MD 03-6420	31.6	53.7	42.7	10-14	31	1.7
EXPERIMENTAL - MD 05-5656	31.5	-	-	10-18	37	2.3
EXPERIMENTAL - MD 03-5527	28.4	-	-	10-11	31	2.5
EXPERIMENTAL - MD 04-6101	27.3	-	-	10-12	25	1.3
EXPERIMENTAL - MD 04-5763	24.7	-	-	10-09	28	2.3
EXPERIMENTAL - MD 04-6008	23.4	-	-	10-11	29	1.2
EXPERIMENTAL - MD 05-6384	19.4	-	-	10-09	25	1.2
MEAN	30.4	52.6	41.5	-	30	1.9
LSD (0.20)	5.4	3.8	-	-	3	0.4
CV (%)	16.6	6.8	-	-	-	-
MATURITY GROUP V						
PUBLIC - HOLLADAY	46.2	62.3	54.3	10-15	30	2.3
USG - 5002T	43.9	52.9	48.4	10-15	27	2.2
EXPERIMENTAL - MD 99-6226	42.2	60.5	51.4	10-18	32	1.8
EXPERIMENTAL - MD 04-5218	41.8	-	-	10-17	27	2.0
PUBLIC - ESSEX	40.9	52.1	46.5	10-18	27	1.8
EXPERIMENTAL - MD 01-6106	40.4	54.1	47.3	10-31	33	2.0
USG - 5601T	40.4	55.4	47.9	10-19	36	2.3
PUBLIC - HUTCHESON	40.1	53.1	46.6	10-30	35	1.8
PUBLIC - TEEJAY	36.5	64.7	50.6	10-23	31	1.7
PUBLIC - KS 5502N	35.3	48.4	41.9	10-25	32	1.5
MEAN	40.8	56.0	48.4	-	31	2.0
LSD (0.20)	3.5	3.1	-	-	3	ns
CV (%)	7.9	5.1	-	-	-	-

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

Table 7. Relative yields of standard varieties compared to the mean yield of all varieties in that maturity group at each location in 2007.

BRAND - ENTRY	Queenstown	Quantico	
		Full Season	Double Crop
MATURITY GROUP III			
	Relative Yield, % of Mean		
PUBLIC - IA 3023	94	98	103*
PUBLIC - MACON	98	87	115*
EXPERIMENTAL - MD 03-5188	91	79	100
EXPERIMENTAL - MD 03-5453	81	103	109*
EXPERIMENTAL - MD 03-5458	64	86	95
EXPERIMENTAL - MD 03-5872	74	78	88
EXPERIMENTAL - MD 04-5918	62	85	86
EXPERIMENTAL - MD 05-6377	70	85	94
S.STATES - SS385	155*	120*	111*
EXPERIMENTAL - U9842	156*	127*	105*
ASGROW - AG 2921V (GP II)	116	116	91
ASGROW - AG 3521V	140	131	111*
Location/Group Mean Yield	25.2	35.8	33.3
*Supplemental entries with modified oil traits			
MATURITY GROUP IV			
PUBLIC - HS 93-4118	102	99	106
EXPERIMENTAL - IL 3309	117	110*	98
PUBLIC - LS 93-0375	112	102	98
PUBLIC - MONOCACY	102	104*	110
EXPERIMENTAL - MD 02-5988	98	98	102
EXPERIMENTAL - MD 03-5603	72	78	87
EXPERIMENTAL - MD 04-5217	122	106*	99
EXPERIMENTAL - MD 04-5545	73	113*	98
EXPERIMENTAL - MD 04-5550	78	99	89
EXPERIMENTAL - MD 04-6006	86	100	103
EXPERIMENTAL - MD 05-6381	83	87	92
S.STATES - SS435	148*	97	117*
USG - 440nSTS	108	106*	100
Location/Group Mean Yield	32.1	39.8	36.0ns

