

SOYBEAN VARIETY TRIAL REPORT

ROUNDUP READY AND CONVENTIONAL SOYBEAN VARIETY TRIALS IN 2008

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ABSTRACT: Two hundred and eight Roundup Ready and 10 conventional soybean varieties were evaluated on a Leeper silty clay soil in 2008. The Roundup Ready varieties were evaluated in separate maturity group (MG) studies (MG III, Early MG IV, Late MG IV, Early MG V, and Late MG V). The conventional varieties were evaluated in one study and included Early MG V, and Late MG V varieties. Rainfall was 144%, 10%, 62%, 174% and 133% of normal for May, June and July, August and September respectively. The warm temperatures and week of light rain in early September from hurricane Gustav delayed harvest of MG III and early MG IV varieties which resulted in seed rots, purple stained seed and reduced yields. The lack of rainfall in June through late July (8 weeks) had a negative impact on early maturity soybean yields, especially the MG III and early MG IV varieties. However, above normal rainfall from late July through September enhanced the early MG V varieties. Ratings for lodging and green plant stems were made at soybean maturity. These data are shown in tables for all studies. The highest conventional variety yield was 72.4 bu/ac. The highest yield for Roundup Ready varieties across all maturity groups ranged from 49 to 80 bu/ac. The maturity group III yields ranged from 38 to 49 bu/ac and ranged from 35 to 58 bu/ac for early MG IV varieties. The late MG IV yields ranged from 32 to 64 bu/ac. The early MG V yields ranged from 43 to 80 bu/ac, with the late MG V yields from 35 to 64 bu/ac. The lowest yielding varieties across all studies ranged from 32 to 43 bu/ac. The overall mean yields for Roundup Ready MG III, early MG IV, late MG IV, early MG V, and late MG V studies were 44, 47, 51, 59, and 54 bu/ac, respectively. The overall mean yield for the conventional variety study was 59 bu/ac. When compared to the lowest yielding varieties in each study, selecting the most productive variety has the potential to increase yield up to 37 bu/ac. Variety selection for high yield and appropriate disease resistance is essential for soybean profitability.

MATERIALS AND METHODS: Six field studies were conducted in 2008 on a Leeper silty clay loam soil, Verona, MS. Roundup tolerant soybean varieties of MG III, early MG IV, late MG IV, early MG V, and late MG V varieties were evaluated in separate studies. All conventional soybean varieties of MG IV, early MG V, and late MG V were evaluated in one study. All experiments were conducted as randomized complete block designs with four replications. Plot size was four 16-inch rows on a 76-inch bed x 20 ft in length.

Potash (0-0-60) fertilizer at 155 lb/ac and 40 lb/ac of magnesium sulfate (36% mg and 6% sulfur) were applied to all studies on 10/17/07. The whole study area was disked twice and smoothed with a do-all on 11/9/07; and bed-rolled in 76-inch beds on 11/20/07. A burndown application of Roundup WeatherMAX (glyphosate) + Clarity (dicamba) + AIM (carfentrazone) at 1.0 + 0.25 lb ai/ac + 1 oz/ac was applied 3/25/08. All seeds were treated with Vitavax/Thiram plus Apron fungicides before planting. The conventional and all Roundup Ready maturity groups except MG III varieties were planted 4/24/08. The MG III varieties were planted 5/07/08.

The conventional soybean variety study received postemergence applications of Select (clethodim) + First Rate (cloransulam) + crop oil at 0.15 lb ai/ac + 0.25 oz ai/ac + 2.0 pt/ac on 5/13/08 and repeated on 6/5/08. The Roundup Ready varieties received Roundup + First Rate at 1.0 lb ai + 0.3 oz/ac on 5/14/08 and 6/5/08. Foliar insecticide Karate (*lambda-cyhalothrin*) was applied to all varieties on 5/14/08, 7/18/08 and 8/30/08 for bean leaf beetle and stink bug control.

