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Agronomy Facts No. 32
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2009 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 3, 4, and 5 are included in the tests because they are best adapted for production in Maryland. Late maturing varieties in Maturity Group 4 were evaluated separately from the other varieties in Maturity Group 4 and are listed as "4S" in the data tables. Entries in the 2009 test included Roundup Ready, Liberty Link, and standard varieties of public and private brands. In addition, promising new varieties and advanced breeding lines are tested to compare their performance to that of previously released varieties. Experimental lines and releases from Illinois (LD 00-3309 and LD 00-2817P), Ohio (Dennison, Kottman, OHS 305, Prohio), Maryland (MD 99-6226, MD 00-5326, MD 00-6015, MD 01-5866, MD 03-5453, MD 03-5527, MD 03-6420, MD 04-5060, MD 04-5217, MD 04-5545, MD 04-5550, MD 04-6101, MD 05-5276, MD 05-5355, MD 05-5468, MD 05-5585, MD 05-5633, MD 0506WN 16, MD 0506WN 99, MD 06-21RR, MD 06-98RR, MD 06-5356, MD 06-5401, MD 06-5415, MD 06-5613, MD 06-5617, MD 06-5693, MD 06-5700, MD 06-6182, MD 0607WN 21, MD 0607WN 32, MD 0607WN 37, MD 0607WN 38, MD 0607WN 51, MD 0708WN 50, MD 0708WN 214), Missouri (MPV 4238N) and Virginia (V 02-8659) were included in the 2009 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 2009 growing season was generally wet and cool. Planting was delayed at each location because of wet soil conditions. Only the Roundup Ready full-season test at Quantico and the non-Roundup Ready full-season test at Queenstown were planted by June 2. Planting of the remaining "full-season" tests was delayed until after June 15, which would be more representative of double-crop planting dates than the target for full-season plantings. Reduced rainfall was noted at Clarksville and Keedysville during the critical seed-fill period from July through September. Monthly rainfall amounts for May through October for the test locations are shown in Table 3.

Results of the 2009 tests are reported in Tables 4-7 for the non-Roundup Ready varieties and in Tables 9-14 for the Roundup Ready varieties. In each of these tables, varieties within maturity groups are listed in order of yield, highest to lowest. This year one Roundup Ready variety which had previously performed good in Maryland was included in the non-Roundup Ready variety tests for relative yield comparisons. The highest overall

test location mean yields were at Queenstown for the non-Roundup Ready varieties and Quantico 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 8 and 15 summarize the relative yields of the non-Roundup Ready 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 8 and 15, 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 non-Roundup Ready and Roundup Ready varieties previously entered in the 2008 tests are shown in the data tables. The 2008 location average yield for each maturity group and the 2008 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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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/ .

LIST OF TABLES

Table 1. Suppliers of private entries tested in 2009.

COMPANY	BRAND	HERBICIDE REACTION	ENTRY
Crop Production Services	DynaGro	Roundup Ready	37P37, V39N9RR, 32X39, 33A40,
East Aurora, NY 14052		"	35X43, 32P48, V47N8RR, 33G48
Growmark FS, LLC	HiSoy	Roundup Ready	HSX38, HS39R70, HS42T80,
Milford, DE 19963		"	HS47R90, HS476
Mid Atlantic Seeds, Inc.	Mid Atlantic	Roundup Ready+	MA3299RR/STS,MA4077RR/STS,
York, PA 17402		"	MA4399NRR/STS
		Roundup Ready	MA3488RR, MA3566RRII,
		"	MA3599RR, MA3781NRR,
		"	MA3788RR, MA3877RR,
		"	MA3955RR, MA4100RRII,
		"	MA4666NRR, MA4999RR,
		"	MA5200RR
Monsanto Company	Asgrow	Roundup Ready	AG3803, RY3709, RY3919,
St. Louis, MO 63167		"	AG4005, AG4303, AG4605
Southern States	S. States	Roundup Ready	3820NR2, RT3871N, RT3971N, RT4370N,
Cooperative, Inc.		"	RT4451N, RT4470N, RT4777N,
Richmond, VA 23260		"	RT4808N, RT4996N
		Liberty Link	LL389N, LL410N, LL430N, LL450N,
		"	LL499N, LL511N
T.A. Seeds	TA Seeds	Roundup Ready	TS3989RS, TS4299RS, TS4319R2,
Avis, PA 17721		"	TS4499R
Unisouth Genetics, Inc.	USG	Roundup Ready	USG73F59, USG73H77, 7384nRS,
Nashville, TN 37211		"	USG74A27, USG74A39, USG74A45,
		"	USG74B58, USG74A69, USG74A79,
		"	USG74A88, USG74E88
		None	5002T, 5601T, USG74G99

Table 2. The 2009 soybean variety test plot information.

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

Tests:	Roundup Ready Varieties Maturity Groups 3, 4, 4S
Planting Date:	June 14
Row Spacing:	24 inches
Soil Type:	Hagerstown silt loam
Soil Test:	pH 6.4, P Level- 38 M, K Level- 146 G
Previous Crop:	Corn
Fertilizer:	None
Lime:	None
Herbicide:	Preemerge:1 Qt/A Credit Extra (June 16) Post: 22 Oz/A Roundup Power Max (July 1)
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:	Non-Roundup Ready Varieties Maturity Group 3, 4, 4S
Planting Date:	June 16
Row Spacing:	24 inches
Soil Type:	Delanco silt loam
Soil Test:	pH 6.8, P 66, K 198
Previous Crop:	Corn
Fertilizer:	36 Lb/A P and 72 Lb/A K
Lime:	None
Herbicide:	6 Oz/A Canopy XL, 16 Oz/A Outlook (June 17)
Plots:	4 rows, 20 feet long
Seeding Rate:	6.5 seeds/foot
Tillage:	Conventional

Tests:	Roundup Ready Varieties Maturity Groups 3, 4, 4S
Planting Date:	June 16
Row Spacing:	24 inches
Soil Type:	Delanco silt loam
Soil Test:	pH 6.8, P 66, K 198
Previous Crop:	Corn
Fertilizer:	36 Lb/A P and 72 Lb/A K
Lime:	None
Herbicide:	22 Oz/A Roundup Power Max (July 14)
Plots:	4 rows, 20 feet long
Seeding Rate:	6.5 seeds/foot
Tillage:	Conventional

Table 2. (Continued) Plot Information

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

Tests:	Full Season Non-RR Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	June 2
Row Spacing:	24 inches
Soil Type:	Matapeake silt loam
Soil Test:	pH 6.1, P Index- 43, K Index- 87
Previous Crop:	Corn
Fertilizer:	2.8 tons/A poultry manure; Total nutrients in 2009= 88-100-116 Lbs/A N-P-K
Lime:	None
Herbicide:	Preemerge:1Qt/A Strikeout Xtra,1 Pt/A Compadre, 1.75 Pt/A Dual Magnum Post:1.5 Pt/A Basagran, 1.5 Pt/A Blazer, 1Gal/A 30% N solution, surfactant, 8 Oz/A Fusion and crop oil
Plots:	4 rows, 20 feet long
Seeding Rate:	6.5 seeds/foot except Maturity Group 5 entries= 6 seeds/foot
Tillage:	Conventional

Tests:	Full Season Roundup Ready Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	June 24
Row Spacing:	24 inches
Soil Type:	Matapeake silt loam
Soil Test:	pH 6.8, P Index- 51, K Index- 85
Previous Crop:	Corn
Fertilizer:	None added
Lime:	Yes
Herbicide:	Post:1.5 Qt/A Alecto on July 28
Plots:	4 rows, 20 feet long
Seeding Rate:	6.5 seeds/foot except Maturity Group 5 entries= 6 seeds/foot
Tillage:	Conventional

Tests:	Double Crop Roundup Ready Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	June 30
Row Spacing:	7.5 inches
Soil Type:	Matapeake silt loam
Soil Test:	pH 6.4, P Index- 133, K Index- 70
Previous Crop:	Wheat
Fertilizer:	None on soybeans
Lime:	None
Herbicide:	1.5 Qt/A Alecto on July 17
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 Non-RR Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	June 25
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:	10-30-70 N-P-K
Lime:	None
Herbicide:	Preemerge: 1.5Pt/A Dual 8E, 12 Oz/A Lorox DF, 3 Oz/A Canopy XL Post: 1.5 Pt/A Storm, 0.5 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 5 entries= 6 seeds/foot
Tillage:	Conventional

Tests:	Full Season Roundup Ready Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	May 20
Row Spacing:	20 inches
Soil Type:	Mattapex silt loam
Soil Test:	pH 6.3, 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 Non-RR Varieties Maturity Groups 3, 4, 4S and 5
Planting Date:	July 1
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:	Preemerge: 1.5 Pt/A Roundup Ultra Max,1.6 Pt/A Dual,5 Oz/A Canopy,8 Oz/A 2,4-DB Post: 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 3, 4, 4S and 5
Planting Date:	July 1
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:	Preemerge: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	5.03	4.17	6.22	2.76	1.81	3.61	23.60
Clarksville	7.28	5.26	0.78	4.97	4.16	6.46	28.91
Queenstown	4.29	5.94	2.93	5.90	3.74	5.87	28.67
Quantico	3.87	3.77	3.52	8.29	3.74	5.39	28.58

Table 4. Performance of non-Roundup Ready soybean varieties planted at Clarksville.

