



# Information

DEPARTMENT OF PLANT SCIENCE & LANDSCAPE ARCHITECTURE  
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**Agronomy Facts No. 32**  
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## **2010 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 2010 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 Arkansas (Osage), Iowa (IA 3024, IA 4004), Illinois (LD 00-3309, LD 00-2817P), Ohio (Dennison, OHS 305, Prohio), Maryland (Md 99-6226, Md 00-5326, Md 00-6015, Md 01-5866, Md 03-5453, Md 03-6420, Md 04-5217, Md 04-5545, Md 05-5276, Md 05-5468, Md 05-5585, Md 05-5633, Md 05-6207, Md 0506WN 16, Md 06-5356, Md 06-5401, Md 06-5415, Md 06-5617, Md 06-5693, Md 06-5700, Md 06-6182, Md 0607WN 21, Md 0607WN 32, Md 0607WN 38, Md 0607WN 51, Md 07-5100, Md 07-5769, Md 07-5959, Md 07-5964, Md 07-6091, Md 0708WN 50, Md 0708WN 53, Md 0708WN 55, Md 0708WN 66, Md 0708WN 90, Md 0708WN 93, Md 0708WN 120, Md 0708WN 145, Md 0708WN 182, Md 0708WN 187, Md 0708WN 214, Md 0708WN 225), and Virginia (V 02-8659, V 03-4660, V 03-4705) were included in the 2010 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 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 2010 growing season was generally hot and dry in most areas of the state. Planting was completed in a timely manner and adequate early season soil moisture resulted in good plant stands. Temperatures remained warmer than normal for much of the early summer. Reduced rainfall was noted at Clarksville and Keedysville during the critical seed-fill period from July through September. Large populations of stinkbugs were also observed at Keedysville. The insect damage and drought stress severely restricted growth and this location was not harvested. Only two replications of the full season Maturity Group 3 Roundup Ready test at Queenstown were harvested for yield data. Monthly rainfall amounts for May through October for the test locations are shown in Table 3.

Results of the 2010 tests are reported in Tables 4-7 for the non-Roundup Ready varieties and in Tables 9-13 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 well in Maryland was included in the non-Roundup Ready variety tests for relative yield comparisons. The highest overall test location mean yields were at Clarksville for both the non-Roundup Ready and 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 14 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 14, 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 2009 tests are shown in the data tables. The 2009 location average yield for each maturity group and the 2009 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/>.

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Table 1. Suppliers of private entries tested in 2010.

<b>Company</b>	<b>Brand</b>	<b>Herbicide Reaction</b>	<b>Entry</b>
Doebler's PA Hybrids Jersey Shore, PA 17740	RPM	RR	DB3519RR, DB3809RR, DB3909RR, DB4409RR
Dyna-Gro Seed East Aurora, NY 14052	DynaGro	RR RR LL	37RY39, V39N9RR, 32RY40, 35X43, 39RY41, 33G48, 34RY46, 37RY47, V47N8RR, 34LL37, 36LL39, 39LL43, SX10342L, SX10348L
Growmark FS, LLC Milford, DE 19963	Hisoy	RR	HS35A90, HS41A02, HS42T80
Mid Atlantic Seeds, Inc. York, PA 17402	Mid Atlantic	RR RR RR+	MAS3411NRRII, MAS3511NRRII, MAS3781NRR, MAS3955RR MAS3977NRRII, MAS4217NRR, MAS4444NRRII MAS4399RR/STS
Southern States Cooperative, Inc. Richmond, VA 23260	S. States	RR RR RR LL	RT3871N, RT3971N, RT4370N, RT4470N, RT4777N, RT4808N, RT4888N, RT4710N, RT4996N, SS3820NR2, SS3910NR2, SS4510NR2, SS4700, SS4720NR2 LL396N, LL426N, LL430N, LL450N, LL499N,
T.A. Seeds Avis, PA 17721	TA Seeds	RR LL	TS3989RS, TS4299R, TS4499R, TS5199R TS3609L, TS3919L, TS4819L
Unisouth Genetics, Inc. Nashville, TN 37211	USG	RR RR	73F59R, 73H77, 74T59, 74B58, 74A69R, 74A88, 74E88, 74T98, 75T18, 75J10R, 75M16

RR= Roundup Ready  
 LL=Liberty Link

Table 2. The 2010 soybean variety test plot information.

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WESTERN MARYLAND RESEARCH & EDUCATION CENTER

Washington County - Keedysville, MD

Tests: Roundup Ready Varieties Maturity Groups 3, 4, 4s  
Planting Date: June 3  
Row Spacing: 24 inches  
Soil Type: Hagerstown silt loam

Due to drought and heavy stink-bug damage, this location was not harvested.

CENTRAL MARYLAND RESEARCH & EDUCATION CENTER- CLARKSVILLE FACILITY

Howard County - Clarksville, MD

Tests: Non-Roundup Ready Varieties Maturity Group 3, 4, 4s  
Planting Date: June 4  
Row Spacing: 24 inches  
Soil Type: Delanco silt loam  
Soil Test: pH 6.6, P 45, K 250  
Previous Crop: Corn  
Fertilizer: 36 Lb/A P and 72 Lb/A K  
Lime: None  
Herbicide: Preemergence: 6 Oz/A Canopy XL, 16 Oz/A Outlook (June 4)  
Post: 1 Qt/A Basagran+1.5 Pts/A crop oil (July 20)  
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 4  
Row Spacing: 24 inches  
Soil Type: Delanco silt loam  
Soil Test: pH 6.6, P 45, K 250  
Previous Crop: Corn  
Fertilizer: 36 Lb/A P and 72 Lb/A K  
Lime: None  
Herbicide: 28 Oz/A Roundup Power Max (July 20)  
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: May 26  
 Row Spacing: 24 inches  
 Soil Type: Matapeake silt loam  
 Soil Test: pH 6.3, P Index- 95, K Index- 104  
 Previous Crop: Corn  
 Fertilizer: 0-0-120  
 Lime: None  
 Herbicide: Preemerge:6.5 Oz/A Authority First + 2 Pt/A Dual II Magnum  
 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 27  
 Row Spacing: 24 inches  
 Soil Type: Matapeake silt loam  
 Soil Test: pH 6.1, P Index- 87, K Index- 75  
 Previous Crop: Corn  
 Fertilizer: None added  
 Lime: None  
 Herbicide: Preemerge: 2 Pt/A Dual II Magnum  
 Post: 1.5 Qt/A GlySupreme Plus (July 1)  
 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: July 19  
 Row Spacing: 7.5 inches  
 Soil Type: Matapeake silt loam  
 Soil Test: pH 6.1, P Index- 63, K Index- 60  
 Previous Crop: Wheat  
 Fertilizer: None on soybeans  
 Lime: None  
 Herbicide: Preemerge:1.5 Qt/A GlySupreme Plus,22 Oz/A Ignite,1Qt/A Liberty,4 Pt/A  
 Choice Weather Master, 1 Qt/100 gal Weather Guard Complete  
 Post: 1.5 Qt/A GlySupreme Plus (Aug. 2)  
 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: May 25  
 Row Spacing: 24 inches  
 Soil Type: Mattapex silt loam  
 Soil Test: pH 6.0, P Index- Very High, K Index- High  
 Previous Crop: Corn  
 Fertilizer: 25-00-100-35-1 N-P-K-S-B  
 Lime: None  
 Herbicide: Preemerge: 1.3Pt/A Dual II Magnum, 12 Oz/A Lorox DF, 5 Oz/A Canopy XL  
 Post: 20 Oz/A Ultra Blazer+1 Pt/A Basagran+ 2 Oz/A 2,4-DB+ 14 Oz/A 820 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 25  
 Row Spacing: 20 inches  
 Soil Type: Nassawango 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: None  
 Herbicide: Preemerge: 1.5 Pt/A Roundup Power Max, 12 Oz/A 2,4-D Ester, 1 Pt/A Dual II Magnum  
 Post: 26 Oz/A Roundup Power Max, 1 Pt/A Dual II Magnum  
 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: Nassawango silt loam  
 Soil Test: pH 6.3, P Index- Very High, K Index- High  
 Previous Crop: Rye  
 Fertilizer: 25-00-100-35-1 N-P-K-S-B  
 Lime: None  
 Herbicide: Preemerge: 20 Oz/A Roundup Power Max, 1 Pt/A Dual II Magnum, 5 Oz/A Canopy XL,  
 1.5 Pt/A Lorox DF  
 Post: 20 Oz/A Ultra Blazer, 1 Pt/A Basagran, 2 Oz/A 2,4-DB, 14 Oz/A 820 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:	Nassawango silt loam
Soil Test:	pH 6.3, P Index- Very High, K Index- High
Previous Crop:	Rye
Fertilizer:	25-00-100-35-1 N-P-K-S-B
Lime:	None
Herbicide:	Preemergence:20 Oz/A Roundup Power Max,1 Pt/A Dual II Magnum, 5 Oz/A Canopy XL, 1.5 Pt/A Lorox DF Post: 26 Oz/A Roundup Power 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	3.52	1.02	1.67	1.32	5.84	2.38	15.75
Clarksville	3.43	0.87	4.01	3.28	6.45	3.01	21.05
Queenstown	2.05	2.81	6.91	3.00	7.42	3.32	25.51
Quantico	1.57	2.90	3.42	4.21	6.03	4.58	22.71