Maturity dates, plant height at maturity, lodging and green stem ratings at maturity were recorded for all varieties. Lodging was rated on a scale of 1 to 5: 1 = most plants erect; 2 = all plants leaning slightly or only a few plants down; 3 = all plants leaning moderately or 25 to 50% of plants down; 4 = all plants leaning considerably with 50 to 80% of plants down; and 5 = all plants down. The maturity date was recorded when all pods were dry. Green stem ratings were made on all plots when maturities were

recorded. A visual rating scale of 1 to 9 with 1 equaled 0 to 10% of plant stems were green up to a rating scale of 9 equaled 90 to 100% of the plant stems being green. Plant height of 10 consecutive plants, selected at a random spot in the center 2 rows, were measured from the soil surface to the upper most extremity in the first replication of each study.

The 4 16-inch rows of each variety on 76-inch beds (6.33 ft) were harvested within 5 to 10 days after maturity with a plot combine. Following harvest, the grain was cleaned with a 3-sieve seed cleaner, weighed, and grain moisture was determined with a Dickey John GAC II[®] seed analyzer. Yields were adjusted to 13% seed moisture and were calculated for an area (6.33 ft x 20 ft area). Variety mean yields in each study were separated using Fisher Protected LSD at the 5% significance level.

RESULTS AND DISCUSSION: Rainfall during the growing season was 5.64, 6.96, 0.46, 2.21, 6.80, and 5.44 inches for April, May, June, July, August and September, respectively (Table 1). The rainfall for April and May, was 108 and 144% of normal. The low rainfall (1.25 inches total) for an 8-week period from June through late July had a negative yield impact on early maturity (MG III and early MG IV) soybean varieties. The first week of September warm and rainy weather from hurricane Gustav resulted in delayed harvest and seed rots and quality deterioration for the MG III and early MG IV varieties. Plants with mostly dry pods and green stems at maturity have been observed more frequently especially in the last few years. All plots were rated for green stems at maturity and results are presented in each table. However, green stem occurrences were highly variable among replications which resulted in coefficients of variability from 30% to 70% across all studies.

In the Roundup Ready MG III variety trial, 8 varieties were evaluated (Table 2). Plant height at maturity ranged from 27 to 34 inches. Maturity dates ranged from 9/2/08 to 9/11/08. The yields ranged from 38.0 to 49.2 bu/ac with a study mean yield of 44.0 bu/ac. The highest yield variety was Asgrow AG3906 with a yield of 49.2 bu/ac. Schillinger 398.RCP, Progeny 3906RR and Asgrow AG3905 had yields equal to Asgrow AG3906.

In the Roundup Ready early MG IV variety trial, 51 varieties were evaluated (Table 3). Plant height at maturity ranged from 19 to 48 inches. Maturity dates ranged from 9/2/08 to 9/16/08. Yields ranged from 35.0 to 58.4 bu/ac with an overall mean of 47.4 bu/ac. The highest yield variety was Hornbeck R4527 at 58.4 bu/ac. Varieties which did not differ in yield from Hornbeck R4527 were Asgrow AG4703, AG4605, AG4303, AG4705, AG4405, Dyna-Gro DG 32R46, DG 33Y45, DG 36C44, Morsoy RTS4556N, Progeny 4606RR, Pioneer 94Y60, Crow's C4517R, Schillinger 457.RCP, Asgrow DP 4546RR and Delta King DK 4667.

Fifty-nine varieties in the Roundup Ready late MG IV trial were evaluated (Table 4). The yields ranged from 31.5 to 64.2 bu/ac with an overall mean yield of 50.7 bu/ac. Maturity dates ranged from 9/08/08 to 9/31/08. Plant height at maturity ranged from 24 to 45 inches. The highest yield variety was USG 74A91 with 64.2 bu/ac. Varieties which were not different in yield from USG 74A91, were Asgrow DK4866, Asgrow AG4903, AG4907, Hornbeck HBK 4828, and HBK R4924, Terral TV47R17, TV49R17, M-Pride MPG 4808nRR, and MPG 4907nRR/STS, Agventure AV 49D6NRR, Progeny 4906RR, USG 7495nRS, Pioneer 94Y90 and Delta Grow DG4770RR and DG4975RR.