BRAND - ENTRY	Seed Yield, Bu/A 2009	2008	2-Year	2009 Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP 3						
Experimental - V02-8659	55.7	60.2	58.0	10-19	32	1.0
Public - Macon	55.5	56.1	55.8	10-11	26	1.0
S.States - LL389N	54.2	-	-	10-13	25	1.0
Experimental - MD 05-5633	53.3	57.6	55.5	10-13	25	1.0
Ohio - OHS 305	52.9	-	-	10-11	21	1.0
Experimental - MD 03-5453	51.5	37.3	44.4	10-11	24	1.0
Public - Kottman	50.6	-	-	10-08	21	1.0
Asgrow - AG3803 RR Check	49.1	-	-	10-13	23	1.0
Experimental - MD 05-5585	48.1	-	-	10-10	29	1.0
Public - IA 3024	47.9	57.9	52.9	10-09	22	1.0
Public - Dennison	46.2	-	-	10-08	23	1.0
Public - IA 3023	41.5	55.9	48.7	10-09	19	1.0
Mean	**50.5**	**52.6**	**51.6**	**-**	**24**	**1.0**
LSD 0.20	**3.4**	**5.6**	**-**	**-**	**2**	**ns**
CV, %	**6.2**	**9.8**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
Asgrow - AG4303 RR Check	60.5	-	-	10-22	25	1.0
S.States - LL430N	60.0	-	-	10-22	27	1.0
Public - Monocacy	58.8	47.6	53.2	10-20	27	1.0
Public - Prohio	58.0	-	-	10-13	26	1.0
S.States - LL450N	57.5	-	-	10-23	31	1.0
Experimental - MD 04-5217	57.3	44.2	50.8	10-13	29	1.0
Experimental - MD 06-5700	57.1	36.6	46.9	10-17	30	1.0
Experimental - MD 06-5401	57.0	-	-	10-17	31	1.0
Experimental - MD 04-5060	56.1	41.8	48.9	10-11	25	1.0
Missouri - MPV 4238N	55.7	-	-	10-20	29	1.0
Experimental - MD 05-5355	55.7	36.1	45.9	10-24	29	1.0
Experimental - MD 04-5545	54.4	41.9	48.1	10-22	30	1.0
Experimental - MD 0607WN 32	54.0	-	-	10-19	25	1.0
S.States - LL410N	53.0	-	-	10-19	26	1.0
Experimental - MD 06-5613	51.8	39.4	45.6	10-23	33	1.0
Experimental - MD 06-5693	51.6	41.1	46.3	10-19	28	1.0
Public (IL) - LD00-2817P	51.0	-	-	10-18	22	1.0
Experimental - MD 04-5550	50.8	40.9	45.9	10-13	29	1.0
Experimental - MD 0607WN 37	50.3	36.7	43.5	10-21	31	1.0
Public (IL) - LD00-3309	48.0	42.5	45.2	10-13	19	1.0
Mean	**54.9**	**39.8**	**47.4**	**-**	**28**	**1.0**
LSD 0.20	**4.2**	**6.6**	**-**	**-**	**2**	**ns**
CV, %	**7.3**	**15.6**	**-**	**-**	**-**	**-**

Table 4. (Continued) Clarksville - Non-Roundup Ready Soybean Varieties

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 4S						
Experimental - MD 00-5326	61.2	48.5	54.9	10-25	32	1.0
Public - MD 4900	59.4	54.9	57.1	10-28	23	1.3
Experimental - MD 00-6015	53.9	49.5	51.7	10-26	23	1.0
USG - 74G99	53.9	-	-	10-30	28	1.0
Experimental - MD 05-5276	53.7	-	-	10-21	37	1.7
S.States - LL511N	53.3	-	-	10-29	24	1.7
S.States - LL499N	53.2	-	-	10-30	30	1.3
Experimental - MD 01-5866	53.0	47.7	50.4	10-27	26	1.0
Experimental - MD 06-5356	52.1	-	-	10-28	33	1.0
Experimental - MD 04-6101	51.0	38.1	44.5	10-25	27	1.0
Public - KS 4602N	49.8	46.3	48.0	10-19	24	1.0
Experimental - MD 0607WN 21	49.4	-	-	10-27	35	2.7
Experimental - MD 06-5617	48.4	-	-	10-23	27	1.0
Experimental - MD 0506WN 99	47.6	44.2	45.9	10-28	33	2.3
USG - 74A88 RR Check	47.5	-	-	10-25	26	1.0
Public - Manokin	47.3	44.5	45.9	10-27	28	2.7
Experimental - MD 03-6420	47.1	48.1	47.6	10-27	31	1.0
Experimental - MD 0708WN 50	47.0	-	-	10-28	30	1.3
Experimental - MD 03-5527	44.7	44.6	44.7	10-12	25	1.0
Experimental - MD 0708WN 214	44.1	-	-	10-23	27	1.0
Experimental - MD 0506WN 16	42.5	-	-	10-25	27	1.3
Mean	**50.5**	**43.1**	**46.8**	**-**	**28**	**1.3**
LSD 0.20	**5.8**	**4.3**	**-**	**-**	**4**	**0.6**
CV, %	**10.7**	**9.3**	**-**	**-**	**-**	**-**

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

Table 5. Performance of non-Roundup Ready soybean varieties planted at Queenstown.

BRAND - ENTRY	Seed Yield, Bu/A 2009	2008	2-Year	2009 Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP 3						
S.States - LL389N	64.0	-	-	10-05	31	2.3
Experimental - V02-8659	63.4	42.5	53.0	10-07	35	2.2
Public - Macon	61.6	45.0	53.3	10-06	29	1.0
Asgrow - AG3803 RR Check	61.2	-	-	10-05	33	1.0
Ohio - OHS 305	61.1	-	-	10-05	30	2.7
Public - Kottman	60.3	-	-	10-03	28	1.7
Public - IA 3024	59.6	46.1	52.9	9-29	29	1.7
Public - IA 3023	56.0	45.2	50.6	9-29	26	2.3
Experimental - MD 05-5585	55.8	-	-	10-05	32	1.0
Experimental - MD 05-5633	55.6	45.3	50.5	10-05	30	1.7
Experimental - MD 03-5453	55.4	38.5	47.0	10-03	31	2.3
Public - Dennison	52.3	-	-	10-01	27	2.0
Mean	**58.9**	**42.7**	**50.8**	**-**	**30**	**1.8**
LSD 0.20	**4.8**	**3.1**	**-**	**-**	**2**	**0.6**
CV, %	**7.6**	**6.8**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
Asgrow - AG4303 RR Check	73.6	-	-	10-08	33	1.0
Public - Monocacy	67.0	51.0	59.0	10-08	35	1.7
Public (IL) - LD00-3309	66.4	51.5	58.9	10-08	31	2.0
Public (IL) - LD00-2817P	66.2	-	-	10-08	33	2.7
S.States - LL430N	64.7	-	-	10-08	37	1.7
Missouri - MPV 4238N	64.0	-	-	10-08	35	2.0
S.States - LL450N	63.9	-	-	10-08	40	2.3
Public - Prohio	61.1	-	-	10-05	31	2.3
S.States - LL410N	60.3	-	-	10-08	32	2.0
Experimental - MD 04-5217	60.1	43.6	51.9	10-08	36	2.7
Experimental - MD 06-5401	59.9	-	-	10-08	37	2.0
Experimental - MD 04-5060	59.3	49.0	54.1	10-03	30	2.3
Experimental - MD 04-5545	56.7	48.2	52.4	10-08	33	2.7
Experimental - MD 05-5355	54.8	48.8	51.8	10-08	39	2.3
Experimental - MD 0607WN 32	54.2	-	-	10-08	35	2.0
Experimental - MD 06-5693	51.5	50.3	50.9	10-08	35	2.7
Experimental - MD 06-5700	51.4	49.5	50.5	10-04	32	2.7
Experimental - MD 06-5613	50.3	41.8	46.1	10-08	39	3.0
Experimental - MD 04-5550	50.2	45.7	47.9	10-08	34	2.3
Experimental - MD 0607WN 37	44.2	45.3	44.7	10-08	37	3.0
Mean	**59.0**	**47.1**	**53.1**	**-**	**35**	**2.3**
LSD 0.20	**4.9**	**4.1**	**-**	**-**	**2**	**0.5**
CV, %	**7.8**	**8.1**	**-**	**-**	**-**	**-**

Table 5. (Continued) Queenstown - Non-Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A 2009	2008	2-Year	2009 Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP 4S						
USG - 74G99	68.0	-	-	10-22	40	1.5
Experimental - MD 00-5326	67.9	44.6	56.2	10-18	36	1.5
S.States - LL499N	62.3	-	-	10-20	39	1.5
S.States - LL511N	60.4	-	-	10-22	29	2.0
Experimental - MD 00-6015	59.4	37.7	48.5	10-17	24	1.0
Experimental - MD 05-5276	59.3	-	-	10-12	40	2.3
Public - MD 4900	58.7	41.1	49.9	10-17	24	1.0
Experimental - MD 01-5866	58.6	47.2	52.9	10-13	27	1.3
Experimental - MD 03-6420	56.5	30.7	43.6	10-21	37	2.5
Public - KS 4602N	56.2	39.1	47.7	10-10	33	1.7
Experimental - MD 06-5617	54.9	-	-	10-13	35	2.3
Public - Manokin	54.7	39.6	47.1	10-17	32	3.0
USG - 74A88 RR Check	53.9	-	-	10-12	34	2.0
Experimental - MD 06-5356	53.6	-	-	10-22	37	2.0
Experimental - MD 0506WN 16	53.2	-	-	10-15	36	2.0
Experimental - MD 0607WN 21	52.1	-	-	10-21	43	3.5
Experimental - MD 0708WN 214	50.7	-	-	10-16	42	2.3
Experimental - MD 03-5527	49.9	30.8	40.3	10-10	35	2.3
Experimental - MD 0506WN 99	49.3	33.4	41.3	10-22	34	2.0
Experimental - MD 04-6101	46.9	34.0	40.5	10-11	28	2.0
Experimental - MD 0708WN 50	43.6	-	-	10-20	45	3.0
Mean	**55.7**	**34.6**	**45.2**	**-**	**35**	**2.0**
LSD 0.20	**6.0**	**4.6**	**-**	**-**	**4**	**0.5**
CV, %	**10.1**	**12.4**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Mid Atlantic - MA5200RR Check	68.0	-	-	10-25	34	2.3
Experimental - MD 99-6226	64.8	34.6	49.7	10-21	31	2.3
Public - Hutcheson	60.5	32.5	46.5	10-21	37	2.3
Public - Glenn	59.2	-	-	10-23	35	3.3
Public - Essex	58.5	29.4	44.0	10-17	29	2.3
Public - Holladay	57.9	28.3	43.1	10-22	26	3.0
USG - 5002T	57.8	24.6	41.2	10-22	31	2.7
Experimental - MD 05-5468	55.0	-	-	10-23	36	2.7
USG - 5601T	55.0	29.4	42.2	10-25	35	2.7
Experimental - MD 0607WN 51	52.0	-	-	10-20	38	2.3
Experimental - MD 06-6182	49.0	29.6	39.3	10-23	37	2.3
Experimental - MD 06-5415	47.3	-	-	10-22	43	2.0
Experimental - MD 0607WN 38	46.4	-	-	10-21	34	2.7
Mean	**56.3**	**28.6**	**42.5**	-	**34**	**2.5**
LSD 0.20	**4.4**	**5.9**	-	-	**4**	**ns**
CV, %	**7.3**	**19.1**	-	-	-	-