Table 7. (Continued) Relative Yields, Standard Soybean Varieties

BRAND - ENTRY	Queenstown	Quantico	
		Full Season	Double Crop
MATURITY GROUP IV-S			
	Relative Yield, % of Mean		
PUBLIC - KS 4602N	133	108	111
PUBLIC - MANOKIN	145	86	108
PUBLIC - MD 4900	88	107	121*
EXPERIMENTAL - MD 00-5326	119	106	129*
EXPERIMENTAL - MD 00-6015	123	127*	112*
EXPERIMENTAL - MD 01-5866	166*	92	105
EXPERIMENTAL - MD 03-5527	66	104	93
EXPERIMENTAL - MD 03-6420	92	105	104
EXPERIMENTAL - MD 04-5763	69	94	81
EXPERIMENTAL - MD 04-6008	59	93	77
EXPERIMENTAL - MD 04-6101	99	95	90
EXPERIMENTAL - MD 05-5656	87	97	104
EXPERIMENTAL - MD 05-6384	57	85	64
Location/Group Mean Yield	24.7	38.7ns	30.4
MATURITY GROUP V			
PUBLIC - ESSEX	73	103	100
PUBLIC - HOLLADAY	78	100	113*
PUBLIC - HUTCHESON	92	94	98
PUBLIC - KS 5502N	143*	96	86
EXPERIMENTAL - MD 99-6226	102	105	103
EXPERIMENTAL - MD 01-6106	111	101	99
EXPERIMENTAL - MD 04-5218	117	83	102
PUBLIC - TEEJAY	73	111*	89
USG - 5002T	85	104	108*
USG - 5601T	126	102	99
Location/Group Mean Yield	28.9	45.3ns	40.8

ns= no significant differences among entries in this group

*Yield is not significantly different from the highest yielding entry in the 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 8. Performance of Roundup Ready soybean varieties planted at Keedysville.

BRAND - ENTRY	2007				
	Seed Yield, Bu/A			Height, Inches	Lodging Score*
	2007	2006	2-Year		
MATURITY GROUP III					
USG - 73T77	64.5	-	-	27	1.0
USG - 73A67	64.4	-	-	26	1.2
S.STATES - RT3971N	63.9	-	-	27	1.0
ASGROW - AG3803	62.4	-	-	28	1.0
FS HISOY - 395NRR	60.5	57.7	59.1	25	1.0
S.STATES - RT3951N	59.0	61.7	60.4	29	1.2
S.STATES - RT3860	57.9	66.8	62.4	22	1.0
S.STATES - RT3871N	56.1	-	-	26	1.2
FS HISOY - 3855	54.3	64.4	59.4	23	1.0
USG - 7384nRS	53.8	56.5	55.2	23	1.0
ASGROW - AG3705	53.0	-	-	26	1.2
S.STATES - RT3851N	50.6	52.1	51.4	24	1.0
SEEDWAY - SG3775	49.7	-	-	21	1.0
SEEDWAY - SG3660	48.1	-	-	22	1.0
MEAN	57.0	58.7	57.9	25	1.0
LSD (0.20)	7.4	6.3	-	3	ns
CV (%)	12.1	10.1	-	-	-
MATURITY GROUP IV					
ASGROW - AG4404	56.5	59.6	58.1	30	1.0
S.STATES - RT4451N	56.2	64.5	60.4	34	1.2
USG - 74A45	55.7	60.7	58.2	36	1.2
SCHILLINGER - 427.RC	55.6	-	-	25	1.2
USG - 7423nRS	53.9	62.5	58.2	27	1.0
S.STATES - RT4370N	53.9	-	-	29	1.3
S.STATES - RT4440N	53.7	62.3	58.0	29	1.0
S.STATES - RT4470N	53.4	-	-	26	1.0
USG - 74A27	52.3	-	-	25	1.0
FS HISOY - 432NRR	51.9	59.3	55.6	28	1.0
ASGROW - AG4103	51.6	58.4	55.0	26	1.2
S.STATES - RT4551N	51.5	56.3	53.9	32	1.0
SCHILLINGER - 447.RC	51.5	-	-	25	1.0
S.STATES - RT4151N	50.4	53.6	52.0	27	1.3
MEAN	53.4	59.8	56.6	29	1.1
LSD (0.20)	ns	5.9	-	3	0.2
CV (%)	10.0	9.3	-	-	-