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

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
S.States - LL396N	60.7	-	-	10-05	38	1.0
DynaGro - 36LL39	58.9	-	-	10-07	38	1.7
Public - Macon	58.9	55.5	57.2	10-05	38	1.0
Public - IA 3024	58.8	47.9	53.3	10-02	36	1.0
Public - Dennison	58.0	46.2	52.1	9-27	34	1.7
Ohio - OHS 305	57.7	52.9	55.3	10-02	36	1.0
Experimental - V 02-8659	57.0	55.7	56.4	10-05	45	2.7
TA Seeds - TS 3919L	56.0	-	-	10-04	38	1.0
DynaGro - 34LL37	56.0	-	-	10-02	38	1.3
TA Seeds - TS 3989RS RR Check	55.9	-	-	10-06	40	1.0
TA Seeds - TS 3609L	55.8	-	-	10-07	44	1.0
Experimental - Md 03-5453	53.4	51.5	52.5	10-02	37	1.7
Experimental - Md 0708WN 55	52.6	-	-	10-03	38	2.3
Experimental - Md 05-5585	52.1	48.1	50.1	9-30	38	1.3
Experimental - Md 05-5633	51.7	53.3	52.5	10-04	37	3.7
Experimental - Md 07-5964	42.2	-	-	10-11	37	1.0
<b>Mean</b>	<b>55.4</b>	<b>50.5</b>	<b>53.0</b>	-	<b>38</b>	<b>1.5</b>
<b>LSD 0.20</b>	<b>4.8</b>	<b>3.4</b>	-	-	<b>3</b>	<b>0.5</b>
<b>CV, %</b>	<b>8.2</b>	<b>6.2</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
S.States - LL430N	52.3	60.0	56.2	10-07	39	1.0
Public - IA 4004	52.0	-	-	10-01	34	3.0
Public (IL) - LD 00-2817P	51.8	51.0	51.4	9-30	37	1.3
USG - 74B58 RR Check	50.3	-	-	10-05	34	1.0
DynaGro - SX10342L	49.9	-	-	10-03	39	1.0
Experimental - Md 0708WN 120	49.5	-	-	9-27	37	1.0
Public (IL) - LD 00-3309	48.8	48.0	48.4	9-25	31	1.0
DynaGro - 39LL43	48.3	-	-	10-06	38	1.0
S.States - LL426N	48.2	-	-	9-30	39	1.3
Experimental - Md 07-5100	48.2	-	-	10-13	38	1.3
Public - Prohio	47.9	58.0	53.0	10-01	37	1.3
Public - Monocacy	47.9	58.8	53.3	10-02	38	1.3
Experimental - Md 06-5401	47.9	57.0	52.4	10-03	38	1.0
S.States - LL450N	45.1	57.5	51.3	9-30	42	1.0
Experimental - Md 06-5700	44.2	57.1	50.7	10-05	37	3.3
Experimental - Md 04-5217	43.9	57.3	50.6	9-30	37	3.7
Experimental - Md 06-5693	43.4	51.6	47.5	10-04	37	1.7

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

Brand – Entry	Seed Yield, Bu/A			Maturity Date	2010	
	2010	2009	2-Year		Height, Inches	Lodging Score*
<b>MATURITY GROUP 4 - Continued</b>						
Experimental - Md 04-5545	42.4	54.4	48.4	10-04	40	2.0
Experimental - Md 0607WN 32	41.3	54.0	47.6	10-05	35	1.3
Experimental - Md 07-5959	35.6	-	-	10-02	35	1.3
Experimental - Md 07-5769	35.0	-	-	10-05	42	1.7
<b>Mean</b>	<b>46.4</b>	<b>54.9</b>	<b>50.7</b>	-	<b>37</b>	<b>1.6</b>
<b>LSD 0.20</b>	<b>5.5</b>	<b>4.2</b>	-	-	<b>3</b>	<b>0.6</b>
<b>CV, %</b>	<b>11.1</b>	<b>7.3</b>	-	-	-	-
<b>MATURITY GROUP 4s</b>						
Public - KS 4602N	56.1	49.8	53.0	10-10	38	1.0
Experimental - Md 00-6015	51.5	53.9	52.7	10-11	32	3.0
Experimental - Md 0708WN 225	51.1	-	-	10-14	42	1.7
S.States - RT4996RR Check	48.0	-	-	10-17	43	1.7
Experimental - V 03-4705	47.3	-	-	10-19	39	3.7
S.States - LL499N	46.1	53.2	49.7	10-18	41	2.0
Experimental - Md 06-5356	45.6	52.1	48.9	10-15	43	1.7
Experimental - Md 05-6207	45.4	-	-	10-05	35	1.3
Experimental - Md 01-5866	45.1	53.0	49.0	10-14	33	1.7
Experimental - Md 0708WN 53	45.0	-	-	10-05	33	3.3
Experimental - Md 05-5276	44.1	53.7	48.9	10-13	46	2.3
Experimental - Md 0708WN 214	43.9	44.1	44.0	10-14	41	3.0
Experimental - Md 0607WN 21	43.7	49.4	46.5	10-14	45	2.3
Experimental - V 03-4660	42.9	-	-	10-14	36	3.0
Public - Manokin	42.8	47.3	45.1	10-15	39	4.7
Experimental - Md 0506WN 16	41.7	42.5	42.1	10-11	39	1.3
Experimental - Md 06-5617	40.9	48.4	44.7	10-05	37	1.3
Experimental - Md 03-6420	40.8	47.1	44.0	10-11	45	3.0
TA Seeds -TS 4819L	40.6	-	-	10-14	41	1.3
Experimental - Md 0708WN 187	39.9	-	-	10-12	39	3.0
DynaGro - SX10348L	39.5	-	-	10-06	38	1.0
Experimental - Md 00-5326	39.3	61.2	50.2	10-17	40	1.0
Experimental - Md 07-6091	34.5	-	-	10-14	36	2.7
<b>Mean</b>	<b>44.2</b>	<b>50.5</b>	<b>47.4</b>	-	<b>39</b>	<b>2.2</b>
<b>LSD 0.20</b>	<b>4.8</b>	<b>5.8</b>	-	-	<b>3</b>	<b>0.9</b>
<b>CV, %</b>	<b>10.2</b>	<b>10.7</b>	-	-	-	-

\*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			Maturity Date	2010		
	2010	2009	2-Year		Height, Inches	Lodging Score*	
<b>MATURITY GROUP 3</b>							
S.States - LL396N	61.6	-	-	10-10	36	1.8	
TA Seeds - TS 3989RS RR Check	59.0	-	-	10-06	40	1.8	
TA Seeds - TS 3919L	57.4	-	-	10-08	33	2.0	
DynaGro - 34LL37	56.7	-	-	10-02	34	2.0	
Ohio - OHS 305	54.7	61.1	57.9	9-28	34	2.3	
DynaGro - 36LL39	53.0	-	-	10-07	31	1.3	
TA Seeds - TS 3609L	51.3	-	-	10-05	37	2.2	
Experimental - Md 0708WN 55	48.2	-	-	9-25	31	2.3	
Experimental - Md 03-5453	47.8	55.4	51.6	9-24	31	2.7	
Public - IA 3024	47.8	59.6	53.7	9-23	29	2.3	
Public - Macon	46.9	61.6	54.2	9-28	32	2.2	
Public – Dennison	44.0	52.3	48.1	10-01	29	2.0	
Experimental - V 02-8659	38.6	63.4	51.0	9-29	35	2.2	
Experimental - Md 05-5585	37.3	55.8	46.5	9-23	34	2.3	
Experimental - Md 05-5633	33.8	55.6	44.7	9-24	31	2.3	
Experimental - Md 07-5964	27.3	-	-	9-23	29	1.7	
	<b>Mean</b>	<b>47.8</b>	<b>58.9</b>	<b>53.4</b>	-	<b>33</b>	<b>2.1</b>
	<b>LSD 0.20</b>	<b>9.0</b>	<b>4.8</b>	-	-	<b>3</b>	<b>ns</b>
	<b>CV,%</b>	<b>17.6</b>	<b>7.6</b>	-	-	-	-
<b>MATURITY GROUP 4</b>							
Public (IL) - LD 00-3309	62.8	66.4	64.6	10-06	40	2.7	
S.States - LL426N	60.1	-	-	10-08	47	3.0	
DynaGro - 39LL43	59.5	-	-	10-09	46	3.2	
S.States - LL430N	59.4	64.7	62.0	10-07	44	3.2	
USG - 74B58 RR Check	58.4	-	-	10-07	38	1.8	
DynaGro - SX10342L	57.7	-	-	10-07	45	3.0	
Experimental - Md 06-5401	55.9	59.9	57.9	10-11	44	2.2	
Experimental - Md 0708WN 120	55.8	-	-	10-06	38	3.7	
Public - Monocacy	55.7	67.0	61.4	10-07	42	2.8	
Experimental - Md 07-5100	53.8	-	-	10-12	36	3.2	
Public - IA 4004	53.8	-	-	9-29	37	3.7	
Experimental - Md 07-5959	53.4	-	-	10-09	37	3.3	
S.States - LL450N	53.4	63.9	58.6	10-08	49	3.0	
Public (IL) - LD 00-2817P	52.1	66.2	59.2	10-06	41	3.2	
Experimental - Md 06-5700	49.3	51.4	50.3	10-03	37	3.7	
Public - Prohio	47.3	61.1	54.2	10-07	39	2.7	
Experimental - Md 0607WN 32	46.7	54.2	50.4	10-12	42	3.0	