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

Table 6. Performance of non-Roundup Ready soybean varieties planted full season at Quantico.

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3						
Asgrow - AG3803 RR Check	62.7	-	-	10-13	32	1.7
Ohio - OHS 305	59.1	-	-	10-09	26	2.7
Public - Kottman	58.9	-	-	10-07	25	2.0
Experimental - MD 05-5633	58.2	32.2	45.2	10-13	25	3.0
Public - IA 3024	58.0	31.5	44.8	10-07	25	2.3
S.States - LL389N	58.0	-	-	10-15	29	3.0
Public - Macon	57.3	34.4	45.9	10-09	26	2.3
Public - IA 3023	56.6	32.8	44.7	10-07	24	1.7
Public - Dennison	55.9	-	-	10-07	26	2.7
Experimental - MD 05-5585	52.6	-	-	10-07	29	2.0
Experimental - V02-8659	51.8	34.2	43.0	10-13	30	3.0
Experimental - MD 03-5453	51.7	32.0	41.8	10-09	25	2.3
Mean	**56.7**	**32.0**	**44.4**	**-**	**27**	**2.4**
LSD 0.20	**3.4**	**ns**	**-**	**-**	**2**	**0.5**
CV, %	**5.5**	**11.3**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
S.States - LL430N	64.0	-	-	10-23	33	2.0
Asgrow - AG4303 RR Check	62.9	-	-	10-15	29	1.0
Public (IL) - LD00-2817P	60.3	-	-	10-15	32	3.0
S.States - LL410N	58.9	-	-	10-13	31	1.3
Public - Monocacy	58.8	22.6	40.7	10-11	34	2.0
Public (IL) - LD00-3309	58.8	22.1	40.4	10-09	28	1.3
S.States - LL450N	57.0	-	-	10-15	35	1.7
Missouri - MPV 4238N	55.0	-	-	10-14	32	2.0
Public - Prohio	53.7	-	-	10-12	29	2.7
Experimental - MD 04-5545	53.6	21.2	37.4	10-15	31	2.3
Experimental - MD 04-5060	53.4	22.7	38.1	10-06	31	2.3
Experimental - MD 06-5693	53.1	21.7	37.4	10-14	32	2.3
Experimental - MD 06-5401	52.5	-	-	10-13	31	1.7
Experimental - MD 0607WN 32	51.6	-	-	10-16	31	2.7
Experimental - MD 04-5217	51.2	21.4	36.3	10-13	33	3.0
Experimental - MD 06-5700	50.1	25.3	37.7	10-10	32	3.0
Experimental - MD 05-5355	49.3	22.0	35.7	10-14	33	3.0
Experimental - MD 06-5613	46.7	24.6	35.6	10-21	35	2.3
Experimental - MD 04-5550	46.4	23.7	35.1	10-11	30	2.7
Experimental - MD 0607WN 37	43.3	23.3	33.3	10-24	34	3.3
Mean	**54.0**	**22.2**	**38.1**	**-**	**32**	**2.3**
LSD 0.20	**3.0**	**2.6**	**-**	**-**	**2**	**0.5**
CV, %	**5.2**	**11.0**	**-**	**-**	**-**	**-**

Table 6. (Continued) Quantico - Full Season, Non-Roundup Ready Soybean Varieties

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 4S						
Experimental - MD 00-5326	62.9	30.5	46.7	10-24	37	2.0
USG - 74G99	60.8	-	-	10-26	37	1.0
S.States - LL499N	59.8	-	-	10-25	36	1.0
Experimental - MD 00-6015	59.5	36.7	48.1	10-25	25	2.0
Public - MD 4900	59.4	35.1	47.3	10-25	26	2.7
S.States - LL511N	59.1	-	-	10-28	28	2.0
Experimental - MD 03-6420	57.2	30.2	43.7	10-24	35	3.0
Experimental - MD 01-5866	54.7	34.1	44.4	10-21	28	2.0
USG - 74A88 RR Check	54.6	-	-	10-19	35	1.3
Experimental - MD 05-5276	54.2	-	-	10-19	41	3.0
Public - KS 4602N	54.1	29.5	41.8	10-15	32	2.0
Experimental - MD 06-5356	53.9	-	-	10-22	37	1.3
Public - Manokin	51.0	31.5	41.3	10-23	31	4.0
Experimental - MD 06-5617	50.2	-	-	10-15	29	1.7
Experimental - MD 0708WN 214	49.9	-	-	10-22	29	2.3
Experimental - MD 0708WN 50	49.1	-	-	10-24	38	3.0
Experimental - MD 0506WN 16	49.0	-	-	10-20	36	2.0
Experimental - MD 04-6101	48.6	28.8	38.7	10-18	29	1.7
Experimental - MD 03-5527	47.9	27.9	37.9	10-13	32	2.3
Experimental - MD 0607WN 21	46.5	-	-	10-27	36	4.0
Experimental - MD 0506WN 99	45.4	26.7	36.1	10-27	33	4.0
Mean	**53.7**	**29.3**	**41.5**	**-**	**33**	**2.3**
LSD 0.20	**3.4**	**4.4**	**-**	**-**	**3**	**0.5**
CV, %	**6.0**	**14.1**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Mid Atlantic - MA5200RR Check	59.5	-	-	10-31	35	2.3
Public - Glenn	59.3	-	-	10-26	32	3.7
USG - 5601T	59.3	43.0	51.1	10-27	33	3.7
Experimental - MD 99-6226	56.2	45.8	51.0	10-26	31	2.3
Public - Essex	54.3	43.4	48.9	10-25	29	3.0
Public - Hutcheson	52.2	43.5	47.8	10-26	30	3.3
Public - Holladay	51.0	42.7	46.8	10-25	28	3.0
Experimental - MD 05-5468	49.6	-	-	10-27	32	3.0
Experimental - MD 0607WN 38	49.5	-	-	10-27	35	3.7
Experimental - MD 06-6182	47.2	33.1	40.1	10-27	35	4.0
Experimental - MD 0607WN 51	45.9	-	-	10-28	35	4.0
Experimental - MD 06-5415	44.5	-	-	10-26	39	3.7
USG - 5002T	44.0	42.2	43.1	10-28	30	4.0
Mean	**51.7**	**40.5**	**46.1**	**-**	**33**	**3.4**
LSD 0.20	**4.6**	**5.0**	**-**	**-**	**2**	**0.5**
CV, %	**8.3**	**11.4**	**-**	**-**	**-**	**-**

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

Table 7. Performance of non-Roundup Ready soybean varieties double cropped at Quantico.

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3						
Ohio - OHS 305	61.9	-	-	10-13	30	1.0
Public - Macon	60.8	37.5	49.2	10-13	32	1.0
Public - Dennison	60.0	-	-	10-11	31	1.7
Experimental - MD 05-5633	58.9	38.8	48.9	10-19	31	1.3
Experimental - MD 03-5453	56.4	35.0	45.7	10-13	32	1.0
Experimental - V02-8659	56.2	43.3	49.8	10-23	39	2.0
S.States - LL389N	56.0	-	-	10-18	34	1.0
Public - Kottman	55.2	-	-	10-10	29	1.3
Public - IA 3024	55.2	35.0	45.1	10-10	28	1.0
Public - IA 3023	54.8	34.8	44.8	10-12	29	1.3
Asgrow - AG3803 RR Check	54.1	-	-	10-16	37	1.7
Experimental - MD 05-5585	50.3	-	-	10-14	34	2.0
Mean	**56.6**	**37.3**	**47.0**	**-**	**32**	**1.4**
LSD 0.20	**ns**	**3.2**	**-**	**-**	**2**	**0.4**
CV, %	**9.0**	**7.8**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
Public - Monocacy	64.6	39.3	51.9	10-22	35	1.3
S.States - LL430N	62.4	-	-	10-22	37	1.3
Asgrow - AG4303 RR Check	60.6	-	-	10-23	34	1.3
Experimental - MD 06-5401	59.2	-	-	10-23	39	1.3
Experimental - MD 0607WN 32	58.6	-	-	10-23	37	1.7
Public - Prohio	56.9	-	-	10-21	32	2.0
S.States - LL450N	56.2	-	-	10-23	39	1.3
S.States - LL410N	55.6	-	-	10-19	34	1.3
Missouri - MPV 4238N	54.7	-	-	10-23	33	1.0
Public (IL) - LD00-3309	54.7	42.2	48.4	10-19	30	1.3
Experimental - MD 04-5545	52.4	40.3	46.3	10-23	34	1.3
Public (IL) - LD00-2817P	52.3	-	-	10-21	33	2.0
Experimental - MD 04-5060	51.7	42.2	46.9	10-13	30	1.0
Experimental - MD 06-5693	50.5	38.3	44.4	10-24	37	1.7
Experimental - MD 06-5613	50.2	34.4	42.3	10-24	41	1.7
Experimental - MD 06-5700	49.9	37.3	43.6	10-23	33	2.0
Experimental - MD 04-5217	47.8	38.8	43.3	10-17	33	2.3
Experimental - MD 05-5355	47.3	36.4	41.9	10-24	34	1.3
Experimental - MD 04-5550	42.4	40.7	41.6	10-15	33	2.0
Experimental - MD 0607WN 37	40.4	33.2	36.8	10-23	37	2.0
Mean	**53.4**	**37.2**	**45.3**	**-**	**35**	**1.6**
LSD 0.20	**5.7**	**4.5**	**-**	**-**	**2**	**0.5**
CV, %	**9.9**	**11.4**	**-**	**-**	**-**	**-**