Seventy-one varieties in the Roundup Ready Early MG V trial were evaluated (Table 5). Maturity dates ranged from 9/17/08 to 10/12/08. Plant height at maturity ranged from 19 to 44 inches. The yields ranged from 43.3 to 80.3 bu/ac with an overall mean yield of 58.9 bu/ac. The highest yield variety was Asgrow DP5634 with 80.3 bu/ac. Varieties which had yields equal to Asgrow DP5634 were Asgrow AG5606 and Pioneer 95Y40.

Nineteen varieties in the Roundup Ready late MG V trial were evaluated (Table 6). Maturity dates ranged from 9/25/08 to 10/06/08. Plant height at maturity ranged from 28 to 43 inches. The yields ranged from 35.1 to 64.4 bu/ac with an overall mean yield of 53.8 bu/ac. The highest yield variety was USG 75J97 with 64.4 bu/ac. Morsoy RT5906N, Asgrow AG5905, Delta Grow DG5970RR, Pioneer 95Y70, Hornbeck HBKR5727, and Asgrow DP 5915RR yields were equal to USG 75J97.

Ten varieties were evaluated in the conventional variety trial (Table 7). The yields ranged from 45.5 to 72.4 bu/ac with an overall mean yield of 58.8 bu/ac. Maturity dates ranged from 9/22/08 to 10/02/08. Plant height at maturity ranged from 24 to 49 inches. The highest yield variety was Stoddard (EV) with 72.4 bu/ac. Varieties that were not different in yield from Stoddard were Osage (EV), USG 5002T (EV), Jake (EV), and Hornbeck HBK C5894 (LV).

These results indicated soybean growers have a good selection of productive varieties to choose from that range in maturity from mid-August to late September to early October. The most productive varieties yielded 49 to 70 bu/ac. Selection of varieties with the highest yield potential and appropriate disease resistance is essential for soybean profitability.

Table 1. 2008 Rainfall for Verona

Month	-----Days of Month-----			Total	% Normal
	1 - 10	11-20	21-30		
-----Rainfall (inches)-----					
April	3.07	1.70	0.87	5.64	108
May	2.20	2.06	2.70	6.96	144
June	0.25	0.11	0.10	0.46	10
July	0.60	0.19	1.42	2.21	62
August	3.24	1.06	2.50	6.80	174
September	<u>3.55</u>	<u>1.89</u>	<u>0.00</u>	<u>5.44</u>	<u>133</u>
Total	12.91	7.01	7.59	27.51	106
% Total					

Table 2. Roundup Ready Maturity Group III Soybean Variety Trial planted May 7, 2008 on a Leeper silty clay loam soil, Verona, MS

Variety	Brand Name	-----2008-----						
		Yield Bu/ac 2008	Yield Bu/ac 2007	Yield Bu/ac 2006	Maturity Date	Plant Height	Lodging Rating	Green Stem Rating
AG3906	Asgrow	49.2	55.7	29.0	9/11	29	1	1.5
398.RCP	Schillinger	48.8	---	---	9/11	31	1	2.3
Progeny 3906RR	Progeny	45.1	---	---	9/08	27	1	1.0
AG3905	Asgrow	43.8	47.8	31.5	9/02	33	1	1.0
Armor 39-K4	Armor	43.1	50.3	---	9/08	34	2	1.0
AG4005	Asgrow	42.3	---	---	9/08	28	1	1.5
AG3803	Asgrow	41.4	---	---	9/02	31	1	1.0
TN 07-220RR	Public	38.0	---	---	9/02	28	1	1.0
LSD (P=0.05)		5.9						0.6
CV		9.2						32.6
Grand Mean		44.0						1.3
The shaded values are not different from the highest value at the 5% probability level.								

Table 3 . Roundup Ready Early Maturity Group IV Soybean Variety Trial planted April 24, 2008 on a Leeper silty clay loam soil, Verona, MS.