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

Brand – Entry	Seed Yield, Bu/A			Maturity Date	2010	
	2010	2009	2-Year		Height, Inches	Lodging Score*
<b>MATURITY GROUP 4 - Continued</b>						
Experimental - Md 04-5217	44.2	60.1	52.1	10-09	42	3.7
Experimental - Md 04-5545	42.8	56.7	49.8	10-10	42	3.5
Experimental - Md 07-5769	42.4	-	-	10-09	46	4.0
Experimental - Md 06-5693	41.9	51.5	46.7	10-11	40	3.7
<b>Mean</b>	<b>52.7</b>	<b>59.0</b>	<b>55.9</b>	-	<b>42</b>	<b>3.1</b>
<b>LSD 0.20</b>	<b>5.9</b>	<b>4.9</b>	-	-	<b>2</b>	<b>0.4</b>
<b>CV,%</b>	<b>10.6</b>	<b>7.8</b>	-	-	-	-
<b>MATURITY GROUP 4s</b>						
S.States - RT4996RR Check	62.9	-	-	10-17	46	3.0
Experimental - Md 05-6207	57.3	-	-	10-09	41	1.2
Experimental - V 03-4705	55.9	-	-	10-17	37	2.3
Experimental - Md 01-5866	53.6	58.6	56.1	10-12	32	1.3
Public - KS 4602N	53.4	56.2	54.8	10-11	41	1.0
Experimental - Md 05-5276	53.4	59.3	56.3	10-13	45	4.0
Experimental - V 03-4660	49.1	-	-	10-14	34	2.5
Experimental - Md 00-6015	48.8	59.4	54.1	10-14	29	1.0
Experimental - Md 00-5326	47.4	67.9	57.7	10-15	47	1.0
DynaGro - SX10348L	46.5	-	-	10-09	45	1.0
S.States - LL499N	45.8	62.3	54.1	10-16	43	1.2
Public - Manokin	45.8	54.7	50.2	10-14	33	3.5
TA Seeds - TS 4819L	43.2	-	-	10-09	41	1.0
Experimental - Md 0708WN 53	42.9	-	-	10-11	36	5.0
Experimental - Md 06-5356	42.5	53.6	48.1	10-13	43	1.0
Experimental - Md 03-6420	40.9	56.5	48.7	10-12	43	1.5
Experimental - Md 0506WN 16	38.9	53.2	46.0	10-10	42	2.7
Experimental - Md 0708WN 214	38.3	50.7	44.5	10-11	33	2.2
Experimental - Md 0708WN 225	38.2	-	-	10-15	46	2.2
Experimental - Md 0708WN 187	37.7	-	-	10-13	41	2.7
Experimental - Md 07-6091	37.0	-	-	10-17	36	1.8
Experimental - Md 0607WN 21	36.7	52.1	44.4	10-17	48	2.7
Experimental - Md 06-5617	35.3	54.9	45.1	10-08	41	1.0
<b>Mean</b>	<b>45.7</b>	<b>55.7</b>	<b>50.7</b>	-	<b>40</b>	<b>2.0</b>
<b>LSD 0.20</b>	<b>8.0</b>	<b>6.0</b>	-	-	<b>4</b>	<b>0.9</b>
<b>CV,%</b>	<b>16.6</b>	<b>10.1</b>	-	-	-	-

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

Brand – Entry	Seed Yield, Bu/A			Maturity Date	2010	
	2010	2009	2-Year		Height, Inches	Lodging Score*
	<b>MATURITY GROUP 5</b>					
Experimental - Md 99-6226	31.4	64.8	48.1	10-11	25	1.2
Public - Osage	30.6	-	-	10-16	27	1.0
Experimental - Md 0708WN 93	29.5	-	-	10-16	25	1.2
USG - 75J10R RR Check	28.9	-	-	10-09	29	1.2
Public - 5002T	28.5	57.8	43.2	10-10	25	1.0
Experimental - Md 0607WN 51	28.4	52.0	40.2	10-09	34	2.2
Experimental - Md 0607WN 38	28.0	46.4	37.2	10-08	29	1.5
Experimental - Md 06-5415	28.0	47.3	37.7	10-09	43	2.3
Public - Hutcheson	27.5	60.5	44.0	10-15	31	1.3
Experimental - Md 0708WN 66	26.9	-	-	10-09	34	2.2
Public - 5601T	26.9	55.0	40.9	10-17	33	1.5
Experimental - Md 06-6182	26.1	49.0	37.5	10-09	34	2.0
Public - Glenn	25.4	59.2	42.3	10-12	26	2.0
Public - Essex	25.1	58.5	41.8	10-07	24	1.3
Experimental - Md 0708WN 50	24.3	43.6	34.0	10-09	37	2.2
Experimental - Md 0708WN 182	23.0	-	-	10-09	43	2.3
Experimental - Md 0708WN 145	23.0	-	-	10-09	38	2.3
Experimental - Md 05-5468	22.1	55.0	38.5	10-11	28	1.2
Experimental - Md 0708WN 90	18.3	-	-	10-13	38	2.3
<b>Mean</b>	<b>26.4</b>	<b>56.3</b>	<b>41.4</b>	-	<b>32</b>	<b>1.7</b>
<b>LSD 0.20</b>	<b>4.2</b>	<b>4.4</b>	-	-	<b>3</b>	<b>0.4</b>
<b>CV,%</b>	<b>14.8</b>	<b>7.3</b>	-	-	-	-

\*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.

Brand – Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
Ohio - OHS 305	49.5	59.1	54.3	9-25	32	2.5
S.States - LL396N	47.8	-	-	9-30	33	1.5
DynaGro - 34LL37	46.4	-	-	9-27	34	2.2
TA Seeds - TS 3609L	46.1	-	-	10-03	36	1.8
DynaGro - 36LL39	44.9	-	-	10-01	35	1.8
Experimental - Md 05-5585	44.2	52.6	48.4	9-25	37	2.7
TA Seeds - TS 3919L	44.2	-	-	9-29	33	1.7
Public - Macon	42.0	57.3	49.6	9-28	29	2.2
Experimental - V 02-8659	41.5	51.8	46.6	9-25	36	3.0
Experimental - Md 03-5453	41.1	51.7	46.4	9-27	30	2.2
Public - Dennison	40.1	55.9	48.0	9-25	26	1.5
Experimental - Md 05-5633	39.8	58.2	49.0	9-26	31	2.8
Experimental - Md 0708WN 55	38.9	-	-	9-25	31	2.2
Experimental - Md 07-5964	37.8	-	-	9-28	31	2.3
TA Seeds - TS 3989RS RR Check	37.3	-	-	9-26	33	1.8
Public - IA 3024	36.5	58.0	47.3	9-27	28	1.7
<b>Mean</b>	<b>42.4</b>	<b>56.7</b>	<b>49.6</b>	-	<b>32</b>	<b>2.1</b>
<b>LSD 0.20</b>	<b>5.8</b>	<b>3.4</b>	-	-	<b>3</b>	<b>0.6</b>
<b>CV, %</b>	<b>12.9</b>	<b>5.5</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
Experimental - Md 0708WN 120	60.0	-	-	9-25	34	3.0
USG - 74B58 RR Check	56.6	-	-	9-28	34	1.5
S.States - LL426N	56.5	-	-	9-27	41	2.7
DynaGro - SX10342L	54.2	-	-	9-27	40	3.0
DynaGro - 39LL43	51.9	-	-	10-08	40	2.5
S.States - LL430N	51.4	64.0	57.7	10-04	39	2.7
S.States - LL450N	50.5	57.0	53.8	9-26	46	2.3
Public - IA 4004	49.3	-	-	9-26	33	3.2
Experimental - Md 06-5401	46.6	52.5	49.6	10-05	41	2.3
Public - Monocacy	46.5	58.8	52.6	10-01	39	2.3
Experimental - Md 06-5700	45.8	50.1	48.0	9-27	37	4.0
Public (IL) - LD 00-3309	45.6	58.8	52.2	9-25	30	2.2
Public (IL) - LD 00-2817P	45.6	60.3	52.9	9-25	37	2.2
Experimental - Md 0607WN 32	45.5	51.6	48.5	10-11	40	3.0
Experimental - Md 06-5693	45.4	53.1	49.3	10-09	41	3.3
Experimental - Md 04-5545	44.3	53.6	48.9	10-08	37	3.5
Public - Prohio	43.8	53.7	48.7	9-27	35	2.8

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

Brand – Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 4 - Continued</b>					
Experimental - Md 07-5100	41.1	-	-	10-10	34	2.2
Experimental - Md 07-5959	40.9	-	-	10-02	34	3.0
Experimental - Md 04-5217	39.2	51.2	45.2	9-28	36	3.5
Experimental - Md 07-5769	38.2	-	-	10-09	42	3.5
<b>Mean</b>	<b>47.6</b>	<b>54.0</b>	<b>50.8</b>	-	<b>38</b>	<b>2.8</b>
<b>LSD 0.20</b>	<b>4.7</b>	<b>3.0</b>	-	-	<b>3</b>	<b>0.3</b>
<b>CV, %</b>	<b>9.3</b>	<b>5.2</b>	-	-	-	-
<b>MATURITY GROUP 4s</b>						
Experimental - Md 05-6207	48.9	-	-	9-30	35	1.8
DynaGro - SX10348L	46.7	-	-	10-06	42	1.5
Experimental - Md 06-5617	46.5	50.2	48.4	9-27	37	3.2
Experimental - Md 00-6015	45.4	59.5	52.4	10-07	29	1.7
Experimental - Md 01-5866	45.2	54.7	49.9	10-05	27	1.7
TA Seeds - TS 4819L	45.0	-	-	10-04	39	1.5
Public - KS 4602N	44.9	54.1	49.5	10-02	38	2.3
S.States - LL499N	44.8	59.8	52.3	10-09	40	1.8
Experimental - Md 03-6420	44.1	57.2	50.6	10-04	42	2.5
Experimental - Md 05-5276	43.8	54.2	49.0	10-07	46	3.0
Experimental - V 03-4660	42.0	-	-	10-11	39	2.8
Experimental - Md 0708WN 53	41.3	-	-	10-02	32	3.5
Experimental - Md 0708WN 214	41.1	49.9	45.5	10-05	37	2.7
Experimental - Md 00-5326	40.4	62.9	51.7	10-08	38	1.8
Public - Manokin	39.4	51.0	45.2	10-10	35	2.8
Experimental - Md 0506WN 16	39.2	49.0	44.1	9-30	40	2.3
Experimental - Md 0708WN 225	39.0	-	-	10-02	40	2.3
S.States - RT4996RR Check	36.8	-	-	10-03	38	2.3
Experimental - V 03-4705	36.5	-	-	10-08	36	2.7
Experimental - Md 06-5356	34.8	53.9	44.4	10-02	39	1.7
Experimental - Md 0607WN 21	34.5	46.5	40.5	9-29	41	3.0
Experimental - Md 0708WN 187	34.3	-	-	10-04	38	3.3
Experimental - Md 07-6091	32.1	-	-	10-10	36	2.5
<b>Mean</b>	<b>41.2</b>	<b>53.7</b>	<b>47.5</b>	-	<b>37</b>	<b>2.4</b>
<b>LSD 0.20</b>	<b>4.4</b>	<b>3.4</b>	-	-	<b>5</b>	<b>0.4</b>
<b>CV, %</b>	<b>10.0</b>	<b>6.0</b>	-	-	-	-