Table 7. (Continued) Quantico - Double Crop, Non-Roundup Ready Soybean Varieties

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 4S						
S.States - LL499N	62.7	-	-	10-31	39	2.7
USG - 74G99	61.4	-	-	10-28	38	2.8
Experimental - MD 05-5276	60.0	-	-	10-26	45	3.5
Experimental - MD 00-5326	59.7	41.4	50.5	10-26	37	2.7
S.States - LL511N	59.7	-	-	10-31	35	3.5
Experimental - MD 03-6420	57.0	37.9	47.4	10-31	41	3.5
Experimental - MD 00-6015	56.9	45.1	51.0	10-31	33	3.7
Public - KS 4602N	56.0	40.6	48.3	10-23	37	2.8
Public - MD 4900	55.6	42.9	49.3	10-31	31	3.5
Experimental - MD 06-5356	54.7	-	-	10-26	40	2.8
Experimental - MD 06-5617	50.3	-	-	10-23	33	3.2
Experimental - MD 0506WN 16	50.1	-	-	10-25	35	3.5
USG - 74A88 RR Check	48.2	-	-	10-24	38	2.8
Experimental - MD 01-5866	47.4	45.4	46.4	10-26	35	3.5
Experimental - MD 0708WN 214	44.6	-	-	10-26	33	3.3
Experimental - MD 04-6101	43.0	38.6	40.8	10-26	34	2.8
Public - Manokin	41.9	42.0	41.9	10-27	36	4.0
Experimental - MD 03-5527	41.5	36.2	38.9	10-23	36	3.8
Experimental - MD 0708WN 50	37.9	-	-	10-25	39	3.5
Experimental - MD 0607WN 21	36.7	-	-	10-28	40	3.8
Experimental - MD 0506WN 99	31.7	37.8	34.7	10-28	41	4.0
Mean	**50.3**	**38.0**	**44.2**	**-**	**37**	**3.3**
LSD 0.20	**5.5**	**3.8**	**-**	**-**	**2**	**0.3**
CV, %	**10.2**	**9.3**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Public - Holladay	56.1	46.1	51.1	11-01	33	3.8
USG - 5601T	55.0	44.6	49.8	11-01	35	3.7
Mid Atlantic - MA5200RR Check	54.8	-	-	11-06	39	3.2
Experimental - MD 99-6226	53.8	53.7	53.7	11-01	33	3.7
Public - Glenn	51.0	-	-	11-01	37	4.0
Public - Essex	49.8	43.7	46.8	11-01	34	3.8
USG - 5002T	49.3	47.2	48.3	11-01	36	4.0
Experimental - MD 05-5468	46.7	-	-	11-01	37	4.0
Public - Hutcheson	45.5	45.3	45.4	11-01	39	3.8
Experimental - MD 06-6182	33.2	36.7	34.9	11-06	38	3.8
Experimental - MD 0607WN 38	32.5	-	-	11-01	37	4.0
Experimental - MD 0607WN 51	31.5	-	-	11-01	40	3.8
Experimental - MD 06-5415	30.7	-	-	11-06	43	3.6
Mean	**45.4**	**43.5**	**44.5**	**-**	**37**	**3.8**
LSD 0.20	**4.5**	**3.6**	**-**	**-**	**4**	**0.3**
CV, %	**9.3**	**7.7**	**-**	**-**	**-**	**-**

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

Table 8. Relative yields of non-Roundup Ready varieties compared to the mean of all varieties in that maturity group at each location in 2009.

			Quantico	
BRAND - ENTRY	**Clarksville**	**Queenstown**	**Full Season**	**Double Crop**
MATURITY GROUP 3		**Relative Yield, % of Mean**		
Public - Dennison	91	89	99	106
Public - IA 3023	82	95	100	97
Public - IA 3024	95	101*	102	98
Public - Kottman	100	102*	104	98
Public - Macon	110*	105*	101	107
Experimental - MD 03-5453	102	94	91	100
Experimental - MD 05-5585	95	95	93	89
Experimental - MD 05-5633	106*	94	103	104
Ohio - OHS 305	105*	104*	104	109*
S.States - LL389N	107*	109*	102	99
Experimental - V02-8659	110*	108*	91	99
Asgrow - AG3803 RR Check	97	104*	111*	96
Location/Group Mean Yield	**50.5**	**58.9**	**56.7**	**56.6ns**
MATURITY GROUP 4				
Public (IL) - LD00-3309	87	113	109	102
Public (IL) - LD00-2817P	93	112	112	98
Experimental - MD 04-5060	102	101	99	97
Experimental - MD 04-5217	104*	102	95	90
Experimental - MD 04-5545	99	96	99	98
Experimental - MD 04-5550	93	85	86	79
Experimental - MD 05-5355	101	93	91	89
Experimental - MD 06-5401	104*	102	97	111*
Experimental - MD 06-5613	94	85	86	94
Experimental - MD 06-5693	94	87	98	95
Experimental - MD 06-5700	104*	87	93	93
Experimental - MD 0607WN 32	98	92	96	110
Experimental - MD 0607WN 37	92	75	80	76
Public - Monocacy	107*	114	109	121*
Missouri - MPV 4238N	101	108	102	102
Public - Prohio	106*	104	99	107
S.States - LL410N	97	102	109	104
S.States - LL430N	109*	110	119*	117*
S.States - LL450N	105*	108	106	105
Asgrow - AG4303 RR Check	110*	125*	117*	113*
Location/Group Mean Yield	**54.9**	**59.0**	**54.0**	**53.4**

Table 8. (Continued) Relative Yields, Non-Roundup Ready Soybean Varieties

BRAND - ENTRY	Clarksville	Queenstown	Quantico Full Season	Quantico Double Crop
MATURITY GROUP 4S		**Relative Yield, % of Mean**		
Public - KS 4602N	99	101	101	111
Public - Manokin	94	98	95	83
Public - MD 4900	118*	105	111	111
Experimental - MD 00-5326	121*	122*	117*	119*
Experimental - MD 00-6015	107	107	111	113
Experimental - MD 01-5866	105	105	102	94
Experimental - MD 03-5527	89	90	89	83
Experimental - MD 03-6420	93	101	107	113
Experimental - MD 04-6101	101	84	91	85
Experimental - MD 05-5276	106	106	101	119*
Experimental - MD 0506WN 16	84	96	91	100
Experimental - MD 0506WN 99	94	89	85	63
Experimental - MD 06-5356	103	96	100	109
Experimental - MD 06-5617	96	99	93	100
Experimental - MD 0607WN 21	98	94	87	73
Experimental - MD 0708WN 50	93	78	91	75
Experimental - MD 0708WN 214	87	91	93	89
S.States - LL499N	105	112*	111*	125*
S.States - LL511N	106	108	110	119*
USG - 74G99	107	122*	113*	122*
USG - 74A88 RR Check	94	97	102	96
Location/Group Mean Yield	**50.5**	**55.7**	**53.7**	**50.3**
MATURITY GROUP 5				
Public - Essex	-	104	105	110
Public - Glenn	-	105	115*	112
Public - Holladay	-	103	99	124*
Public - Hutcheson	-	107	101	100
Experimental - MD 99-6226	-	115*	109*	119*
Experimental - MD 05-5468	-	98	96	103
Experimental - MD 06-5415	-	84	86	68
Experimental - MD 06-6182	-	87	91	73
Experimental - MD 0607WN 38	-	82	96	72
Experimental - MD 0607WN 51	-	92	89	69
USG - 5002T	-	103	85	109
USG - 5601T	-	98	115*	121*
Mid Atlantic - MA5200RR Check	-	121*	115*	121*
Location/Group Mean Yield	-	**56.3**	**51.7**	**45.4**

*Yield is not significantly different from the highest yielding entry in the maturity group at this location. ns= no significant differences among entries in this group.
Actual 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. Performance of Roundup Ready soybean varieties planted at Keedysville.