Variety	Brand Name	Yield bu/ac 2008	Yield bu/ac 2007	Yield bu/ac 2006	----- 2008 -----			
					Maturity Date	Plant Height Inches	Lodging Rating	Green Stem Rating
HBK R4527	Hornbeck	58.4	57.5	----	9/11	25	1	1.8
AG4703	Asgrow	56.9	----	----	9/10	28	1	1.8
AG4605	Asgrow	56.5	----	----	9/11	26	1	5.0
AG4303	Asgrow	56.1	----	----	9/11	23	1	3.5
DG 32R46	Dyna-Gro	55.9	55.7	40.4	9/08	26	1	2.0
Morsoy RTS4556N	Morsoy	55.6	----	----	9/02	19	1	3.3
Progeny 4606RR	Progeny	55.4	60.2	----	9/16	28	1	2.5
AG4405	Asgrow	54.7	53.5	----	9/02	28	1	1.0
DG 33Y45	Dyna-Gro	54.4	----	----	9/08	26	1	3.3
94Y60	Pioneer	54.1	----	----	9/08	24	1	6.8
C4517R	Crow's	54.1	----	----	9/02	35	1	1.8
AG4705	Asgrow	54.0	----	----	9/08	31	1	1.5
457. RCP	Schillinger	53.7	58.3	----	9/16	33	1	4.5
DG 36C44	Dyna-Gro	53.6	----	----	9/08	25	1	2.3
DP 4546RR	Asgrow	52.6	53.5	41.7	9/11	33	1	1.0
DK 4667	Delta King	52.5	70.0	45.9	9/11	35	1	2.5
94Y20	Pioneer	51.5	----	----	9/02	24	1	1.3
HBK R3927	Hornbeck	49.3	61.6	----	9/02	32	1	1.0
USG 74H48	USG	48.8	----	----	9/11	28	1	2.5
AG4403	Asgrow	48.7	----	----	9/08	28	1	1.3
RC4455	Croplan Genetics	48.7	57.1	----	9/02	37	2	1.0
HBK R3824	Hornbeck	48.4	49.5	36.5	9/02	28	1	1.0
RC4417	Croplan Genetics	48.2	----	----	9/02	32	1	1.3
C4119R	Crow's	48.0	----	----	9/02	30	1	2.3
Progeny 4206RR	Progeny	47.8	53.9	----	9/08	26	1	2.8
NK S43-N6	NK Brand	47.5	----	----	9/02	19	1	2.3
TV46R19	Terral	47.2	----	----	9/11	36	1	1.3
AV 46J5NRR	Agventure	47.1	----	----	9/08	26	1	1.5
DKB 46-51	Asgrow	46.1	----	----	9/02	28	1	1.5
TV44R27	Terral	45.3	59.7	----	9/08	39	1	1.0
AG4606	Asgrow	44.8	----	----	9/02	28	1	1.0
AV 46P1RR	Agventure	43.5	----	----	9/08	27	1	1.8
448. RCS	Schillinger	43.3	----	----	9/02	32	1	1.0
DG 31J39	Dyna-Gro	43.3	----	----	9/02	29	2	1.0
Norfolk 741RR	Merschman	43.2	----	----	9/08	25	1	3.0
DG 37F46	Dyna-Gro	42.9	62.4	45.6	9/08	32	1	1.8
DG 37A44	Dyna-Gro	42.8	----	----	9/02	34	2	1.0
NK S44-D5	NK Brand	42.7	----	----	9/08	23	1	2.8
TV46R15	Terral	42.0	54.0	42.6	9/11	37	1	1.3
DG4150RR	Delta Grow	41.9	56.0	33.9	9/08	28	1	1.0
Progeny 4405RR	Progeny	41.7	----	----	9/08	33	1	1.3
Morsoy RT4485N	Morsoy	41.6	----	----	9/02	24	1	1.3
USG 74A45	USG	41.2	----	----	9/02	38	2	1.3
NK S46-U6	NK Brand	40.6	50.8	----	9/08	48	1	4.3
MPG 4406nRR	M-Pride	40.5	----	----	9/08	28	1	1.0
USG 74A27	USG	40.2	52.3	----	9/08	28	1	1.8
AG4404	Asgrow	40.1	57.2	35.8	9/02	25	1	1.0
USG 74E68	USG	38.8	----	----	9/02	33	1	1.0
TV45R18	Terral	38.4	----	----	9/02	35	1	1.0
ES 4661RR	Eagle Seed	36.9	----	----	9/08	26	1	3.3
ES 4333RR	Eagle Seed	35.0	----	----	9/02	24	1	1.0
LSD (P=0.05)		7.6			----	----	----	1.6
CV		11.4			----	----	----	59.4
Grand Mean		47.4			----	----	----	2.0

The shaded values are not different from the highest value at the 5% probability level.