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

Brand – Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 5</b>					
Public - Glenn	59.4	59.3	59.4	10-16	36	3.0
Public - 5002T	56.3	44.0	50.2	10-10	32	2.7
Experimental - Md 99-6226	50.8	56.2	53.5	10-10	34	2.3
USG - 75J10R RR Check	49.9	-	-	10-11	39	2.3
Experimental - Md 0607WN 51	46.0	45.9	45.9	10-14	39	3.0
Public - 5601T	45.8	59.3	52.5	10-16	43	3.2
Experimental - Md 0708WN 93	44.9	-	-	10-15	32	1.7
Experimental - Md 06-6182	43.7	47.2	45.5	10-15	41	3.2
Public - Essex	43.2	54.3	48.8	10-11	31	2.7
Experimental - Md 05-5468	43.1	49.6	46.4	10-13	40	2.7
Public - Osage	41.6	-	-	10-13	33	1.8
Experimental - Md 0607WN 38	40.8	49.5	45.2	10-13	41	3.2
Experimental - Md 0708WN 66	40.2	-	-	10-14	48	4.3
Experimental- Md 0708WN 182	39.1	-	-	10-14	58	4.5
Public - Hutcheson	38.1	52.2	45.1	10-13	35	2.5
Experimental - Md 0708WN 145	34.8	-	-	10-09	49	2.5
Experimental - Md 0708WN 90	33.8	-	-	10-14	48	2.8
Experimental - Md 06-5415	32.5	44.5	38.5	10-11	51	2.8
Experimental - Md 0708WN 50	32.2	49.1	40.7	10-08	49	3.5
<b>Mean</b>	<b>43.0</b>	<b>51.7</b>	<b>47.4</b>	-	<b>41</b>	<b>2.9</b>
<b>LSD 0.20</b>	<b>6.9</b>	<b>4.6</b>	-	-	<b>4</b>	<b>0.5</b>
<b>CV, %</b>	<b>15.0</b>	<b>8.3</b>	-	-	-	-

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



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

Brand - Entry	2010						
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*	
	2010	2009	2-Year				
<b>MATURITY GROUP 3</b>							
Public - IA 3024	46.4	55.2	50.8	10-10	27	1.3	
TA Seeds - TS 3919L	45.2	-	-	10-15	29	1.0	
S.States - LL396N	45.0	-	-	10-16	28	1.0	
DynaGro - 36LL39	44.2	-	-	10-17	31	1.2	
DynaGro - 34LL37	43.5	-	-	10-12	30	1.3	
TA Seeds - TS 3989RS RR	43.0	-	-	10-19	29	1.2	
Experimental - V 02-8659	42.8	56.2	49.5	10-16	33	2.2	
TA Seeds - TS 3609L	41.7	-	-	10-17	32	1.3	
Public - Dennison	41.6	60.0	50.8	10-10	27	1.2	
Public - Macon	41.3	60.8	51.0	10-15	27	1.3	
Experimental - Md 05-5633	40.8	58.9	49.8	10-16	28	1.8	
Experimental - Md 0708WN 55	40.2	-	-	10-11	26	1.3	
Ohio - OHS 305	39.0	61.9	50.5	10-14	28	1.2	
Experimental - Md 03-5453	37.0	56.4	46.7	10-12	26	1.0	
Experimental - Md 07-5964	34.2	-	-	10-10	26	1.2	
Experimental - Md 05-5585	33.5	50.3	41.9	10-12	28	1.3	
	<b>Mean</b>	<b>41.2</b>	<b>56.6</b>	<b>48.9</b>	<b>-</b>	<b>28</b>	<b>1.3</b>
	<b>LSD 0.20</b>	<b>4.1</b>	<b>ns</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>0.3</b>
	<b>CV, %</b>	<b>9.2</b>	<b>9.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>MATURITY GROUP 4</b>							
USG 74B58 RR Check	43.3	-	-	10-18	25	1.0	
S.States - LL450N	42.6	56.2	49.4	10-19	33	1.5	
DynaGro - 39LL43	42.4	-	-	10-19	30	1.5	
Public - Monocacy	41.6	64.6	53.1	10-17	30	1.7	
S.States - LL426N	41.0	-	-	10-15	28	1.2	
S.States - LL430N	40.5	62.4	51.5	10-19	30	1.7	
DynaGro - SX10342L	38.9	-	-	10-17	29	1.3	
Experimental - Md 07-5100	38.5	-	-	10-21	29	2.5	
Public - Prohio	37.9	56.9	47.4	10-16	27	1.8	
Experimental - Md 0708WN 120	37.1	-	-	10-14	26	1.3	
Experimental - Md 07-5959	36.9	-	-	10-18	27	2.2	
Experimental - Md 06-5401	36.9	59.2	48.1	10-17	29	1.3	
Public (IL) - LD 00-2817P	36.4	52.3	44.3	10-12	28	1.0	
Experimental - Md 0607WN 32	35.6	58.6	47.1	10-19	32	1.8	
Experimental - Md 06-5700	35.5	49.9	42.7	10-15	28	2.8	
Public (IL) - LD 00-3309	35.4	54.7	45.1	10-11	24	1.0	
Public - IA 4004	35.3	-	-	10-10	26	1.3	

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

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
<b>MATURITY GROUP 4 - Continued</b>						
Experimental - Md 04-5545	34.7	52.4	43.6	10-19	30	2.0
Experimental - Md 06-5693	32.5	50.5	41.5	10-18	29	1.8
Experimental - Md 07-5769	31.8	-	-	10-17	31	2.8
Experimental - Md 04-5217	29.3	47.8	38.6	10-14	28	2.0
<b>Mean</b>	<b>37.3</b>	<b>53.4</b>	<b>45.4</b>	-	<b>28</b>	<b>1.7</b>
<b>LSD 0.20</b>	<b>4.6</b>	<b>5.7</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>11.7</b>	<b>9.9</b>	-	-	-	-
<b>MATURITY GROUP 4s</b>						
Experimental - V 03-4705	40.4	-	-	11-01	30	2.8
S.States - RT4996RR Check	40.2	-	-	10-26	34	2.3
DynaGro - SX10348L	39.2	-	-	10-18	33	1.2
S.States - LL499N	38.4	62.7	50.6	10-29	29	1.2
Experimental - Md 06-5356	36.8	54.7	45.8	10-19	30	1.3
Experimental - Md 03-6420	36.4	57.0	46.7	10-20	31	2.0
Experimental - Md 0607WN 21	35.1	36.7	35.9	10-30	30	2.0
Experimental - V 03-4660	34.9	-	-	10-29	30	2.5
Experimental - Md 0708WN 225	34.6	-	-	10-19	29	1.7
TA Seeds - TS 4819L	34.3	-	-	10-19	33	1.2
Experimental - Md 05-6207	34.3	-	-	10-14	28	1.0
Experimental - Md 00-6015	34.3	56.9	45.6	10-17	22	1.2
Experimental - Md 0506WN 16	33.4	50.1	41.8	10-15	28	1.5
Experimental - Md 0708WN 53	33.4	-	-	10-17	25	2.2
Experimental - Md 06-5617	33.2	50.3	41.8	10-16	27	1.3
Experimental - Md 0708WN 214	33.1	44.6	38.8	10-17	25	2.5
Experimental - Md 00-5326	33.0	59.7	46.3	10-18	31	1.3
Experimental - Md 05-5276	31.8	60.0	45.9	10-17	32	1.8
Experimental - Md 01-5866	31.7	47.4	39.6	10-19	25	1.3
Public - KS 4602N	31.7	56.0	43.9	10-15	28	1.5
Experimental - Md 07-6091	31.1	-	-	10-26	24	2.2
Public - Manokin	30.9	41.9	36.4	10-20	32	3.0
Experimental - Md 0708WN 187	27.6	-	-	10-17	27	2.0
<b>Mean</b>	<b>34.3</b>	<b>50.3</b>	<b>42.3</b>	-	<b>29</b>	<b>1.8</b>
<b>LSD 0.20</b>	<b>4.0</b>	<b>5.5</b>	-	-	<b>2</b>	<b>0.4</b>
<b>CV, %</b>	<b>10.9</b>	<b>10.2</b>	-	-	-	-

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

Brand - Entry	2010					
	Seed Yield, Bu/A			Maturity Date	Height, Inches	Lodging Score*
	2010	2009	2-Year			
<b>MATURITY GROUP 5</b>						
Experimental - Md 99-6226	40.0	53.8	46.9	10-27	26	1.7
Experimental - Md 05-5468	38.9	46.7	42.8	10-30	28	2.2
Experimental - Md 0708WN 93	37.2	-	-	10-31	24	1.2
Public - Essex	36.8	49.8	43.3	10-20	24	1.3
Public - Osage	36.6	-	-	10-31	24	1.3
Public - 5601T	36.4	55.0	45.7	10-31	30	2.0
Public - Hutcheson	36.2	45.5	40.9	10-29	27	2.2
USG - 75J10R RR Check	36.1	-	-	10-21	25	1.3
Public - 5002T	36.1	49.3	42.7	10-23	27	2.3
Public - Glenn	35.4	51.0	43.2	10-28	26	2.3
Experimental - Md 0708WN 145	32.6	-	-	10-30	34	1.7
Experimental - Md 06-6182	31.3	33.2	32.3	10-30	32	2.5
Experimental - Md 0708WN 66	30.2	-	-	10-20	28	1.7
Experimental - Md 0607WN 51	30.0	31.5	30.8	10-29	32	3.0
Experimental - Md 0708WN 50	29.9	37.9	33.9	10-20	29	2.2
Experimental - Md 0607WN 38	29.5	32.5	31.0	10-30	33	2.8
Experimental - Md 0708WN 90	29.5	-	-	10-25	31	1.7
Experimental - Md 06-5415	29.3	30.7	30.0	10-25	31	2.2
Experimental - Md 0708WN 182	28.9	-	-	10-25	34	2.3
<b>Mean</b>	<b>33.7</b>	<b>45.4</b>	<b>39.6</b>	-	<b>29</b>	<b>2.0</b>
<b>LSD 0.20</b>	<b>2.6</b>	<b>4.5</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>7.2</b>	<b>9.3</b>	-	-	-	-

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

Table 8. Relative yields of non-Roundup Ready soybean varieties compared to the mean of all varieties in that maturity group at each location in 2010.