	Seed Yield, Bu/A			2009	
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3					
S.States - 3820NR2	70.2	-	-	35	1.0
Mid Atlantic - MA 3955RR	68.8	57.4	63.1	32	1.0
USG - 73H77	68.4	56.4	62.4	35	1.0
Mid Atlantic - MA 3781NRR	67.9	-	-	35	1.0
Mid Atlantic - MA 3566RRII	65.7	-	-	30	1.0
USG - 73F59	65.5	-	-	35	1.0
S.States - RT3971N	65.5	58.6	62.0	33	1.3
Asgrow - RY3919	65.0	-	-	33	1.0
Mid Atlantic - MA 3788RR	64.7	54.9	59.8	34	1.0
Mid Atlantic - MA 3599RR	64.6	54.3	59.5	38	1.0
TA Seeds - TS3989RS	64.4	63.5	63.9	35	1.0
S.States - RT3871N	62.8	55.6	59.2	41	1.0
DynaGro - V39N9RR	62.4	-	-	31	1.0
Asgrow - AG3803	62.1	62.4	62.3	32	1.0
Asgrow - RY3709	61.6	-	-	33	1.3
Mid Atlantic - MA 3877RR	61.6	54.7	58.1	39	1.7
DynaGro - 32X39	60.7	57.5	59.1	35	1.0
USG - 7384nRS	59.8	61.6	60.7	31	1.0
Hisoy - HS39R70	58.4	56.6	57.5	31	1.3
Mid Atlantic - MA 3488RR	56.9	53.0	54.9	28	1.0
Hisoy - HSX38	56.2	-	-	31	1.0
DynaGro - 37P37	54.2	59.2	56.7	29	1.0
Mid Atlantic - MA 3299RR/STS	51.8	-	-	30	1.0
Mean	**62.6**	**58.0**	**60.3**	**33**	**1.1**
LSD 0.20	**6.9**	**ns**	**-**	**4**	**0.3**
CV, %	**10.4**	**10.9**	**-**	**-**	**-**
MATURITY GROUP 4					
Hisoy - HS42T80	64.7	63.8	64.2	31	1.0
TA Seeds - TS4319R2	62.8	-	-	33	1.0
USG - 74B58	61.7	57.1	59.4	29	1.0
Asgrow - AG4005	61.5	53.3	57.4	36	1.0
Mid Atlantic - MA 4077RR/STS	61.4	63.6	62.5	32	1.0
Asgrow - AG4303	61.0	69.7	65.3	31	1.0
Mid Atlantic - MA 4399NRR/STS	60.0	-	-	32	1.0
USG - 74A39	57.8	-	-	31	1.0
Mid Atlantic - MA 4100RRII	57.7	-	-	27	1.0
S.States - RT4451N	57.4	59.9	58.7	34	1.0
DynaGro - 35X43	56.4	-	-	29	1.0
USG - 74A45	56.3	57.5	56.9	37	1.0

Table 9. (Continued) Keedysville - Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A 2009	2008	2-Year	2009 Height, Inches	2009 Lodging Score*
MATURITY GROUP 4 - CONTINUED					
USG - 74A27	56.1	59.3	57.7	30	1.0
TA Seeds - TS4499R	55.7	59.4	57.6	31	1.0
DynaGro - 33A40	54.6	52.5	53.5	31	1.0
TA Seeds - TS4299RS	52.1	58.9	55.5	29	1.0
S.States - RT4470N	50.3	63.3	56.8	25	1.0
S.States - RT4370N	48.9	57.1	53.0	37	1.0
Mean	**57.6**	**59.3**	**58.5**	**31**	**1.0**
LSD 0.20	**6.1**	**4.7**	**-**	**3**	**ns**
CV, %	**10.0**	**7.4**	**-**	**-**	**-**
MATURITY GROUP 4S					
USG - 74A79	52.9	-	-	25	1.0
Mid Atlantic - MA 4666NRR	50.6	-	-	30	1.0
Hisoy - HS476	50.5	62.7	56.6	26	1.0
Asgrow - AG4605	48.7	-	-	23	1.0
Mid Atlantic - MA 4999RR	48.7	-	-	29	1.0
S.States - RT4996N	48.1	62.9	55.5	30	1.0
USG - 74E88	47.9	57.6	52.7	28	1.0
USG - 74A88	47.7	59.6	53.6	29	1.0
Hisoy - HS47R90	46.0	-	-	31	1.0
S.States - RT4808N	45.6	63.0	54.3	30	1.0
DynaGro - 32P48	45.4	62.2	53.8	28	1.0
USG - 74A69	45.4	-	-	24	1.0
S.States - RT4777N	43.7	60.4	52.1	29	1.0
DynaGro - V47N8RR	43.3	64.6	54.0	29	1.0
DynaGro - 33G48	43.2	-	-	27	1.0
Mean	**47.2**	**62.3**	**54.8**	**28**	**1.3**
LSD 0.20	**ns**	**ns**	**-**	**4**	**0.6**
CV, %	**11.3**	**5.3**	**-**	**-**	**-**

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

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

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3						
DynaGro - V39N9RR	57.0	-	-	10-21	23	1.0
DynaGro - 32X39	55.8	49.7	52.8	10-17	25	1.0
Asgrow - RY3919	53.0	-	-	10-15	22	1.0
Asgrow - AG3803	51.0	56.4	53.7	10-16	20	1.0
DynaGro - 37P37	50.9	49.6	50.2	10-11	22	1.0
Asgrow - RY3709	50.4	-	-	10-10	19	1.0
Mid Atlantic - MA 3788RR	50.4	48.0	49.2	10-10	19	1.0
TA Seeds - TS3989RS	50.2	49.3	49.8	10-16	23	1.0
Hisoy - HSX38	49.7	-	-	10-11	20	1.0
S.States - RT3871N	49.7	52.9	51.3	10-19	22	1.0
Mid Atlantic - MA 3566RRII	49.4	-	-	10-12	17	1.0
Mid Atlantic - MA 3955RR	49.0	49.9	49.4	10-11	18	1.0
Hisoy - HS39R70	48.7	49.4	49.0	10-14	23	1.0
Mid Atlantic - MA 3599RR	48.1	55.1	51.6	10-14	20	1.0
USG - 73H77	47.9	54.3	51.1	10-09	22	1.0
Mid Atlantic - MA 3877RR	47.7	54.3	51.0	10-13	25	1.0
USG - 73F59	45.6	-	-	10-09	19	1.0
Mid Atlantic - MA 3299RR/STS	45.4	-	-	10-11	21	1.0
Mid Atlantic - MA 3488RR	44.8	42.8	43.8	10-10	17	1.0
S.States - RT3971N	44.7	50.5	47.6	10-13	21	1.0
S.States - 3820NR2	44.1	-	-	10-11	19	1.0
USG - 7384nRS	36.4	53.1	44.8	10-09	17	1.0
Mid Atlantic - MA 3781NRR	36.2	-	-	10-08	17	1.0
Mean	**48.1**	**49.8**	**49.0**	**-**	**20**	**1.0**
LSD 0.20	**7.6**	**4.8**	**-**	**-**	**3**	**ns**
CV, %	**14.9**	**9.1**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
Hisoy - HS42T80	67.3	51.9	59.6	10-14	29	1.0
Asgrow - AG4303	67.2	51.9	59.5	10-19	25	1.0
DynaGro - 35X43	64.7	-	-	10-23	25	1.0
Mid Atlantic - MA 4399NRR/STS	64.2	-	-	10-23	30	1.0
TA Seeds - TS4299RS	64.0	52.4	58.2	10-17	27	1.0
USG - 74A39	62.8	-	-	10-21	25	1.0
DynaGro - 33A40	62.7	46.2	54.5	10-20	30	1.0
S.States - RT4470N	60.5	48.8	54.7	10-21	23	1.0
Mid Atlantic - MA 4100RRII	59.6	-	-	10-17	24	1.0
S.States - RT4370N	59.2	52.8	56.0	10-18	29	1.0
TA Seeds - TS4499R	58.4	49.9	54.2	10-25	26	1.0
TA Seeds - TS4319R2	58.3	-	-	10-18	23	1.0

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

BRAND - ENTRY	Seed Yield, Bu/A 2009	2008	2-Year	2009 Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP 4 - CONTINUED						
Asgrow - AG4005	57.3	45.8	51.5	10-16	27	1.0
USG - 74B58	56.4	47.8	52.1	10-19	25	1.0
S.States - RT4451N	56.1	52.4	54.3	10-23	29	1.0
Mid Atlantic - MA 4077RR/STS	56.0	47.1	51.5	10-20	27	1.0
USG - 74A27	55.3	54.0	54.7	10-23	25	1.0
USG - 74A45	54.1	52.1	53.1	10-18	29	1.0
Mean	**60.2**	**50.7**	**55.5**	**-**	**26**	**1.0**
LSD 0.20	**4.2**	**ns**	**-**	**-**	**3**	**ns**
CV, %	**6.5**	**10.2**	**-**	**-**	**-**	**-**
MATURITY GROUP 4S						
USG - 74A88	67.1	57.9	62.5	10-27	31	1.0
Hisoy - HS47R90	66.9	-	-	10-25	28	1.0
USG - 74A79	66.8	-	-	10-26	29	1.0
USG - 74A69	65.8	-	-	10-25	28	1.0
DynaGro - V47N8RR	64.3	51.2	57.7	10-26	29	1.0
S.States - RT4808N	62.5	50.8	56.7	10-27	29	1.0
Mid Atlantic - MA 4999RR	62.1	-	-	10-25	30	1.0
S.States - RT4996N	61.9	47.8	54.9	10-28	30	1.3
Hisoy - HS476	61.8	45.4	53.6	10-25	23	1.0
S.States - RT4777N	61.6	48.6	55.1	10-26	32	1.0
Mid Atlantic - MA 4666NRR	61.4	-	-	10-26	27	1.0
DynaGro - 33G48	61.4	-	-	10-26	29	1.0
DynaGro - 32P48	58.7	48.3	53.5	10-25	30	1.0
Asgrow - AG4605	53.9	-	-	10-21	22	1.0
USG - 74E88	53.1	50.3	51.7	10-25	27	1.0
Mean	**62.0**	**48.7**	**55.4**	**-**	**28**	**1.0**
LSD 0.20	**4.9**	**4.7**	**-**	**-**	**3**	**0.2**
CV, %	**7.3**	**9.0**	**-**	**-**	**-**	**-**