Table 4. Roundup Ready Late Maturity Group IV Soybean Variety Trial planted April 24, 2008 on a Leeper silty clay loam soil, Verona, MS.

		-----2008-----						
Variety	Brand Name	Yield bu/ac 2008	Yield bu/ac 2007	Yield bu/ac 2006	Maturity Date	Plant Height Inches	Lodging Rating	Green Stem Rating
USG 74A91	USG	64.2	----	----	9/16	32	1	2.0
HBK 4828	Hornbeck	62.8	----	----	9/22	45	1	1.0
TV47R17	Terral	61.8	60.3	----	9/24	38	1	1.0
DK4866	Asgrow	61.8	74.2	45.0	9/22	29	2	1.0
AG4903	Asgrow	61.3	73.1	42.8	9/22	28	1	2.5
MPG 4808nRR	M-Pride	58.9	----	----	9/22	27	1	2.3
AG4907	Asgrow	58.5	----	----	9/20	35	3	1.3
TV49R17	Terral	57.9	59.3	----	9/19	35	1	1.0
AV 49D6NRR	Agventure	57.3	58.1	44.3	9/22	33	1	2.8
Progeny 4906RR	Progeny	57.2	----	----	9/22	33	1	1.3
USG 7495nRS	USG	57.2	70.1	----	9/19	31	2	1.3
HBK R4924	Hornbeck	56.7	65.7	47.4	9/20	35	3	1.0
MPG 4907nRR/STS	M-Pride	56.7	----	----	9/22	26	1	4.0
94Y90	Pioneer	56.4	----	----	9/20	31	2	1.0
DG4770RR	Delta Grow	55.9	64.6	----	9/16	30	1	1.3
DG4975RR	Delta Grow	55.8	69.7	57.6	9/16	33	1	2.5
DK 4995	Delta King	55.2	----	----	9/22	38	2	1.8
4782-4	Stine	55.0	----	----	9/31	26	1	2.5
S49--W6	NK Brand	54.8	58.7	----	9/19	32	1	1.0
DG4820RR	Delta Grow	54.6	----	----	9/19	24	1	1.0
RC 4757	Croplan Genetics	54.5	----	----	9/19	24	1	1.0
DG 36Y48	Dyna-Gro	53.6	65.3	----	9/22	31	2	2.8
USG 74A88	USG	53.2	----	----	9/19	32	1	1.5
TV49R19	Terral	53.1	----	----	9/22	29	1	1.0
DG 37P49	Dyna-Gro	53.1	----	----	9/16	30	1	3.0
AV 49X9NRR	Agventure	53.0	----	----	9/22	39	2	1.0
DG4870RR	Delta Grow	52.6	----	----	9/20	28	1	2.0
Nashville 749RR	Merschman	52.5	----	----	9/16	27	1	1.8
Progeny 4949RR	Progeny	52.0	67.2	----	9/22	33	1	1.5
Houston 747RR	Merschman	51.7	----	----	9/19	24	1	1.0
USG 74F96	USG	51.1	----	----	9/22	34	2	2.3
ES 4991	Eagle Seed	50.7	----	----	9/22	34	1	1.0
Morsoy RT4955N	Morsoy	50.4	64.4	----	9/22	29	1	4.0
94Y70	Pioneer	50.2	----	----	9/16	32	1	1.0
USG 74F78	USG	50.2	60.6	----	9/18	25	1	1.0
Morsoy RT4914N	Morsoy	49.8	----	----	9/22	30	1	2.0
ES 4818	Eagle Seed	49.4	----	----	9/19	32	2	1.0
94M80	Pioneer	48.8	----	----	9/20	29	1	2.0
478.RCS	Schillinger	48.7	64.3	48.8	9/22	25	1	2.0
RC 4877	Croplan Genetics	48.5	----	----	9/21	29	2	3.8
AV47G3NRR	Agventure	47.9	54.5	----	9/22	24	1	2.8
495.RCS	Schillinger	47.1	59.8	38.2	9/22	29	1	2.5
Progeny 4706RR	Progeny	47.0	68.7	----	9/08	30	1	1.5
Progeny 4807RR	Progeny	47.0	----	----	9/22	27	1	3.0
TV49R27	Terral	46.9	59.3	----	9/22	33	1	1.3
DG 32P48	Dyna-Gro	46.0	----	----	9/19	27	1	1.5
DG4780RR	Delta Grow	45.7	58.1	----	9/22	30	1	5.5
DG4970RR	Delta Grow	45.4	57.7	47.1	9/20	32	2	1.3
HBK R4727	Hornbeck	44.8	56.8	36.7	9/19	31	1	5.3
TV48R14	Terral	43.8	----	----	9/20	26	1	1.0
Morsoy RT4707N	Morsoy	43.7	----	----	9/22	26	1	6.5
DP 4888RR/S	Asgrow	43.5	70.1	----	9/11	31	1	2.3
ES 4777	Eagle Seed	42.2	----	----	9/16	28	1	2.3
ES 4906	Eagle Seed	40.5	----	----	9/22	24	1	2.3
TV47R18	Terral	39.6	----	----	9/11	30	1	3.0
DK 4968	Delta King	35.3	----	----	9/11	31	2	1.5
94B73	Pioneer	34.9	61.1	34.2	9/08	27	1	1.0
Armor 47-G7	Armor	33.7	----	----	9/08	25	1	1.3
MPG 4705nRR	M-Pride	31.5	----	----	9/08	26	1	1.5
LSD (P=0.05)		8.7						2.1
CV		12.2						74.8
Grand Mean		50.7						2.0