Table 8. (Continued) Keedysville - Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			2007		
	2007	2006	2-Year	Height, Inches	Lodging Score*	
	MATURITY GROUP IV-S					
USG - 74D77	61.2	-	-	32	1.0	
S.STATES - RT4760N	58.5	65.4	62.0	31	1.3	
USG - 74A76	56.9	-	-	34	1.3	
USG - 7494nRR	56.5	60.8	58.7	33	1.0	
ASGROW - AG4604	56.4	-	-	29	1.2	
S.STATES - RT4808N	56.1	65.3	60.7	28	1.0	
EXPERIMENTAL - MD 02-651 RR	56.0	67.9	62.0	27	1.2	
SCHILLINGER - 467.RC	55.1	-	-	27	1.2	
S.STATES - RT4777N	54.4	66.9	60.7	30	1.2	
USG - 74T97	52.3	-	-	38	2.8	
FS HISOY - 476NRR	50.8	-	-	25	1.0	
S.STATES - RT4981N	50.0	57.5	53.8	34	1.0	
S.STATES - RT4996N	49.6	60.9	55.3	30	1.3	
	MEAN	54.9	61.6	58.3	31	1.3
	LSD (0.20)	4.8	5.1	-	3	0.3
	CV (%)	8.1	7.9	-	-	-

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

Table 9. Performance of Roundup Ready soybean varieties planted full season at Queenstown.

BRAND - ENTRY	Seed Yield, Bu/A			Maturity Date	2007	
	2007	2006	2-Year		Height, Inches	Lodging Score*
MATURITY GROUP III						
FS HISOY - 3855	60.2	59.4	59.8	9-26	22	1.0
S.STATES - RT3860	60.1	59.1	59.6	9-25	22	1.0
SEEDWAY - SG3775	58.2	-	-	9-26	19	1.0
S.STATES - RT3871N	54.0	-	-	9-26	21	1.0
ASGROW - AG3705	53.9	-	-	9-25	25	1.0
SEEDWAY - SG3660	50.3	-	-	9-24	18	1.0
ASGROW - AG3803	49.5	-	-	9-26	20	1.0
FS HISOY - 395NRR	48.3	58.4	53.4	9-24	18	1.0
S.STATES - RT3851N	47.4	54.6	51.0	9-27	23	1.3
S.STATES - RT3951N	45.0	52.5	48.8	9-25	23	1.3
USG - 73T77	44.7	-	-	9-26	22	1.2
S.STATES - RT3971N	43.0	-	-	9-26	20	1.0
USG - 73A67	42.7	-	-	9-26	23	1.5
USG - 7384nRS	38.5	56.7	47.6	9-26	20	1.2
MEAN	49.7	54.9	52.3	-	21	1.1
LSD (0.20)	ns	3.5	-	-	3	0.2
CV (%)	18.2	6.0	-	-	-	-
MATURITY GROUP IV						
S.STATES - RT4551N	68.3	56.6	62.5	10-04	31	1.2
S.STATES - RT4151N	66.3	57.6	62.0	10-01	29	1.5
S.STATES - RT4440N	65.3	56.8	61.1	10-04	29	1.3
FS HISOY - 432NRR	63.3	56.9	60.1	10-02	25	1.0
ASGROW - AG4404	62.1	61.9	62.0	10-06	27	1.0
S.STATES - RT4451N	61.5	58.4	60.0	10-01	32	1.2
USG - 7423nRS	61.1	57.9	59.5	10-04	23	1.2
USG - 74A27	60.2	-	-	10-05	23	1.0
SCHILLINGER - 427.RC	59.8	-	-	9-29	26	1.7
S.STATES - RT4470N	58.2	-	-	10-03	23	1.0
S.STATES - RT4370N	58.1	-	-	9-28	28	1.3
SCHILLINGER - 447.RC	56.0	-	-	10-04	25	1.2
ASGROW - AG4103	53.9	56.1	55.0	9-28	25	1.0
USG - 74A45	51.7	59.0	55.4	9-29	28	1.2
MEAN	60.4	55.4	57.9	-	27	1.2
LSD (0.20)	6.5	4.1	-	-	3	ns
CV (%)	10.1	7.0	-	-	-	-