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

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

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3						
USG - 73F59	66.3	-	-	10-15	27	1.7
S.States - 3820NR2	63.8	-	-	10-16	28	1.7
Mid Atlantic - MA 3781NRR	62.1	-	-	10-16	29	1.7
Asgrow - RY3709	61.1	-	-	10-13	27	2.0
Mid Atlantic - MA 3788RR	60.4	42.3	51.4	10-16	32	2.3
Mid Atlantic - MA 3566RRII	60.3	-	-	10-15	25	2.0
DynaGro - 37P37	58.8	40.7	49.8	10-16	26	1.0
USG - 7384nRS	58.5	42.5	50.5	10-15	27	1.7
Asgrow - AG3803	57.9	48.0	52.9	10-16	26	1.3
Hisoy - HSX38	57.4	-	-	10-16	25	1.3
Mid Atlantic - MA 3955RR	57.2	46.2	51.7	10-15	26	1.0
TA Seeds - TS3989RS	56.6	47.5	52.1	10-16	25	2.0
S.States - RT3971N	56.6	42.6	49.6	10-16	28	2.3
Hisoy - HS39R70	55.6	43.4	49.5	10-16	29	2.0
Mid Atlantic - MA 3488RR	55.5	39.9	47.7	10-11	25	1.0
S.States - RT3871N	55.2	44.8	50.0	10-16	31	2.3
Mid Atlantic - MA 3877RR	54.9	45.8	50.4	10-15	29	2.0
Asgrow - RY3919	54.5	-	-	10-15	27	1.7
Mid Atlantic - MA 3599RR	54.3	42.4	48.3	10-16	28	2.3
USG - 73H77	53.5	40.8	47.1	10-15	27	2.0
DynaGro - V39N9RR	53.1	-	-	10-15	27	1.7
Mid Atlantic - MA 3299RR/STS	51.8	-	-	10-13	25	1.3
DynaGro - 32X39	50.4	46.3	48.4	10-15	26	2.0
Mean	**57.2**	**43.5**	**50.4**	**-**	**27**	**1.8**
LSD 0.20	**4.8**	**3.8**	**-**	**-**	**2**	**0.7**
CV, %	**8.0**	**8.3**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
Asgrow - AG4303	67.1	56.4	61.7	10-19	32	1.0
Asgrow - AG4005	65.7	53.6	59.6	10-16	32	2.0
Hisoy - HS42T80	65.4	52.7	59.0	10-16	29	1.3
TA Seeds - TS4299RS	65.2	57.2	61.2	10-16	29	1.0
TA Seeds - TS4319R2	64.2	-	-	10-20	28	1.0
S.States - RT4470N	62.7	53.5	58.1	10-18	31	1.0
Mid Atlantic - MA 4100RRII	62.7	-	-	10-21	33	1.3
USG - 74B58	62.0	54.7	58.3	10-18	27	1.0
DynaGro - 33A40	61.3	53.5	57.4	10-20	31	1.3
DynaGro - 35X43	60.7	-	-	10-22	32	1.3
USG - 74A39	60.5	-	-	10-20	30	1.0
USG - 74A27	60.5	55.2	57.8	10-20	31	1.0

Table 11. (Continued) Queenstown – Full Season Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A 2009	Seed Yield, Bu/A 2008	Seed Yield, Bu/A 2-Year	2009 Maturity Date	2009 Height, Inches	2009 Lodging Score*
MATURITY GROUP 4 CONTINUED						
S.States - RT4370N	59.8	52.9	56.3	10-21	37	1.0
TA Seeds - TS4499R	59.8	49.8	54.8	10-18	34	1.0
Mid Atlantic - MA 4399NRR/STS	58.9	-	-	10-20	35	1.0
Mid Atlantic - MA 4077RR/STS	58.1	46.5	52.3	10-16	29	2.0
S.States - RT4451N	56.0	52.6	54.3	10-18	31	1.3
USG - 74A45	55.8	51.2	53.5	10-21	32	1.3
Mean	**61.5**	**52.7**	**57.1**	**-**	**31**	**1.2**
LSD 0.20	**3.6**	**ns**	**-**	**-**	**3**	**0.4**
CV, %	**5.5**	**9.2**	**-**	**-**	**-**	**-**
MATURITY GROUP 4S						
Hisoy - HS476	63.4	50.6	57.0	10-20	30	1.7
USG - 74A69	62.1	-	-	10-19	32	2.0
USG - 74A79	62.1	-	-	10-19	32	1.7
Asgrow - AG4605	60.5	-	-	10-19	33	2.0
Hisoy - HS47R90	60.1	-	-	10-18	37	2.0
S.States - RT4996N	59.9	52.3	56.1	10-18	35	2.7
Mid Atlantic - MA 4666NRR	59.6	-	-	10-19	37	2.3
DynaGro - V47N8RR	58.6	49.8	54.2	10-17	39	2.7
S.States - RT4777N	58.3	53.6	55.9	10-17	37	2.3
DynaGro - 32P48	57.4	49.9	53.6	10-20	38	2.0
S.States - RT4808N	57.2	51.1	54.2	10-19	33	2.0
USG - 74A88	56.7	50.1	53.4	10-20	37	3.3
USG - 74E88	52.9	44.6	48.8	10-18	35	2.0
Mid Atlantic - MA 4999RR	52.7	-	-	10-19	37	2.3
DynaGro - 33G48	51.5	-	-	10-20	34	2.3
Mean	**58.2**	**49.6**	**53.9**	**-**	**35**	**2.2**
LSD 0.20	**4.5**	**ns**	**-**	**-**	**2**	**0.6**
CV, %	**7.3**	**10.0**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Mid Atlantic - MA 5200RR	55.9	-	-	11-03	27	2.0
Experimental - Md 06-98RR	52.4	-	-	11-01	27	1.7
Experimental - Md 06-21RR	38.0	52.8	45.4	11-06	39	2.7
Mean	**48.7**	**55.6**	**52.2**	**-**	**31**	**2.1**
LSD 0.20	**3.9**	**4.4**	**-**	**-**	**1**	**0.4**
CV, %	**6.4**	**7.2**	**-**	**-**	**-**	**-**

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

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

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	2009	2008	2-Year	Maturity Date	Height, Inches	Lodging Score*
MATURITY GROUP 3						
Mid Atlantic - MA 3955RR	64.4	45.8	55.1	10-31	31	1.0
Asgrow - RY3919	64.2	-	-	10-31	33	1.3
TA Seeds - TS3989RS	64.0	48.8	56.4	10-31	32	1.7
S.States - RT3871N	62.8	47.6	55.2	10-29	31	1.3
USG - 73F59	61.8	-	-	10-29	30	1.0
DynaGro - 37P37	61.5	48.8	55.1	10-30	31	1.0
Mid Atlantic - MA 3566RRII	61.4	-	-	10-27	26	1.0
Asgrow - RY3709	61.0	-	-	10-28	31	1.0
DynaGro - 32X39	60.6	44.4	52.5	10-28	31	1.0
USG - 73H77	60.2	50.2	55.2	10-29	32	1.3
Hisoy - HS39R70	59.8	45.5	52.7	10-31	31	1.7
DynaGro - V39N9RR	59.2	-	-	10-30	31	1.0
Mid Atlantic - MA 3877RR	59.0	47.9	53.5	10-29	36	2.0
Mid Atlantic - MA 3599RR	58.9	50.8	54.8	10-28	34	1.0
Mid Atlantic - MA 3781NRR	58.3	-	-	10-26	31	1.0
Hisoy - HSX38	58.1	-	-	10-28	33	1.3
Asgrow - AG3803	56.8	52.8	54.8	10-28	31	1.0
S.States - RT3971N	56.8	46.9	51.9	10-28	32	1.0
Mid Atlantic - MA 3788RR	56.4	48.6	52.5	10-28	33	1.3
USG - 7384nRS	55.8	48.9	52.4	10-30	31	1.0
Mid Atlantic - MA 3488RR	55.5	43.3	49.4	10-25	30	1.0
S.States - 3820NR2	55.0	-	-	10-26	33	1.3
Mid Atlantic - MA 3299RR/STS	54.4	-	-	10-28	30	1.0
Mean	**59.4**	**46.9**	**53.2**	**-**	**31**	**1.2**
LSD 0.20	**4.6**	**ns**	**-**	**-**	**2**	**0.4**
CV, %	**7.3**	**9.0**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
USG - 74B58	70.9	60.5	65.7	10-28	29	1.0
Asgrow - AG4303	68.4	63.7	66.0	11-02	31	1.0
DynaGro - 33A40	67.8	57.1	62.4	10-30	33	2.0
S.States - RT4470N	67.6	56.7	62.1	10-31	29	1.0
Mid Atlantic - MA 4100RRII	67.4	-	-	10-29	31	1.3
USG - 74A39	67.0	-	-	10-31	32	1.7
Mid Atlantic - MA 4077RR/STS	64.9	56.5	60.7	11-01	32	2.0
Hisoy - HS42T80	62.3	54.4	58.4	11-01	31	2.0
TA Seeds - TS4299RS	62.2	54.5	58.3	10-28	30	1.7
DynaGro - 35X43	62.1	-	-	10-31	32	3.0
Mid Atlantic - MA 4399NRR/STS	61.0	-	-	10-29	33	1.7
S.States - RT4370N	61.0	55.7	58.3	11-02	34	2.7