The shaded values are not different from the highest value at the 5% probability level.

Table 5. Roundup Ready Maturity Group Early V Soybean Variety Trial planted April 24, 2008 on a Leeper silty clay loam soil, Verona, MS.

Variety	Brand Name	2008			Maturity Date	Plant Height	Lodging Rating	Green Stem Rating
		Yield bu/ac 2008	Yield bu/ac 2007	Yield bu/ac 2006				
DP5634	DPL	80.3	52.0	----	10/01	26	1	1.0
AG5606	Asgrow	78.3	----	----	10/02	28	1	1.0
95Y40	Pioneer	74.1	----	----	9/29	26	1	1.3
MPG 5308nRR	M-Pride	72.2	----	----	9/25	28	1	1.0
DK 52K6	Delta King	71.2	58.4	56.7	10/01	27	1	1.0
NK S56-D7	NK Brand	70.9	38.6	63.8	10/02	26	1	1.3
USG Allen	USG	70.9	56.2	----	9/29	31	1	1.0
AGS 568RR	AgSouth	67.6	55.5	54.0	9/28	30	1	1.0
TV52R28	Terral	67.1	----	----	9/29	29	1	1.0
95M50	Pioneer	67.0	41.9	----	10/02	27	1	1.0
TV54R28	Terral	66.9	----	----	9/29	28	1	1.0
Armor GP-533	Armor	66.5	44.6	----	9/29	26	1	1.0
DG 34J56	Dyna-Gro	65.8	40.6	58.1	9/29	30	1	1.0
AV 53D3NRR	Agventure	65.7	----	----	9/25	29	1	1.3
DG 32A53	Dyna-Gro	65.5	----	----	9/25	28	1	1.3
Morsoy RT5306N	Morsoy	64.7	52.8	----	9/29	28	1	1.0
Progeny 5650 R	Progeny	64.4	51.0	55.6	10/12	28	1	1.0
DG 33X55	Dyna-Gro	63.3	----	----	9/29	26	1	1.0
DG 35F55	Dyna-Gro	62.3	----	----	10/02	32	1	1.0
AG5503	Asgrow	61.8	----	----	9/25	31	1	1.0
AV 52P2NRR	Agventure	61.3	55.8	----	9/29	28	1	1.0
TV55R15	Terral	60.6	47.7	53.2	10/02	31	1	1.0
NK S52-F2	NK Brand	60.6	38.5	----	9/29	24	1	1.0
DG5450RR	Delta Grow	60.5	43.2	----	10/04	24	1	1.0
RC5007	Croplan Genetics	60.4	49.3	----	9/25	26	1	1.3
DG5170RR	Delta Grow	60.2	----	----	9/19	27	2	1.0
DG5555RR	Delta Grow	60.2	45.3	----	10/04	35	1	1.3
DG5300RR	Delta Grow	60.0	38.0	49.4	9/29	26	1	1.0
DP5335RR/S	Asgrow	59.8	57.0	----	10/06	40	1	2.5
95Y41	Pioneer	59.7	----	----	9/22	27	1	1.0
Armor GP-500	Armor	59.7	55.4	61.2	9/25	25	1	1.0
USG 75J18	USG	59.3	----	----	9/23	27	1	1.0
AG5504	Asgrow	58.7	----	----	9/25	23	1	1.3