Table 9. (Continued) Queenstown - Full Season, Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			2007			
	2007	2006	2-Year	Maturity Date	Height, Inches	Lodging Score*	
	MATURITY GROUP IV-S						
S.STATES - RT4996N	64.6	56.3	60.5	10-09	32	1.5	
USG - 74D77	63.4	-	-	10-06	30	1.0	
S.STATES - RT4981N	62.2	59.7	61.0	10-09	38	1.7	
S.STATES - RT4808N	62.0	60.7	61.4	10-07	31	1.5	
S.STATES - RT4760N	61.7	61.9	61.8	10-04	29	1.7	
USG - 74A76	60.4	-	-	10-06	27	1.7	
FS HISOY - 476NRR	60.2	-	-	10-07	26	1.2	
SCHILLINGER - 467.RC	58.6	-	-	10-05	23	1.2	
EXPERIMENTAL - MD 02-651 RR	58.2	55.0	56.6	10-04	23	1.3	
USG - 74T97	57.2	-	-	10-07	29	1.3	
S.STATES - RT4777N	56.4	57.9	57.2	10-07	31	1.2	
USG - 7494nRR	55.8	62.0	58.9	10-06	27	1.2	
ASGROW - AG4604	55.1	-	-	9-30	29	1.2	
	MEAN	59.7	58.8	59.3	-	29	1.3
	LSD (0.20)	ns	3.5	-	-	3	ns
	CV (%)	9.8	5.5	-	-	-	-
MATURITY GROUP V							
S.STATES - RT5160N	61.0	60.7	60.9	10-13	35	2.7	
USG - 75J32	58.6	57.7	58.2	10-12	33	2.5	
USG - 7515nRS	58.5	56.0	57.3	10-07	29	2.7	
EXPERIMENTAL - MD 01-206 RR	58.0	59.7	58.9	10-12	31	2.2	
EXPERIMENTAL - MD 04-40 RR	55.9	-	-	10-14	33	1.5	
USG - ALLEN	52.2	55.4	53.8	10-21	36	2.8	
	MEAN	57.4	56.7	57.1	-	33	2.4
	LSD (0.20)	ns	ns	-	-	2	0.3
	CV (%)	8.8	6.3	-	-	-	-

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

Table 10. Performance of Roundup Ready soybean varieties double cropped at Queenstown.

BRAND - ENTRY	2007					
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*
	2007	2006	2-Year			
MATURITY GROUP III						
SEEDWAY - SG3775	25.3	-	-	10-17	17	1.0
FS HISOY - 3855	24.0	37.8	30.9	10-16	15	1.0
ASGROW - AG3803	24.0	-	-	10-12	19	1.0
ASGROW - AG3705	22.4	-	-	10-11	19	1.2
S.STATES - RT3851N	22.3	37.9	30.1	10-17	19	1.0
USG - 73A67	22.0	-	-	10-11	22	1.0
SEEDWAY - SG3660	22.0	-	-	10-18	18	1.0
FS HISOY - 395NRR	21.5	32.6	27.1	10-15	18	1.0
USG - 73T77	20.9	-	-	10-13	17	1.0
S.STATES - RT3951N	20.4	33.5	27.0	10-17	19	1.0
S.STATES - RT3860	19.8	34.2	27.0	10-17	16	1.0
S.STATES - RT3871N	19.4	-	-	10-17	17	1.0
USG - 7384nRS	18.9	29.7	24.3	10-16	16	1.0
S.STATES - RT3971N	17.1	-	-	10-16	16	1.0
MEAN	21.4	35.9	28.7	-	18	1.0
LSD (0.20)	2.3	4.0	-	-	2	ns
CV (%)	9.8	10.4	-	-	-	-
MATURITY GROUP IV						
FS HISOY - 432NRR	28.7	42.0	35.4	10-22	19	1.0
S.STATES - RT4151N	28.0	39.6	33.8	10-19	18	1.0
ASGROW - AG4103	25.9	34.8	30.4	10-18	18	1.0
ASGROW - AG4404	25.2	36.2	30.7	10-22	21	1.0
USG - 74A45	25.2	36.4	30.8	10-19	21	1.0
SCHILLINGER - 447.RC	24.9	-	-	10-22	20	1.0
SCHILLINGER - 427.RC	24.7	-	-	10-17	15	1.0
S.STATES - RT4440N	24.3	41.7	33.0	10-19	20	1.0
S.STATES - RT4551N	24.2	38.9	31.6	10-21	17	1.0
S.STATES - RT4470N	24.1	-	-	10-22	17	1.0
USG - 74A27	23.2	-	-	10-22	16	1.0
S.STATES - RT4451N	22.1	34.8	28.5	10-21	20	1.0
USG - 7423nRS	21.0	37.5	29.3	10-19	16	1.0
S.STATES - RT4370N	20.0	-	-	10-21	19	1.0
MEAN	24.4	37.3	30.9	-	18	1.0
LSD (0.20)	ns	3.9	-	-	2	ns
CV (%)	15.7	9.8	-	-	-	-