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

BRAND - ENTRY	Seed Yield, Bu/A 2009	Seed Yield, Bu/A 2008	Seed Yield, Bu/A 2-Year	2009 Maturity Date	2009 Height, Inches	2009 Lodging Score*
MATURITY GROUP 4 - CONTINUED						
Asgrow - AG4005	60.9	61.7	61.3	10-30	32	1.3
USG - 74A45	59.8	55.8	57.8	11-01	35	2.3
TA Seeds - TS4319R2	59.6	-	-	11-01	29	1.7
USG - 74A27	58.4	59.7	59.0	10-29	30	1.0
TA Seeds - TS4499R	57.8	56.2	57.0	11-02	31	1.7
S.States - RT4451N	57.1	58.8	58.0	10-27	37	2.7
Mean	**63.1**	**57.3**	**60.2**	**-**	**32**	**1.8**
LSD 0.20	**4.2**	**7.4**	**-**	**-**	**2**	**0.6**
CV, %	**6.2**	**12.1**	**-**	**-**	**-**	**-**
MATURITY GROUP 4S						
Asgrow - AG4605	68.1	-	-	10-31	30	1.3
DynaGro - 32P48	63.9	59.7	61.8	11-02	36	2.3
DynaGro - 33G48	63.9	-	-	11-01	33	2.0
DynaGro - V47N8RR	59.4	61.7	60.5	11-02	34	1.7
Hisoy - HS47R90	63.2	-	-	10-31	35	2.0
Hisoy - HS476	61.3	60.7	61.0	11-02	28	1.7
Mid Atlantic - MA 4666NRR	57.0	-	-	11-02	34	2.0
Mid Atlantic - MA 4999RR	64.9	-	-	11-01	39	2.0
S.States - RT4777N	63.3	59.3	61.3	11-01	37	2.3
S.States - RT4808N	63.8	55.0	59.4	10-31	35	2.3
S.States - RT4996N	62.0	58.3	60.2	11-01	37	2.7
USG - 74A69	60.3	-	-	11-01	35	1.7
USG - 74A79	71.8	-	-	11-01	33	2.0
USG - 74A88	59.6	62.5	61.1	10-31	35	2.0
USG - 74E88	53.0	56.1	54.6	11-01	36	1.7
Mean	**62.4**	**58.9**	**60.7**	**-**	**34**	**2.0**
LSD 0.20	**5.9**	**ns**	**-**	**-**	**2**	**0.5**
CV, %	**8.8**	**7.9**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Mid Atlantic - MA 5200RR	56.6	-	-	11-10	39	1.7
Experimental - Md 06-98RR	52.6	-	-	11-06	35	2.3
Experimental - Md 06-21RR	32.4	40.7	36.6	11-10	40	2.0
Mean	**47.2**	**43.8**	**45.5**	**-**	**38**	**2.0**
LSD 0.20	**5.8**	**3.2**	**-**	**-**	**3**	**0.7**
CV, %	**9.9**	**6.6**	**-**	**-**	**-**	**-**

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

Table 13. Performance of Roundup Ready soybean varieties planted full season at Quantico.

BRAND - ENTRY	Seed Yield, Bu/A 2009	Seed Yield, Bu/A 2008	2009 Maturity Date	2009 Height, Inches	2009 Lodging Score*
MATURITY GROUP 3					
Mid Atlantic - MA 3566RRII	78.3	No data	9-30	25	2.0
DynaGro - 37P37	73.1	"	10-01	28	2.0
TA Seeds - TS3989RS	72.8	"	10-03	31	1.7
Hisoy - HSX38	71.4	"	10-01	29	1.7
Asgrow - RY3919	70.8	"	10-01	29	1.3
Asgrow - AG3803	69.6	"	10-01	30	2.0
USG - 73H77	69.4	"	9-29	32	1.3
S.States - RT3871N	68.0	"	10-02	31	1.3
USG - 7384nRS	67.5	"	9-29	26	1.3
DynaGro - V39N9RR	67.4	"	10-01	29	1.7
Asgrow - RY3709	67.3	"	9-27	26	1.3
Mid Atlantic - MA 3599RR	66.1	"	9-29	30	2.0
Mid Atlantic - MA 3781NRR	66.0	"	10-01	26	2.0
Mid Atlantic - MA 3788RR	66.0	"	9-29	27	1.7
Mid Atlantic - MA 3299RR/STS	65.0	"	9-28	27	2.0
USG - 73F59	64.9	"	9-27	27	2.0
Mid Atlantic - MA 3877RR	64.3	"	10-02	32	2.2
S.States - 3820NR2	64.1	"	9-29	27	1.7
Mid Atlantic - MA 3488RR	63.0	"	9-28	23	1.7
Mid Atlantic - MA 3955RR	61.7	"	10-01	28	1.3
S.States - RT3971N	61.5	"	10-01	27	1.7
Hisoy - HS39R70	61.4	"	9-30	27	1.7
DynaGro - 32X39	61.4	"	9-29	25	1.3
Mean	**67.0**	**"**	**-**	**28**	**1.7**
LSD 0.20	**3.3**	**"**	**-**	**2**	**ns**
CV, %	**4.7**	**"**	**-**	**-**	**-**
MATURITY GROUP 4					
TA Seeds - TS4319R2	76.7	No data	10-05	29	1.0
Asgrow - AG4005	74.4	"	10-02	31	1.3
USG - 74B58	73.5	"	10-05	28	1.0
S.States - RT4370N	73.1	"	10-05	38	2.0
TA Seeds - TS4499R	71.9	"	10-05	33	1.0
TA Seeds - TS4299RS	71.8	"	10-02	29	1.0
USG - 74A39	71.1	"	10-05	32	1.7
Asgrow - AG4303	71.1	"	10-06	26	1.0
Mid Atlantic - MA 4077RR/STS	70.7	"	10-03	33	1.7
Mid Atlantic - MA 4100RRII	70.0	"	10-05	30	1.7
S.States - RT4470N	69.7	"	10-05	28	1.0
DynaGro - 33A40	69.3	"	10-02	34	1.7

Table 13. (Continued) Quantico - Full Season, Roundup Ready Soybean Varieties

BRAND - ENTRY	Seed Yield, Bu/A 2009	Seed Yield, Bu/A 2008	2009 Maturity Date	2009 Height, Inches	2009 Lodging Score*
MATURITY GROUP 4 - CONTINUED					
Mid Atlantic - MA 4399NRR/STS	69.0	No data	10-05	37	1.3
Hisoy - HS42T80	68.9	"	10-02	30	1.0
DynaGro - 35X43	68.7	"	10-05	33	1.7
USG - 74A45	67.9	"	10-04	40	2.0
S.States - RT4451N	66.8	"	10-05	36	2.0
USG - 74A27	65.1	"	10-04	30	1.3
Mean	**70.5**	**"**	**-**	**32**	**1.4**
LSD 0.20	**3.7**	**"**	**-**	**2**	**0.4**
CV, %	**4.9**	**"**	**-**	**-**	**-**
MATURITY GROUP 4S					
Mid Atlantic - MA 4666NRR	75.2	No data	10-07	33	1.7
S.States - RT4777N	75.0	"	10-07	35	2.0
Hisoy - HS476	73.9	"	10-05	27	1.0
USG - 74A69	73.3	"	10-06	30	1.3
Mid Atlantic - MA 4999RR	73.3	"	10-06	37	1.7
USG - 74A79	72.7	"	10-06	30	1.3
Hisoy - HS47R90	72.6	"	10-08	35	2.0
DynaGro - V47N8RR	71.4	"	10-07	34	2.0
DynaGro - 33G48	71.2	"	10-08	35	2.0
S.States - RT4808N	70.4	"	10-07	35	2.0
USG - 74E88	69.5	"	10-05	33	2.0
S.States - RT4996N	67.8	"	10-09	37	2.0
DynaGro - 32P48	67.4	"	10-08	37	1.7
Asgrow - AG4605	67.1	"	10-05	29	1.0
USG - 74A88	67.1	"	10-06	35	1.3
Mean	**71.2**	**"**	**-**	**33**	**1.7**
LSD 0.20	**3.7**	**"**	**-**	**2**	**0.4**
CV, %	**4.8**	**"**	**-**	**-**	**-**
MATURITY GROUP 5					
Mid Atlantic - MA 5200RR	65.5	No data	10-22	30	1.0
Experimental - Md 06-98RR	61.2	"	10-16	28	1.0
Experimental - Md 06-21RR	46.0	"	10-27	36	1.0
Mean	**57.5**	**"**	**-**	**32**	**1.0**
LSD 0.20	**3.8**	**"**	**-**	**2**	**ns**
CV, %	**5.3**	**"**	**-**	**-**	**-**

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

Table 14. Performance of Roundup Ready soybean varieties double cropped at Quantico.