Brand - Entry	Clarksville	Queenstown	Quantico	
			Full Season	Double Crop
<b>MATURITY GROUP 3</b>				
	<b>Relative Yield, % of Mean</b>			
Public - Dennison	105*	92	95	101
DynaGro - 34LL37	101*	119*	109*	105*
DynaGro - 36LL39	106*	111*	106*	107*
Public - IA 3024	106*	100	86	113*
Public - Macon	106*	98	99	100
Experimental - Md 03-5453	96	100	97	90
Experimental - Md 05-5585	94	78	104*	81
Experimental - Md 05-5633	93	71	94	99
Experimental - Md 07-5964	76	57	89	83
Experimental - Md 0708WN 55	95	101	92	98
Ohio - OHS 305	104*	114*	117*	95
S.States - LL396N	110*	129*	113*	109*
TA Seeds - TS 3609L	101	107	109*	101
TA Seeds - TS 3919L	101	120*	104*	110*
Experimental - V 02-8659	103*	81	98	104*
TA Seeds - TS 3989RS RR	101	123*	88	104*
<b>Location/Group Mean Yield</b>	<b>55.4</b>	<b>47.8</b>	<b>42.4</b>	<b>41.2</b>
<b>MATURITY GROUP 4</b>				
DynaGro - 39LL43	104*	113*	109	114*
DynaGro - SX10342L	108*	109*	114	104*
Public - IA 4004	112*	102	104	95
Public (IL) - LD 00-2817P	112*	99	96	98
Public (IL) - LD 00-3309	105*	119*	96	95
Experimental - Md 04-5217	95	84	82	79
Experimental - Md 04-5545	91	81	93	93
Experimental - Md 06-5401	103*	106	98	99
Experimental - Md 06-5700	95	93	96	95
Experimental - Md 06-5693	94	79	95	87
Experimental - Md 0607WN 32	89	89	96	95
Experimental - Md 07-5769	76	80	80	85
Experimental - Md 07-5959	77	101	86	99
Experimental - Md 0708WN 120	107*	106	126*	99
Public - Monocacy	103*	106	98	111*
Public - Prohio	103*	90	92	102
S.States - LL426N	104*	114*	119*	110*
S.States - LL430N	113*	113*	108	109*
S.States - LL450N	97	101	106	114*
Experimental - Md 07-5100	104*	102	86	103
USG 74B58 RR Check	108*	111*	119*	116*
<b>Location/Group Mean Yield</b>	<b>46.4</b>	<b>52.7</b>	<b>47.6</b>	<b>37.3</b>

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

Brand - Entry	Clarksville	Queenstown	Quantico	
			Full Season	Double Crop
<b>MATURITY GROUP 4s</b>		<b>Relative Yield, % of Mean</b>		
DynaGro - SX10348L	89	102	113*	114*
Public - KS 4602N	127*	117	109*	92
Public - Manokin	97	100	96	90
Experimental - Md 00-5326	89	104	98	96
Experimental - Md 00-6015	116*	107	110*	100
Experimental - Md 01-5866	102	117	110*	93
Experimental - Md 03-6420	92	89	107	106
Experimental - Md 05-5276	100	117	106	93
Experimental - Md 05-6207	103	125*	119*	100
Experimental - Md 0506WN 16	94	85	95	97
Experimental - Md 06-5356	103	93	85	107*
Experimental - Md 06-5617	93	77	113*	97
Experimental - Md 0607WN 21	99	80	84	102
Experimental - Md 07-6091	78	81	78	91
Experimental - Md 0708WN 53	102	94	100	97
Experimental - Md 0708WN 187	90	82	83	80
Experimental - Md 0708WN 214	99	84	100	96
Experimental - Md 0708WN 225	116	84	95	101
S.States - LL499N	104	100	109*	112*
TA Seeds - TS 4819L	92	95	109*	100
Experimental - V 03-4660	97	107	102	102
Experimental - V 03-4705	107	122*	88	118*
S.States - RT4996RR Check	109	138*	89	117*
<b>Location/Group Mean Yield</b>	<b>44.2</b>	<b>45.7</b>	<b>41.2</b>	<b>34.3</b>
<b>MATURITY GROUP 5</b>				
Public - Essex	-	95	100	109
Public - Glenn	-	96	138*	105
Public - Hutcheson	-	104*	89	107
Experimental - Md 99-6226	-	119*	118	119*
Experimental - Md 05-5468	-	84	100	116*
Experimental - Md 06-5415	-	106*	76	87
Experimental - Md 06-6182	-	99	102	93
Experimental - Md 0607WN 38	-	106*	95	88
Experimental - Md 0607WN 51	-	108*	107	89
Experimental - Md 0708WN 50	-	92	75	89
Experimental - Md 0708WN 66	-	102	94	90

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

Brand - Entry	Clarksville	Queenstown	Quantic	
			Full Season	Double Crop
<b>MATURITY GROUP 5 (Continued)</b>		<b>Relative Yield, % of Mean</b>		
Experimental - Md 0708WN 90	-	69	79	87
Experimental - Md 0708WN 93	-	112*	104	110
Experimental - Md 0708WN 145	-	87	81	97
Experimental - Md 0708WN 182	-	87	91	86
Public - Osage	-	116*	97	108
Public - 5002T	-	108*	131*	107
Public - 5601T	-	102	107	108
USG - 75J10R RR Check	-	109*	116	107
<b>Location/Group Mean Yield</b>	-	<b>26.4</b>	<b>43.0</b>	<b>33.7</b>

\*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 Clarksville.

Brand - Entry	Seed Yield, Bu/A			Maturity Date	2010	
	2010	2009	2-Year		Height, Inches	Lodging Score*
<b>MATURITY GROUP 3</b>						
TA Seeds - TS3989RS	56.4	50.2	53.3	10-08	35	1.0
S.States - SS3820NR2	53.0	44.1	48.6	10-03	37	2.0
S.States - RT3871N	52.9	49.7	51.3	10-10	34	1.7
Doeblers - RPM DB3809RR	52.7	-	-	10-03	34	1.0
Doeblers - RPM DB3519RR	52.2	-	-	9-29	33	1.0
S.States - SS3910NR2	52.0	-	-	10-03	37	1.3
Mid Atlantic - MAS 3511RR2	51.8	-	-	10-01	36	1.3
DynaGro - 37RY39	51.5	-	-	10-08	35	1.3
S.States - EXP3702R2	51.2	-	-	10-05	35	1.3
USG - 73F59R	51.0	45.6	48.3	10-02	37	1.7
S.States - RT3971N	50.7	44.7	47.7	10-05	35	1.7
Mid Atlantic - MAS 3781NRR	50.5	36.2	43.3	10-03	35	1.3
DynaGro - V39N9RR	50.2	57.0	53.6	10-09	35	1.7
USG - 73H77	49.8	47.9	48.9	10-04	37	2.0
Mid Atlantic - MAS 3955RR	49.6	49.0	49.3	10-06	35	1.3
Mid Atlantic - MAS 3977RR2	49.5	-	-	10-09	39	1.7
Doeblers - RPM DB3909RR	48.2	-	-	10-03	35	1.3
Hisoy - HS35A90	45.8	-	-	9-30	35	2.7
Mid Atlantic - MAS 3411NRR2	44.7	-	-	10-06	36	1.7
<b>Mean</b>	<b>50.7</b>	<b>48.1</b>	<b>49.4</b>	-	<b>36</b>	<b>1.5</b>
<b>LSD 0.20</b>	<b>3.7</b>	<b>7.6</b>	-	-	<b>3</b>	<b>0.6</b>
<b>MATURITY GROUP 4</b>	<b>CV, %</b>	<b>6.8</b>	<b>14.9</b>	-	-	-
Mid Atlantic - MAS 4217NRR	65.6	-	-	10-13	42	3.0
DynaGro - 35X43	62.7	64.7	63.7	10-13	40	4.7
Hisoy - HS41A02	59.7	-	-	10-15	43	3.3
DynaGro - 32RY40	59.3	-	-	10-13	41	2.7
Mid Atlantic - MAS 4399RR/STS	59.0	64.2	61.6	10-11	42	3.7
S.States - RT4370N	57.2	59.2	58.2	10-14	43	2.3
Mid Atlantic - MAS 4444NRR2	57.1	-	-	10-13	46	3.0
DynaGro - 39RY41	56.6	-	-	10-06	34	2.0
Hisoy - HS42T80	56.6	67.3	62.0	10-07	43	3.3
USG - 74B58	56.2	56.4	56.3	10-08	35	1.7
Doeblers - RPM DB4409RR	55.1	-	-	10-13	44	3.7
S.States - RT4470N	54.9	60.5	57.7	10-11	30	1.7
S.States - SS4510NR2	53.2	-	-	10-13	42	2.3
TA Seeds - TS4299RS	52.6	64.0	58.3	10-06	36	2.7
TA Seeds - TS4499R	52.0	58.4	55.2	10-11	40	1.7
USG - 74T59	49.7	-	-	10-17	48	2.7
<b>Mean</b>	<b>56.7</b>	<b>60.2</b>	<b>58.5</b>	-	<b>40</b>	<b>2.8</b>
<b>LSD 0.20</b>	<b>5.7</b>	<b>4.2</b>	-	-	<b>3</b>	<b>0.8</b>
<b>CV, %</b>	<b>9.4</b>	<b>6.5</b>	-	-	-	-

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

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 4s</b>					
DynaGro - 33G48	52.6	61.4	57.0	10-18	40	2.3
S.States - RT4808N	51.5	62.5	57.0	10-11	42	2.0
DynaGro - 37RY47	51.1	-	-	10-11	36	1.7
USG - 74A69R	49.0	65.8	57.4	10-09	37	2.0
S.States - SS4700R2	48.9	-	-	10-12	36	1.7
S.States - RT4888N	48.8	-	-	10-13	43	1.7
S.States - SS4720NR2	48.7	-	-	10-11	40	2.3
S.States - RT4996N	48.2	61.9	55.1	10-19	44	2.0
USG - 74F96	48.0	-	-	10-17	42	1.7
S.States - RT4777N	47.4	61.6	54.5	10-16	43	2.3
USG - 74E88	47.3	53.1	50.2	10-09	38	1.7
DynaGro - 34RY46	46.6	-	-	10-12	36	2.0
S.States - RT4710N	45.1	-	-	10-11	34	1.0
DynaGro - V47N8RR	42.8	64.3	53.6	10-13	38	1.7
USG - 74T98	41.8	-	-	10-20	39	3.0
<b>Mean</b>	<b>47.9</b>	<b>62.0</b>	<b>55.0</b>	-	<b>39</b>	<b>1.9</b>
<b>LSD 0.20</b>	<b>4.5</b>	<b>4.9</b>	-	-	<b>3</b>	<b>0.7</b>
<b>CV, %</b>	<b>8.7</b>	<b>7.3</b>	-	-	-	-

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



Table 10. Performance of Roundup Ready soybean varieties planted full season at Queenstown.