Table 10. (Continued) Queenstown - Double Cropped, Roundup Ready Soybean Varieties

BRAND – ENTRY	2007						
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*	
	2007	2006	2-Year				
MATURITY GROUP IV-S							
S.STATES - RT4760N	31.0	43.1	37.1	10-24	18	1.0	
S.STATES - RT4981N	30.6	42.2	36.4	10-24	21	1.2	
ASGROW - AG4604	29.9	-	-	10-24	21	1.0	
USG - 74D77	28.7	-	-	10-24	22	1.0	
S.STATES - RT4996N	28.1	34.8	31.5	10-24	20	1.0	
USG - 74A76	28.0	-	-	10-24	23	1.2	
SCHILLINGER - 467.RC	27.9	-	-	10-31	18	1.0	
FS HISOY - 476NRR	27.7	-	-	10-24	18	1.0	
USG - 74T97	27.3	-	-	10-24	18	1.0	
S.STATES - RT4777N	25.8	40.4	33.1	10-26	20	1.0	
USG - 7494nRR	25.7	36.6	31.2	10-24	20	1.0	
S.STATES - RT4808N	24.7	40.2	32.5	10-24	20	1.0	
EXPERIMENTAL - MD 02-651 RR	20.5	39.5	30.0	10-19	17	1.0	
	MEAN	27.4	37.9	32.7	-	20	1.0
	LSD (0.20)	3.4	3.0	-	-	2	ns
	CV (%)	11.4	7.4	-	-	-	-
MATURITY GROUP V							
EXPERIMENTAL - MD 04-40 RR	33.5	-	-	11-02	17	1.0	
USG - 7515nRS	31.6	32.8	32.2	10-31	21	1.0	
S.STATES - RT5160N	30.6	32.0	31.3	10-31	19	1.0	
USG - 75J32	30.4	34.8	32.6	10-28	20	1.0	
USG - ALLEN	29.3	28.4	28.9	11-03	19	1.0	
EXPERIMENTAL - MD 01-206 RR	25.8	33.7	29.8	10-28	15	1.0	
	MEAN	30.2	31.1	30.7	-	18	1.0
	LSD (0.20)	ns	2.4	-	-	2	ns
	CV (%)	17.0	7.2	-	-	-	-

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

Table 11. Performance of Roundup Ready soybean varieties planted full season at Quantico.