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 3						
Asgrow - RY3919	68.8	-	-	10-20	35	2.0
Mid Atlantic - MA 3566RRII	66.8	-	-	10-17	32	1.3
DynaGro - V39N9RR	62.5	-	-	10-20	35	1.0
DynaGro - 37P37	62.4	45.8	54.1	10-13	35	1.0
TA Seeds - TS3989RS	62.0	40.2	51.1	10-21	37	1.7
USG - 73H77	60.3	43.9	52.1	10-13	35	2.3
Asgrow - RY3709	60.1	-	-	10-12	34	2.0
Mid Atlantic - MA 3955RR	59.2	42.9	51.0	10-17	35	1.3
Mid Atlantic - MA 3877RR	58.2	39.2	48.7	10-17	42	2.0
USG - 73F59	58.1	-	-	10-11	35	1.3
S.States - 3820NR2	57.7	-	-	10-16	37	1.7
Mid Atlantic - MA 3599RR	57.7	43.5	50.6	10-14	38	1.7
Mid Atlantic - MA 3781NRR	57.4	-	-	10-13	33	1.3
S.States - RT3971N	56.8	39.6	48.2	10-17	35	1.3
Mid Atlantic - MA 3299RR/STS	56.8	-	-	10-09	33	1.7
Hisoy - HS39R70	55.2	42.3	48.7	10-19	33	1.3
Asgrow - AG3803	54.4	42.7	48.5	10-15	37	1.7
DynaGro - 32X39	54.1	43.4	48.8	10-17	35	1.3
Hisoy - HSX38	54.1	-	-	10-15	35	2.0
S.States - RT3871N	53.5	42.1	47.8	10-16	37	1.3
Mid Atlantic - MA 3788RR	52.5	45.5	49.0	10-13	35	2.0
USG - 7384nRS	51.7	44.8	48.3	10-13	32	2.0
Mid Atlantic - MA 3488RR	49.2	40.3	44.8	10-10	31	1.0
Mean	**57.8**	**42.4**	**50.1**	**-**	**35**	**1.6**
LSD 0.20	**4.2**	**ns**	**-**	**-**	**2**	**0.5**
CV, %	**6.9**	**7.7**	**-**	**-**	**-**	**-**
MATURITY GROUP 4						
DynaGro - 35X43	70.5	-	-	10-23	37	2.7
Asgrow - AG4303	66.1	46.3	56.2	10-23	35	1.3
Mid Atlantic - MA 4100RRII	65.9	-	-	10-25	35	3.0
S.States - RT4470N	65.6	47.7	56.7	10-25	33	1.7
DynaGro - 33A40	64.3	47.1	55.7	10-21	39	1.8
USG - 74B58	62.7	47.4	55.1	10-25	33	2.2
Mid Atlantic - MA 4399NRR/STS	61.0	-	-	10-24	35	3.0
Mid Atlantic - MA 4077RR/STS	60.9	43.0	52.0	10-23	36	1.8
TA Seeds - TS4319R2	60.2	-	-	10-25	38	3.5
S.States - RT4370N	59.8	42.3	51.0	10-23	40	2.7
TA Seeds - TS4499R	59.0	43.7	51.4	10-25	37	2.8
USG - 74A27	58.7	43.8	51.2	10-23	34	2.3

Table 14. (Continued) Quantico - Double Cropped, Roundup Ready Soybean Varieties

	Seed Yield, Bu/A			2009		
BRAND - ENTRY	**2009**	**2008**	**2-Year**	**Maturity Date**	**Height, Inches**	**Lodging Score***
MATURITY GROUP 4 - CONTINUED						
Asgrow - AG4005	58.0	44.7	51.3	10-23	37	2.2
TA Seeds - TS4299RS	57.2	44.2	50.7	10-24	36	1.7
USG - 74A39	57.1	-	-	10-25	35	3.2
Hisoy - HS42T80	55.3	48.5	51.9	10-23	36	1.3
USG - 74A45	52.8	45.0	48.9	10-23	44	3.0
S.States - RT4451N	51.9	45.6	48.7	10-25	41	2.8
Mean	**60.4**	**45.5**	**53.0**	**-**	**37**	**2.4**
LSD 0.20	**6.1**	**2.9**	**-**	**-**	**2**	**0.5**
CV, %	**9.5**	**5.9**	**-**	**-**	**-**	**-**
MATURITY GROUP 4S						
USG - 74A79	72.7	-	-	10-28	35	3.0
DynaGro - 32P48	66.8	48.9	57.8	10-26	39	3.2
Asgrow - AG4605	66.5	-	-	10-23	34	2.0
USG - 74A69	65.3	-	-	10-26	35	2.7
Mid Atlantic - MA 4666NRR	64.8	-	-	10-23	41	2.7
S.States - RT4808N	64.0	46.6	55.3	10-25	37	3.0
USG - 74A88	63.8	51.8	57.8	10-27	36	3.2
Hisoy - HS476	63.3	49.3	56.3	10-26	30	2.0
S.States - RT4996N	62.3	48.1	55.2	10-30	39	3.0
S.States - RT4777N	61.3	49.0	55.2	10-26	39	3.3
Hisoy - HS47R90	61.3	-	-	10-24	38	2.5
Mid Atlantic - MA 4999RR	61.2	-	-	10-27	39	3.3
DynaGro - V47N8RR	60.0	48.8	54.4	10-24	38	2.7
DynaGro - 33G48	58.1	-	-	10-25	37	3.3
USG - 74E88	46.5	47.5	47.0	10-26	37	2.5
Mean	**62.5**	**49.2**	**55.9**	**-**	**37**	**2.8**
LSD 0.20	**5.1**	**ns**	**-**	**-**	**2**	**0.4**
CV, %	**7.6**	**5.9**	**-**	**-**	**-**	**-**
MATURITY GROUP 5						
Mid Atlantic - MA 5200RR	54.6	-	-	11-06	41	3.5
Experimental - Md 06-98RR	49.6	-	-	10-31	36	3.5
Experimental - Md 06-21RR	37.2	40.2	38.7	11-15	42	3.3
Mean	**47.2**	**43.2**	**45.2**	**-**	**40**	**3.4**
LSD 0.20	**2.8**	**3.6**	**-**	**-**	**3**	**ns**
CV, %	**4.8**	**7.6**	**-**	**-**	**-**	**-**

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

Table 15. Relative yields of Roundup Ready soybean varieties compared to the mean of all varieties In that maturity group at each location in 2009.

BRAND - ENTRY	Keedys-ville	Clarks-ville	Queenstown FS	Queenstown DC	Quantico FS	Quantico DC
MATURITY GROUP 3		**Relative Yield, % of Mean**				
Asgrow - AG3803	99	106*	101	96	104	94
Asgrow - RY3709	98	105*	107	103*	101	104
Asgrow - RY3919	104*	110*	95	108*	106	119*
DynaGro - 37P37	87	106*	103	104*	109	108
DynaGro - 32X39	97	116*	88	102*	92	94
DynaGro - V39N9RR	100	118*	93	100	101	108
Hisoy - HSX38	90	103*	100	98	107	94
Hisoy - HS39R70	93	101	97	101	92	95
Mid Atlantic - MA 3299RR/STS	83	94	91	92	97	98
Mid Atlantic - MA 3488RR	91	93	97	93	94	85
Mid Atlantic - MA 3566RRII	105*	103*	105	103*	117*	116*
Mid Atlantic - MA 3599RR	103*	100	95	99	99	100
Mid Atlantic - MA 3781NRR	108*	75	109*	98	99	99
Mid Atlantic - MA 3788RR	103*	105*	106	95	98	91
Mid Atlantic - MA 3877RR	98	99	96	99	96	101
Mid Atlantic - MA 3955RR	110*	102	100	108*	92	102
S.States - 3820NR2	112*	92	112*	93	96	100
S.States - RT3871N	100	103*	97	106*	102	92
S.States - RT3971N	105*	93	99	96	92	98
TA Seeds - TS3989RS	103*	104*	99	108*	109	107
USG - 73F59	105*	95	116*	104*	97	100
USG - 73H77	109*	100	94	101*	104	104
USG - 7384nRS	95	76	102	94	101	89
Location/Group Mean Yield	**62.6**	**48.1**	**57.2**	**59.4**	**67.0**	**57.8**
MATURITY GROUP 4						
Asgrow - AG4005	107*	95	107*	97	106*	96
Asgrow - AG4303	106*	112*	109*	108*	101	109*
DynaGro - 33A40	95	104	100	107*	98	106
DynaGro - 35X43	98	107*	99	98	97	117*
Hisoy - HS42T80	112*	112*	106*	99	98	92
Mid Atlantic - MA 4077RR/STS	107*	93	94	103	100	101
Mid Atlantic - MA 4100RRII	100	99	102	107*	99	109*
Mid Atlantic - MA 4399NRR/STS	104*	107*	96	97	98	101
S.States - RT4370N	85	98	97	97	104*	99
S.States - RT4451N	100	93	91	91	95	86
S.States - RT4470N	87	101	102	107*	99	109*
TA Seeds - TS4299RS	91	106*	106*	99	102	95
TA Seeds - TS4319R2	109*	97	104*	94	109*	100
TA Seeds - TS4499R	97	97	97	92	102	98
USG - 74A27	97	92	98	93	92	97

Table 15. (Continued) Relative Yields, Roundup Ready Soybean Varieties

BRAND - ENTRY	Keedys-ville	Clarks-ville	Queenstown FS	Queenstown DC	Quantico FS	Quantico DC
MATURITY GROUP 4 (Continued)			**Relative Yield, % of Mean**			
USG - 74A39	100	104	98	106*	101	95
USG - 74A45	98	90	91	95	96	87
USG - 74B58	107*	94	101	112*	104*	104
Location/Group Mean Yield	**57.6**	**60.2**	**61.5**	**63.1**	**70.5**	**60.4**
MATURITY GROUP 4S						
Asgrow - AG4605	103	87	104*	109*	94	106
DynaGro - 32P48	96	95	99	102	95	107
DynaGro - 33G48	92	99	89	102	100	93
DynaGro - V47N8RR	92	104*	101	95	100	96
Hisoy - HS47R90	97	108*	103*	101	102*	98
Hisoy - HS476	107	100	109*	98	104*	101
Mid Atlantic - MA 4666NRR	107	99	102*	91	106*	104
Mid Atlantic - MA 4999RR	103	100	91	104	103*	98
S.States - RT4777N	93	99	100	101	105*	98
S.States - RT4808N	97	101*	98	102	99	102
S.States - RT4996N	102	100	103*	99	95	100
USG - 74A69	96	106*	107*	97	103*	104
USG - 74A79	112*	108*	107*	115*	102*	116*
USG - 74A88	101	108*	97	96	94	102
USG - 74E88	101	86	91	85	98	74
Location/Group Mean Yield	**47.2ns**	**62.0**	**58.2**	**62.4**	**71.2**	**62.5**
MATURITY GROUP 5						
Mid Atlantic - MA 5200RR	-	-	115*	120*	114*	116*
Experimental - Md 06-21RR	-	-	78	69	80	79
Experimental - Md 06-98RR	-	-	108*	111*	106	105
Location/Group Mean Yield	**-**	**-**	**48.7**	**47.2**	**57.5**	**47.2**

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 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.