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
DynaGro - 37RY39	79.2	-	-	10-01	43	2.7
S.States - RT3971N	73.6	56.6	65.1	9-29	40	1.7
Doebblers - RPM DB3909RR	70.2	-	-	10-03	45	2.8
Mid Atlantic - MAS 3411NRR2	67.8	-	-	9-28	46	2.7
S.States - RT3871N	67.3	55.2	61.3	10-05	43	2.8
USG - 73F59R	66.7	66.3	66.5	9-29	40	2.7
DynaGro - V39N9RR	66.2	53.1	59.7	9-26	40	2.2
Mid Atlantic - MAS 3955RR	64.7	57.2	61.0	10-07	42	2.0
USG - 73H77	63.8	53.5	58.7	10-03	42	3.2
TA Seeds - TS3989RS	63.5	56.6	60.1	10-07	45	2.0
S.States - SS3910NR2	63.2	-	-	10-08	44	2.8
Mid Atlantic - MAS 3781NRR	63.0	62.1	62.6	10-02	42	2.5
Hisoy - HS35A90	62.9	-	-	9-23	40	2.3
S.States - EXP3702R2	62.1	-	-	9-29	39	2.0
Doebblers - RPM DB3519RR	62.1	-	-	9-23	42	2.8
Doebblers - RPM DB3809RR	60.8	-	-	9-25	39	1.7
Mid Atlantic - MAS 3511RR2	60.0	-	-	10-01	40	2.3
S.States - SS3820NR2	53.9	63.8	58.9	9-29	42	1.8
Mid Atlantic - MAS 3977RR2	50.0	-	-	10-02	43	2.2
<b>Mean</b>	<b>64.3</b>	<b>57.2</b>	<b>60.8</b>	-	<b>42</b>	<b>2.4</b>
<b>LSD 0.20</b>	<b>ns</b>	<b>4.8</b>	-	-	<b>4</b>	<b>0.4</b>
<b>CV, %</b>	<b>15.8</b>	<b>8.0</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
USG - 74B58	41.5	62.0	51.7	9-25	33	1.0
Hisoy - HS41A02	39.0	-	-	10-02	45	2.3
Hisoy - HS42T80	39.0	65.4	52.2	9-24	37	1.2
DynaGro - 32RY40	38.4	-	-	9-28	40	1.8
TA Seeds - TS4299RS	38.2	65.2	51.7	9-25	36	1.0
S.States - RT4470N	37.4	62.7	50.1	9-25	32	1.0
DynaGro - 39RY41	36.4	-	-	9-21	29	1.0
Mid Atlantic - MAS 4444NRR2	35.7	-	-	9-26	44	1.3
DynaGro - 35X43	35.2	60.7	47.9	9-23	41	2.0
Doebblers - RPM DB4409RR	35.1	-	-	9-25	40	1.7
TA Seeds - TS4499R	34.6	59.8	47.2	9-25	36	1.3
S.States - RT4370N	34.4	59.8	47.1	9-26	44	2.5
Mid Atlantic - MAS 4217NRR	33.1	-	-	9-23	38	1.7
S.States - SS4510NR2	33.0	-	-	9-26	42	1.7
USG - 74T59	31.0	-	-	10-03	42	1.7
Mid Atlantic - MAS 4399RR/STS	23.9	58.9	41.4	9-29	39	2.7
<b>Mean</b>	<b>35.3</b>	<b>61.5</b>	<b>48.4</b>	-	<b>39</b>	<b>1.6</b>
<b>LSD 0.20</b>	<b>5.5</b>	<b>3.6</b>	-	-	<b>3</b>	<b>0.5</b>
<b>CV, %</b>	<b>14.6</b>	<b>5.5</b>	-	-	-	-

Table 10. (Continued) Queenstown - Full Season Roundup Ready Soybean Varieties

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
<b>MATURITY GROUP 4s</b>						
S.States - SS4700R2	66.6	-	-	10-13	40	1.7
USG - 74A69R	65.1	62.1	63.6	10-13	39	1.8
DynaGro - 33G48	57.5	51.5	54.5	10-20	44	3.0
S.States - RT4710N	57.5	-	-	10-13	36	1.5
S.States - RT4808N	56.5	57.2	56.9	10-13	47	2.3
S.States - RT4888N	55.2	-	-	10-13	44	2.2
DynaGro - 37RY47	54.6	-	-	10-10	40	1.7
USG - 74F96	54.4	-	-	10-17	44	2.7
S.States - SS4720NR2	54.0	-	-	10-09	43	2.0
S.States - RT4777N	53.7	58.3	56.0	10-14	45	2.7
USG - 74E88	51.2	52.9	52.0	10-09	42	1.8
DynaGro - 34RY46	50.8	-	-	10-10	39	1.7
DynaGro - V47N8RR	47.9	58.6	53.3	10-10	46	2.0
S.States - RT4996N	44.1	59.9	52.0	10-13	44	2.8
USG - 74T98	43.7	-	-	10-15	36	2.0
<b>Mean</b>	<b>54.2</b>	<b>58.2</b>	<b>56.2</b>	-	<b>42</b>	<b>2.1</b>
<b>LSD 0.20</b>	<b>6.3</b>	<b>4.5</b>	-	-	<b>2</b>	<b>0.5</b>
<b>CV, %</b>	<b>10.9</b>	<b>7.3</b>	-	-	-	-
<b>MATURITY GROUP 5</b>						
USG - 75M16	47.3	-	-	10-18	40	2.5
USG - 75T18	45.4	-	-	10-13	37	1.8
TA Seeds - TS5199R	45.4	-	-	10-15	40	2.3
USG - 75J10R	40.4	-	-	10-10	40	1.7
<b>Mean</b>	<b>44.6</b>	<b>48.7</b>	<b>46.7</b>	-	<b>39</b>	<b>2.1</b>
<b>LSD 0.20</b>	<b>ns</b>	<b>3.9</b>	-	-	<b>2</b>	<b>0.2</b>
<b>CV, %</b>	<b>20.7</b>	<b>6.4</b>	-	-	-	-

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

Table 11. Performance of Roundup Ready soybean varieties double cropped at Queenstown.

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
S.States - SS3820NR2	40.2	55.0	47.6	10-29	25	1.0
Doebblers - RPM DB3909RR	38.8	-	-	10-29	30	1.2
USG - 73F59R	37.8	61.8	49.8	10-27	23	1.0
TA Seeds - TS3989RS	37.6	64.0	50.8	10-31	26	1.2
S.States - RT3971N	37.5	56.8	47.1	10-29	26	1.2
Hisoy - HS35A90	37.1	-	-	10-28	24	1.3
DynaGro - V39N9RR	37.1	59.2	48.1	10-31	25	1.0
Mid Atlantic - MAS 3511RR2	37.0	-	-	10-29	25	1.3
USG - 73H77	36.8	60.2	48.5	11-01	25	1.2
Mid Atlantic - MAS 3977RR2	36.7	-	-	11-01	27	1.2
S.States - EXP3702R2	36.2	-	-	10-29	25	1.0
S.States - SS3910NR2	35.9	-	-	10-29	29	1.5
DynaGro - 37RY39	34.2	-	-	10-28	22	1.0
S.States - RT3871N	34.1	62.8	48.5	10-31	26	1.0
Doebblers - RPM DB3809RR	33.9	-	-	10-28	23	1.0
Mid Atlantic - MAS 3955RR	33.9	64.4	49.2	10-26	26	1.0
Doebblers - RPM DB3519RR	33.9	-	-	10-26	22	1.2
Mid Atlantic - MAS 3781NRR	32.8	58.3	45.6	10-29	24	1.0
Mid Atlantic - MAS 3411NRR2	29.9	-	-	10-28	26	1.2
<b>Mean</b>	<b>35.9</b>	<b>59.4</b>	<b>47.7</b>	-	<b>25</b>	<b>1.1</b>
<b>LSD 0.20</b>	<b>3.5</b>	<b>4.6</b>	-	-	<b>3</b>	<b>0.3</b>
<b>CV, %</b>	<b>9.2</b>	<b>7.3</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
DynaGro - 39RY41	42.5	-	-	Frosted	25	1.0
Doebblers - RPM DB4409RR	42.4	-	-	Frosted	30	1.0
Mid Atlantic - MAS 4217NRR	41.5	-	-	Frosted	25	1.0
S.States - RT4470N	41.4	67.6	54.5	Frosted	25	1.0
Hisoy - HS41A02	39.4	-	-	Frosted	31	1.0
TA Seeds - TS4299RS	38.7	62.2	50.5	Frosted	26	1.0
S.States - SS4510NR2	38.7	-	-	Frosted	31	1.2
Hisoy - HS42T80	38.5	62.3	50.4	Frosted	27	1.0
S.States - RT4370N	38.4	61.0	49.7	Frosted	31	1.3
Mid Atlantic - MAS 4444NRR2	38.2	-	-	Frosted	30	1.0
DynaGro - 32RY40	38.2	-	-	Frosted	23	1.2
USG - 74B58	37.5	70.9	54.2	Frosted	24	1.0
Mid Atlantic - MAS 4399RR/STS	36.5	61.0	48.8	Frosted	26	1.0
TA Seeds - TS4499R	35.9	57.8	46.9	Frosted	27	1.2
DynaGro - 35X43	34.5	62.1	48.3	Frosted	24	1.2
USG - 74T59	32.6	-	-	Frosted	30	1.2
<b>Mean</b>	<b>38.4</b>	<b>63.1</b>	<b>50.8</b>	-	<b>27</b>	<b>1.1</b>
<b>LSD 0.20</b>	<b>4.0</b>	<b>4.2</b>	-	-	<b>2</b>	<b>ns</b>
<b>CV, %</b>	<b>9.8</b>	<b>6.2</b>	-	-	-	-