BRAND - ENTRY	Seed Yield, Bu/A			Maturity Date	2007	
	2007	2006	2-Year		Height, Inches	Lodging Score*
	MATURITY GROUP III					
S.STATES - RT3851N	47.5	39.8	43.7	9-21	29	1.2
USG - 7384nRS	47.5	48.7	48.1	9-18	25	1.0
ASGROW - AG3803	47.5	-	-	9-22	27	1.7
FS HISOY - 3855	47.3	51.1	49.2	9-22	26	1.2
FS HISOY - 395NRR	47.0	49.3	48.2	9-22	25	1.2
ASGROW - AG3705	45.7	-	-	9-22	31	1.3
USG - 73T77	45.6	-	-	9-21	29	1.3
SEEDWAY - SG3660	45.5	-	-	9-21	25	1.2
USG - 73A67	45.4	-	-	9-23	26	1.3
S.STATES - RT3971N	44.6	-	-	9-24	26	1.5
S.STATES - RT3951N	44.6	48.9	46.8	9-22	30	1.3
S.STATES - RT3871N	44.2	-	-	9-26	28	1.7
S.STATES - RT3860	42.7	52.3	47.5	9-22	24	1.7
SEEDWAY - SG3775	41.4	-	-	9-21	26	1.0
MEAN	45.5	50.1	47.8	-	27	1.3
LSD (0.20)	2.2	6.1	-	-	2	0.3
CV (%)	4.6	11.4	-	-	-	-
MATURITY GROUP IV						
S.STATES - RT4370N	42.9	-	-	9-25	28	1.5
S.STATES - RT4551N	42.9	55.1	49.0	9-26	35	1.3
USG - 74A27	42.3	-	-	9-27	28	1.2
S.STATES - RT4151N	41.1	57.2	49.2	9-24	30	1.3
ASGROW - AG4103	40.7	55.5	48.1	9-23	27	1.0
SCHILLINGER - 447.RC	40.2	-	-	9-28	27	1.3
S.STATES - RT4470N	38.8	-	-	9-26	29	1.3
S.STATES - RT4451N	38.2	56.2	47.2	9-25	31	1.5
USG - 74A45	38.2	55.8	47.0	9-25	35	1.3
S.STATES - RT4440N	37.9	56.3	47.1	9-23	31	1.5
USG - 7423nRS	37.8	53.2	45.5	9-25	27	1.2
FS HISOY - 432NRR	37.6	56.5	47.1	9-24	28	1.2
SCHILLINGER - 427.RC	37.5	-	-	9-24	26	1.0
ASGROW - AG4404	37.5	58.9	48.2	9-26	27	1.3
MEAN	39.5	55.5	47.5	-	29	1.3
LSD (0.20)	3.2	3.8	-	-	3	ns
CV (%)	7.6	6.4	-	-	-	-

Table 11. (Continued) Quantico - Full Season, Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A			Maturity Date	2007		
	2007	2006	2-Year		Height, Inches	Lodging Score*	
MATURITY GROUP IV-S							
USG - 74A76	35.3	-	-	9-28	31	1.0	
S.STATES – RT4760N	34.6	63.4	49.0	9-27	31	1.2	
S.STATES – RT4777N	34.2	64.7	49.5	10-05	33	1.2	
EXPERIMENTAL - MD 02-651 RR	33.5	47.0	40.3	9-24	31	1.0	
ASGROW – AG4604	33.1	-	-	9-26	33	1.3	
S.STATES – RT4996N	31.9	68.4	50.2	10-05	34	1.2	
USG - 7494nRR	31.6	56.0	43.8	10-02	34	1.2	
USG - 74D77	31.5	-	-	10-03	34	1.0	
S.STATES – RT4808N	31.3	63.7	47.5	9-28	34	1.0	
FS HISOY – 476NRR	30.4	-	-	10-05	28	1.0	
S.STATES – RT4981N	29.6	68.2	48.9	10-04	34	1.0	
SCHILLINGER - 467.RC	29.1	-	-	9-28	28	1.2	
USG - 74T97	26.2	-	-	10-05	33	1.2	
	MEAN	31.7	60.1	45.9	-	32	1.1
	LSD (0.20)	3.5	6.0	-	-	2	ns
	CV (%)	10.2	9.4	-	-	-	-
MATURITY GROUP V							
USG - 75J32	32.4	60.2	46.3	10-09	35	1.8	
S.STATES – RT5160N	31.4	60.1	45.8	10-11	35	2.0	
USG - ALLEN	30.2	69.8	50.0	10-18	37	1.7	
EXPERIMENTAL - MD 01-206 RR	28.1	61.7	44.9	10-12	33	1.7	
USG - 7515nRS	27.7	67.1	47.4	10-05	31	2.0	
EXPERIMENTAL - MD 04-40 RR	27.5	-	-	10-12	34	1.5	
	MEAN	29.5	64.8	47.2	-	34	1.8
	LSD (0.20)	2.8	5.4	-	-	3	0.2
	CV (%)	8.5	7.6	-	-	-	-

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

Table 12. Performance of Roundup Ready soybean varieties double cropped at Quantico.