Table 11. (Continued) Queenstown - Double Cropped, Roundup Ready Soybean Varieties

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
<b>MATURITY GROUP 4s</b>						
DynaGro - 34RY46	43.1	-	-	Frosted	26	1.0
USG - 74A69R	43.0	60.3	51.6	Frosted	25	1.0
DynaGro - 37RY47	41.9	-	-	Frosted	27	1.0
S.States - RT4710N	41.2	-	-	Frosted	24	1.0
S.States - SS4720NR2	41.0	-	-	Frosted	27	1.0
S.States - SS4700R2	40.4	-	-	Frosted	25	1.0
USG - 74E88	40.2	53.0	46.6	Frosted	31	1.0
DynaGro - 33G48	39.4	63.9	51.7	Frosted	27	1.0
S.States - RT4777N	38.7	63.3	51.0	Frosted	31	1.0
USG - 74F96	37.2	-	-	Frosted	31	1.3
S.States - RT4808N	37.0	63.8	50.4	Frosted	28	1.0
S.States - RT4888N	36.4	-	-	Frosted	27	1.0
DynaGro - V47N8RR	35.9	59.4	47.6	Frosted	29	1.0
S.States - RT4996N	34.7	62.0	48.3	Frosted	29	1.0
USG - 74T98	28.4	-	-	Frosted	30	2.0
<b>Mean</b>	<b>38.6</b>	<b>62.4</b>	<b>50.5</b>	-	<b>28</b>	<b>1.1</b>
<b>LSD 0.20</b>	<b>2.3</b>	<b>5.9</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>5.6</b>	<b>8.8</b>	-	-	-	-
<b>MATURITY GROUP 5</b>						
USG - 75J10R	41.9	-	-	Frosted	29	1.0
TA Seeds - TS5199R	34.6	-	-	Frosted	31	1.8
USG - 75M16	33.6	-	-	Frosted	33	1.5
USG - 75T18	29.7	-	-	Frosted	33	2.8
<b>Mean</b>	<b>34.9</b>	<b>47.2</b>	<b>41.1</b>	-	<b>32</b>	<b>1.8</b>
<b>LSD 0.20</b>	<b>2.8</b>	<b>5.8</b>	-	-	<b>2</b>	<b>0.5</b>
<b>CV, %</b>	<b>6.8</b>	<b>9.9</b>	-	-	-	-

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

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

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
Mid Atlantic - MAS 3781NRR	48.3	66.0	57.1	9-24	43	1.8
Doeblers - RPM DB3909RR	47.8	-	-	9-27	45	2.2
Doeblers - RPM DB3809RR	46.4	-	-	9-25	37	1.3
USG - 73H77	45.4	69.4	57.4	9-26	42	3.2
Mid Atlantic - MAS 3511RR2	44.9	-	-	9-25	43	2.2
Hisoy - HS35A90	44.6	-	-	9-25	38	2.2
Mid Atlantic - MAS 3955RR	44.2	61.7	53.0	9-27	38	1.5
Doeblers - RPM DB3519RR	43.7	-	-	9-25	37	1.3
DynaGro - V39N9RR	43.7	67.4	55.6	9-25	38	1.7
Mid Atlantic - MAS 3411NRR2	43.5	-	-	9-24	43	1.8
S.States - RT3971N	42.9	61.5	52.2	9-27	39	1.3
DynaGro - 37RY39	42.8	-	-	9-27	43	2.5
USG - 73F59R	42.6	64.9	53.8	9-25	40	2.2
TA Seeds - TS3989RS	42.2	72.8	57.5	9-26	42	1.8
Mid Atlantic - MAS 3977RR2	41.5	-	-	9-25	47	2.2
S.States - EXP3702R2	39.9	-	-	9-27	39	1.7
S.States - RT3871N	39.8	68.0	53.9	9-27	42	1.7
S.States - SS3820NR2	39.1	64.1	51.6	9-24	38	1.7
S.States - SS3910NR2	37.5	-	-	9-25	41	2.2
<b>Mean</b>	<b>43.2</b>	<b>67.0</b>	<b>55.1</b>	-	<b>41</b>	<b>1.9</b>
<b>LSD 0.20</b>	<b>4.3</b>	<b>3.3</b>	-	-	<b>3</b>	<b>0.4</b>
<b>CV, %</b>	<b>9.2</b>	<b>4.7</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
DynaGro - 39RY41	51.2	-	-	9-25	38	1.2
S.States - RT4470N	49.5	69.7	59.6	9-25	36	1.3
Hisoy - HS42T80	49.0	68.9	58.9	9-25	41	1.7
USG - 74B58	48.0	73.5	60.7	9-24	37	1.7
S.States - RT4370N	47.3	73.1	60.2	9-27	48	3.3
Mid Atlantic - MAS 4217NRR	46.8	-	-	9-23	46	2.8
Doeblers - RPM DB4409RR	46.7	-	-	9-26	47	2.5
TA Seeds - TS4299RS	46.7	71.8	59.2	9-25	41	2.0
DynaGro - 32RY40	45.3	-	-	9-25	47	3.0
DynaGro - 35X43	44.5	68.7	56.6	9-25	43	3.2
Hisoy - HS41A02	44.3	-	-	9-26	45	2.5
Mid Atlantic - MAS 4444NRR2	44.1	-	-	9-27	48	2.8
TA Seeds - TS4499R	42.2	71.9	57.1	9-25	43	2.0
S.States - SS4510NR2	40.0	-	-	9-27	50	3.0
Mid Atlantic - MAS 4399RR/STS	40.0	69.0	54.5	9-26	46	3.3
USG - 74T59	36.4	-	-	9-27	50	3.3
<b>Mean</b>	<b>45.1</b>	<b>70.5</b>	<b>57.8</b>	-	<b>44</b>	<b>2.5</b>
<b>LSD 0.20</b>	<b>3.8</b>	<b>3.7</b>	-	-	<b>2</b>	<b>0.4</b>
<b>CV, %</b>	<b>7.9</b>	<b>4.9</b>	-	-	-	-

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

Brand – Entry	Seed Yield, Bu/A			Maturity Date	2010	
	2010	2009	2-Year		Height, Inches	Lodging Score*
<b>MATURITY GROUP 4s</b>						
DynaGro - 37RY47	48.1	-	-	9-26	42	1.5
USG - 74A69R	46.9	73.3	60.1	9-27	43	1.7
S.States - RT4710N	43.0	-	-	9-27	39	1.3
DynaGro - 34RY46	42.8	-	-	9-27	42	1.7
S.States - SS4700R2	42.2	-	-	9-27	46	2.0
S.States - RT4808N	42.2	70.4	56.3	9-26	47	2.2
USG - 74E88	42.2	69.5	55.8	9-30	46	2.0
DynaGro - 33G48	41.9	71.2	56.6	9-28	47	2.2
S.States - SS4720NR2	41.6	-	-	9-25	47	2.0
USG - 74F96	40.1	-	-	10-08	49	2.0
DynaGro - V47N8RR	39.2	71.4	55.3	9-26	47	2.2
S.States - RT4888N	38.2	-	-	9-25	49	2.0
S.States - RT4777N	36.2	75.0	55.6	10-03	50	3.2
S.States - RT4996N	33.4	67.8	50.6	10-02	49	2.7
USG - 74T98	31.9	-	-	10-06	44	3.3
<b>Mean</b>	<b>40.7</b>	<b>71.2</b>	<b>56.0</b>	-	<b>46</b>	<b>2.1</b>
<b>LSD 0.20</b>	<b>4.1</b>	<b>3.7</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>9.3</b>	<b>4.8</b>	-	-	-	-
<b>MATURITY GROUP 5</b>						
USG - 75J10R	33.6	-	-	9-25	45	2.5
USG - 75T18	26.3	-	-	10-08	42	3.7
USG - 75M16	24.0	-	-	10-08	47	3.5
TA Seeds - TS5199R	21.5	-	-	10-08	45	3.3
<b>Mean</b>	<b>26.4</b>	<b>57.5</b>	<b>42.0</b>	-	<b>45</b>	<b>3.3</b>
<b>LSD 0.20</b>	<b>4.5</b>	<b>3.8</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>14.4</b>	<b>5.3</b>	-	-	-	-