BRAND - ENTRY	2007					
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*
	2007	2006	2-Year			
MATURITY GROUP III						
USG - 7384nRS	50.3	60.0	55.2	10-06	26	1.2
ASGROW - AG3803	48.9	-	-	10-06	29	1.7
SEEDWAY - SG3775	48.4	-	-	10-04	26	1.0
USG - 73T77	47.0	-	-	10-06	24	1.0
FS HISOY - 3855	46.2	61.9	54.1	10-06	26	1.0
USG - 73A67	45.9	-	-	10-06	28	1.0
S.STATES - RT3971N	45.6	-	-	10-06	28	1.2
ASGROW - AG3705	45.5	-	-	10-07	26	1.2
S.STATES - RT3871N	45.3	-	-	10-06	27	1.0
FS HISOY - 395NRR	42.8	60.8	51.8	10-04	26	1.0
SEEDWAY - SG3660	41.6	-	-	10-03	26	1.2
S.STATES - RT3951N	41.2	60.3	50.8	10-06	30	1.5
S.STATES - RT3860	39.3	65.3	52.3	10-06	24	1.0
S.STATES - RT3851N	39.1	52.5	45.8	10-05	27	1.3
MEAN	44.8	58.3	51.6	-	27	1.2
LSD (0.20)	4.6	3.8	-	-	2	0.2
CV (%)	9.7	6.2	-	-	-	-
MATURITY GROUP IV						
USG - 74A45	57.3	53.4	55.4	10-13	33	1.8
USG - 74A27	54.8	-	-	10-12	29	1.2
S.STATES - RT4470N	51.6	-	-	10-13	27	1.2
ASGROW - AG4103	51.4	52.5	52.0	10-08	31	1.7
USG - 7423nRS	51.1	56.7	53.9	10-12	28	1.0
S.STATES - RT4370N	50.6	-	-	10-10	33	1.7
S.STATES - RT4440N	50.0	56.0	53.0	10-10	30	1.2
S.STATES - RT4451N	49.8	59.2	54.5	10-12	31	1.3
FS HISOY - 432NRR	48.7	58.5	53.6	10-10	29	1.2
S.STATES - RT4151N	48.3	62.7	55.5	10-08	30	1.3
SCHILLINGER - 447.RC	47.5	-	-	10-13	31	1.0
ASGROW - AG4404	46.9	58.5	52.7	10-13	32	1.8
S.STATES - RT4551N	46.1	59.3	52.7	10-07	33	1.2
SCHILLINGER - 427.RC	45.0	-	-	10-07	28	1.3
MEAN	49.9	57.0	53.5	-	30	1.3
LSD (0.20)	4.7	2.9	-	-	2	0.3
CV (%)	8.8	4.9	-	-	-	-

Table 12. (Continued) Quantico - Double Cropped, Roundup Ready Soybean Varieties

BRAND - ENTRY	2007						
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*	
	2007	2006	2-Year				
MATURITY GROUP IV-S							
USG - 74A76	48.4	-	-	10-10	35	2.5	
USG - 74D77	45.7	-	-	10-13	33	1.8	
SCHILLINGER - 467.RC	43.2	-	-	10-13	30	1.5	
S.STATES - RT4808N	43.2	65.6	54.4	10-13	34	1.5	
FS HISOY - 476NRR	43.1	-	-	10-12	28	1.2	
S.STATES - RT4996N	41.8	59.3	50.6	10-13	36	2.0	
ASGROW - AG4604	41.6	-	-	10-13	33	1.8	
S.STATES - RT4981N	40.8	55.2	48.0	10-14	37	1.7	
EXPERIMENTAL - MD 02-651 RR	40.7	57.5	49.1	10-10	32	1.3	
S.STATES - RT4760N	40.0	62.0	51.0	10-09	33	2.5	
S.STATES - RT4777N	39.9	61.6	50.8	10-11	33	1.8	
USG - 7494nRR	39.6	58.9	49.3	10-12	33	1.8	
USG - 74T97	38.6	-	-	10-19	33	2.0	
	MEAN	42.1	58.9	50.5	-	33	1.8
	LSD (0.20)	ns	3.9	-	-	2	0.5
	CV (%)	9.4	6.2	-	-	-	-
MATURITY GROUP V							
USG - 7515nRS	55.6	60.2	57.9	10-18	35	2.5	
USG - ALLEN	54.9	56.1	55.5	11-02	43	3.5	
USG - 75J32	50.4	50.4	50.4	10-29	40	2.7	
S.STATES - RT5160N	47.2	54.9	51.1	10-30	42	2.3	
EXPERIMENTAL - MD 04-40 RR	47.1	-	-	10-31	39	1.7	
EXPERIMENTAL - MD 01-206 RR	46.1	54.5	50.3	10-20	34	2.0	
	MEAN	50.2	55.2	52.7	-	39	2.4
	LSD (0.20)	5.0	4.1	-	-	3	0.3
	CV (%)	9.0	6.8	-	-	-	-

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

Table 13. Relative yields of Roundup Ready soybean varieties compared to the mean of all varieties in that maturity group at each location in 2007.