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

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

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
	<b>MATURITY GROUP 3</b>					
Doeblers - RPM DB3519RR	44.3	-	-	10-10	28	1.0
Mid Atlantic - MAS 3511RR2	41.8	-	-	10-15	30	1.2
TA Seeds - TS3989RS	39.8	62.0	50.9	10-15	30	1.0
Hisoy - HS35A90	39.7	-	-	10-10	30	1.2
DynaGro - V39N9RR	39.2	62.5	50.9	10-13	30	1.0
S.States - RT3871N	38.8	53.5	46.2	10-15	29	1.2
Mid Atlantic - MAS 3411NRR2	38.2	-	-	10-08	33	1.0
Doeblers - RPM DB3809RR	38.1	-	-	10-10	29	1.0
USG - 73F59R	38.0	58.1	48.0	10-09	28	1.0
Doeblers - RPM DB3909RR	37.5	-	-	10-14	32	1.2
USG - 73H77	37.2	60.3	48.7	10-14	30	1.0
Mid Atlantic - MAS 3977RR2	37.1	-	-	10-15	34	1.0
DynaGro - 37RY39	35.9	-	-	10-09	29	1.2
Mid Atlantic - MAS 3955RR	35.8	59.2	47.5	10-13	28	1.0
S.States - SS3910NR2	35.8	-	-	10-15	30	1.0
Mid Atlantic - MAS 3781NRR	34.0	57.4	45.7	10-11	28	1.0
S.States - RT3971N	33.9	56.8	45.3	10-13	28	1.2
S.States - SS3820NR2	33.8	57.7	45.7	10-09	29	1.0
S.States - EXP3702R2	32.9	-	-	10-13	29	1.0
<b>Mean</b>	<b>37.5</b>	<b>57.8</b>	<b>47.7</b>	-	<b>30</b>	<b>1.1</b>
<b>LSD 0.20</b>	<b>3.6</b>	<b>4.2</b>	-	-	<b>2</b>	<b>ns</b>
<b>CV, %</b>	<b>9.1</b>	<b>6.9</b>	-	-	-	-
<b>MATURITY GROUP 4</b>						
S.States - RT4470N	40.5	65.6	53.1	10-17	27	1.0
Doeblers - RPM DB4409RR	40.0	-	-	10-17	33	1.7
TA Seeds - TS4299RS	39.2	57.2	48.2	10-14	29	1.0
DynaGro - 39RY41	38.8	-	-	10-14	26	1.0
DynaGro - 32RY40	38.6	-	-	10-17	34	1.3
USG - 74B58	38.1	62.7	50.4	10-15	27	1.0
S.States - SS4510NR2	38.0	-	-	10-18	35	1.8
DynaGro - 35X43	36.3	70.5	53.4	10-15	30	1.2
Mid Atlantic - MAS 4444NRR2	35.6	-	-	10-16	31	1.3
Hisoy - HS42T80	35.6	55.3	45.4	10-15	29	1.0
USG - 74T59	35.5	-	-	10-20	33	1.8
Mid Atlantic - MAS 4399RR/STS	33.5	61.0	47.3	10-17	28	1.0
S.States - RT4370N	32.7	59.8	46.2	10-15	34	1.3
TA Seeds - TS4499R	32.4	59.0	45.7	10-16	31	1.3
Hisoy - HS41A02	32.3	-	-	10-17	31	1.0
Mid Atlantic - MAS 4217NRR	32.1	-	-	10-15	29	1.5
<b>Mean</b>	<b>36.2</b>	<b>60.4</b>	<b>48.3</b>	-	<b>31</b>	<b>1.3</b>
<b>LSD 0.20</b>	<b>4.1</b>	<b>6.1</b>	-	-	<b>2</b>	<b>0.4</b>
<b>CV, %</b>	<b>10.5</b>	<b>9.5</b>	-	-	-	-

Table 13. (Continued) Quantico - Double Cropped, Roundup Ready Soybean Varieties

Brand - Entry	Seed Yield, Bu/A			2010		
	2010	2009	2-Year	Maturity Date	Height, Inches	Lodging Score*
<b>MATURITY GROUP 4s</b>						
USG - 74F96	37.1	-	-	10-24	32	1.5
DynaGro - 33G48	35.7	58.1	46.9	10-23	28	1.2
S.States - RT4710N	33.9	-	-	10-20	27	1.0
S.States - SS4720NR2	33.8	-	-	10-19	31	1.3
USG - 74A69R	33.8	65.3	49.5	10-19	30	1.0
USG - 74E88	33.7	46.5	40.1	10-17	34	1.3
USG - 74T98	33.7	-	-	10-29	34	2.7
DynaGro - 37RY47	33.7	-	-	10-17	31	1.0
DynaGro - 34RY46	32.6	-	-	10-17	29	1.2
S.States - RT4808N	32.2	64.0	48.1	10-19	31	1.3
S.States - RT4777N	32.0	61.3	46.6	10-19	33	1.5
S.States - RT4888N	31.3	-	-	10-19	34	1.0
S.States - SS4700R2	31.2	-	-	10-19	30	1.0
DynaGro - V47N8RR	30.5	60.0	45.3	10-17	33	1.0
S.States - RT4996N	30.3	62.3	46.3	10-23	37	1.7
<b>Mean</b>	<b>33.0</b>	<b>62.5</b>	<b>47.8</b>	-	<b>32</b>	<b>1.3</b>
<b>LSD 0.20</b>	<b>2.6</b>	<b>5.1</b>	-	-	<b>2</b>	<b>0.4</b>
<b>CV, %</b>	<b>7.3</b>	<b>7.6</b>	-	-	-	-
<b>MATURITY GROUP 5</b>						
USG - 75J10R	34.4	-	-	10-20	32	1.5
USG - 75T18	34.1	-	-	10-30	34	2.3
TA Seeds - TS5199R	34.1	-	-	10-31	36	2.0
USG - 75M16	33.2	-	-	10-31	37	1.8
<b>Mean</b>	<b>33.9</b>	<b>47.2</b>	<b>40.6</b>	-	<b>35</b>	<b>1.9</b>
<b>LSD 0.20</b>	<b>ns</b>	<b>2.8</b>	-	-	<b>2</b>	<b>0.3</b>
<b>CV, %</b>	<b>8.1</b>	<b>4.8</b>	-	-	-	-

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



Table 14. Relative yields of Roundup Ready soybean varieties compared to the mean of all varieties in that maturity group at each location in 2010.

Brand - Entry	Clarksville	Queenstown		Quantic		
		FS	DC	FS	DC	
<b>MATURITY GROUP 3</b>		<b>Relative Yield, % of Mean</b>				
DynaGro - 37RY39	102	123*	95	99	96	
DynaGro - V39N9RR	99	103	103*	101	105	
Hisoy - HS35A90	90	98	103*	103*	106	
Mid Atlantic - MAS 3411NRR2	88	105	83	101	102	
Mid Atlantic - MAS 3511RR2	102	93	103*	104*	111*	
Mid Atlantic - MAS 3781NRR	100	98	91	112*	91	
Mid Atlantic - MAS 3955RR	98	101	94	102*	96	
Mid Atlantic - MAS 3977RR2	98	78	102	96	99	
Doeblers - RPM DB3519RR	103	97	94	101	118*	
Doeblers - RPM DB3809RR	104	95	94	107*	102	
Doeblers - RPM DB3909RR	95	109	108*	111*	100	
S.States - RT3871N	104*	105	95	92	104	
S.States - RT3971N	100	114	104*	99	90	
S.States - EXP3702R2	101	97	101	92	88	
S.States - SS3820NR2	105*	84	112*	91	90	
S.States - SS3910NR2	103	98	100	87	96	
TA Seeds - TS3989RS	111*	99	105*	98	106	
USG - 73F59R	100	104	105*	99	101	
USG - 73H77	98	99	103*	105*	99	
<b>Location/Group Mean Yield</b>	<b>50.7</b>	<b>64.3ns</b>	<b>35.9</b>	<b>43.2</b>	<b>37.5</b>	
<b>MATURITY GROUP 4</b>						
DynaGro - 32RY40	105	109*	99	100	107*	
DynaGro - 35X43	111*	100	90	99	100	
DynaGro - 39RY41	100	103*	111*	114*	107*	
Hisoy - HS41A02	105	110*	103*	98	89	
Hisoy - HS42T80	100	110*	100	109*	98	
Mid Atlantic - MAS 4217NRR	116*	94	108*	104	89	
Mid Atlantic - MAS 4399RR/STS	104	68	95	89	93	
Mid Atlantic - MAS 4444NRR2	101	101	99	98	98	
Doeblers - RPM DB4409RR	97	99	110*	103	110*	
S.States - RT4370N	101	97	100	105	90	
S.States - RT4470N	97	106*	108*	110*	112*	
S.States - SS4510NR2	94	93	101*	89	105*	
TA Seeds - TS4299RS	93	108*	101*	103	108*	
TA Seeds - TS4499R	92	98	94	94	90	
USG - 74B58	99	117*	98	106*	105*	
USG - 74T59	88	88	85	81	98	
<b>Location/Group Mean Yield</b>	<b>56.7</b>	<b>35.3</b>	<b>38.4</b>	<b>45.1</b>	<b>36.2</b>	

Table 14. (Continued) Relative Yields, Roundup Ready Soybean Varieties

Brand - Entry	Clarksville	Queenstown		Quantic	
		FS	DC	FS	DC
<b>MATURITY GROUP 4s</b>		<b>Relative Yield, % of Mean</b>			
DynaGro - 33G48	110*	106	102	103	108*
DynaGro - 34RY46	97	94	112*	105	99
DynaGro - 37RY47	107*	101	109*	118*	102
DynaGro - V47N8RR	89	88	93	96	93
S.States - RT4710N	94	106	107*	106	103
S.States - RT4777N	99	99	100	89	97
S.States - RT4808N	108*	104	96	104	98
S.States - RT4888N	102*	102	94	94	95
S.States - RT4996N	101*	81	90	82	92
S.States - SS4700R2	102*	123*	105	104	95
S.States - SS4720NR2	102*	100	106*	102	102
USG - 74A69R	102*	120*	111*	115*	102
USG - 74F96	100	100	96	98	112*
USG - 74E88	99	94	104	104	102
USG - 74T98	87	81	74	78	102
<b>Location/Group Mean Yield</b>	<b>47.9</b>	<b>54.2</b>	<b>38.6</b>	<b>40.7</b>	<b>33.0</b>
<b>MATURITY GROUP 5</b>					
TA Seeds - TS5199R	-	102	99	82	101*
USG - 75J10R	-	91	120*	127*	101
USG - 75M16	-	106*	96	91	98
USG - 75T18	-	102	85	100	101
<b>Location/Group Mean Yield</b>	<b>-</b>	<b>44.6ns</b>	<b>34.9</b>	<b>26.4</b>	<b>33.9ns</b>

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 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.