BRAND - ENTRY	Keedys-	Queenstown		Quantic	
	ville	FS	DC	FS	DC
MATURITY GROUP III					
	Relative Yield, % of Mean				
ASGROW - AG3705	93	108	105	100*	102*
ASGROW - AG3803	109*	100	112*	104*	109*
FS HISOY - 3855	95	121*	112*	104*	103*
FS HISOY - 395NRR	106*	97	101	103*	96
SEEDWAY - SG3660	84	101	103	100*	93
SEEDWAY - SG3775	87	117	118*	91	108*
S.STATES - RT3851N	89	95	104	105*	87
S.STATES - RT3860	102*	121	92	94	88
S.STATES - RT3871N	98	109	90	97	101
S.STATES - RT3951N	103*	91	95	98	92
S.STATES - RT3971N	112*	87	80	98	102*
USG - 73A67	113*	86	103	100*	102*
USG - 73T77	113*	90	98	100*	105*
USG - 7384nRS	94	77	89	104*	112*
Location/Group Mean Yield	57.0	49.7ns	21.4	45.5	44.8
MATURITY GROUP IV					
ASGROW - AG4103	97	89	106	103*	103
ASGROW - AG4404	106*	103*	103	95	94
FS HISOY - 432NRR	97	105*	117*	95	98
SCHILLINGER - 427.RC	104	99	101	95	90
SCHILLINGER - 447.RC	96	93	102	102*	95
S.STATES - RT4151N	94	110*	115	104*	97
S.STATES - RT4370N	101	96	82	109*	101
S.STATES - RT4440N	101	108*	100	96	100
S.STATES - RT4451N	105	102	90	97	100
S.STATES - RT4470N	100	96	99	98	103
S.STATES - RT4551N	96	113*	99	109*	92
USG - 74A27	98	100	95	107*	110*
USG - 74A45	104	86	103	97	115*
USG - 7423nRS	101	101	86	96	102
Location/Group Mean Yield	53.4ns	60.4	24.4ns	39.5	49.9

Table 13. (Continued) Relative Yields, Roundup Ready Soybean Varieties

BRAND - ENTRY	Keedys-	Queenstown		Quantico	
	ville	FS	DC	FS	DC
MATURITY GROUP IV-S					
ASGROW - AG4604	103*	92	109*	105*	99
FS HISOY - 476NRR	93	101	101*	96	102
SCHILLINGER - 467.RC	100	98	102*	92	103
S.STATES - RT4760N	106*	103	113*	109*	95
S.STATES - RT4777N	99	94	94	108*	95
S.STATES - RT4808N	102	104	90	99	103
S.STATES - RT4981N	91	104	112*	93	97
S.STATES - RT4996N	90	108*	102*	101*	99
USG - 74A76	104*	101	102*	111*	115*
USG - 74D77	112*	106	105*	99	109
USG - 7494nRR	103*	93	94	100	94
USG - 74T97	95	96	100	83	92
EXPERIMENTAL - MD 02-651 RR	102	97	75	106*	97
Location/Group Mean Yield	54.9	59.7ns	27.4	31.7	42.1ns
MATURITY GROUP V					
S.STATES - RT5160N	-	106*	101	106*	94
USG - ALLEN	-	91	97	102*	109*
USG - 75J32	-	102	101	110*	100
USG - 7515nRS	-	102	105	94	111*
EXPERIMENTAL - MD 01-206 RR	-	101	85	95	92
EXPERIMENTAL - MD 04-40 RR	-	97	111*	93	94
Location/Group Mean Yield	-	57.4ns	30.2ns	29.5	50.2

FS=Full Season, DC=Double Crop, ns=no significant differences among entries in this group

*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.