HBK RS5227	Hornbeck	58.7	41.5	----	9/29	24	1	1.5
USG 7515RS	USG	58.2	----	----	9/20	27	1	2.3
Morsoy RT5688N	Morsoy	57.8	----	----	10/08	26	1	1.3
DG5630RR	Delta Grow	57.6	----	----	10/03	26	1	1.8
Progeny 5107RR	Progeny	57.3	----	----	10/02	35	2	1.8
DG 33B52	Dyna-Gro	57.3	40.2	----	9/25	22	1	1.0
HBK R5525	Hornbeck	57.1	38.0	----	9/29	22	1	1.0
AV 54X4RR	Agventure	56.8	----	----	9/29	27	1	1.0
DG5160RR	Delta Grow	56.3	58.1	----	9/19	32	1	1.5
AG5304	Asgrow	56.1	----	----	9/25	25	1	1.8
HBK R5226	Hornbeck	55.7	45.2	50.6	9/25	21	1	1.0
USG 75J47	USG	55.4	----	----	9/29	28	1	1.5
DG5570RR	Delta Grow	55.3	----	----	10/04	27	1	1.5
DK5068	Asgrow	54.5	----	----	9/16	36	1	1.0
DG5280RR	Delta Grow	54.1	----	----	9/29	25	1	1.0
HBK R5425	Hornbeck	54.1	44.2	----	10/12	44	3	1.0
95Y20	Pioneer	53.9	----	----	9/29	23	1	1.0
DG 31R54	Dyna-Gro	53.9	52.2	----	9/25	26	1	1.0
DG5470RR	Delta Grow	53.4	----	----	10/04	39	1	1.5
AV 51X5RR	Agventure	53.2	----	----	9/22	37	1	1.8
Progeny 5115RR	Progeny	53.0	----	----	9/19	39	1	1.0
Progeny 5622RR	Progeny	52.9	----	----	9/25	27	1	1.3
TV52R14	Terral	52.8	39.9	44.3	9/29	26	1	1.0
Progeny 5108RR	Progeny	52.7	----	----	9/19	37	1	1.0
MPG 5505nRR/STS	M-Pride	52.6	----	----	9/29	29	1	1.0
ES 5121	Eagle Seed	52.3	----	----	9/22	39	1	1.8
USG 7553 RS	USG	52.3	----	----	9/29	30	1	1.0
USG 75Z38	USG	52.2	----	----	9/25	26	1	1.0
MPG 5407nRR	M-Pride	52.2	53.4	----	10/02	35	2	1.3
Olympus 854RR	Merschman	52.2	----	----	10/02	24	1	1.0
DG 33P54	Dyna-Gro	51.5	47.3	----	9/30	19	1	1.5
AG5405	Asgrow	51.5	----	----	9/29	27	1	1.0
C5417R	Crow's	50.5	----	----	9/25	27	1	1.0
AV 50X6RR	Agventure	49.9	----	----	9/17	36	1	1.0
RC 5332NRR	Croplan Genetics	49.8	49.3	----	9/29	26	1	1.0
538.RC	Schillinger	49.5	----	----	9/29	27	1	1.0
557.RC	Schillinger	48.7	47.2	----	9/29	24	1	1.3
AV 50D2NRR	Agventure	43.3	50.3	----	9/17	35	1	2.3
LSD (P=0.05)		7.2						0.7
CV		8.8						44.9
Grand Mean		58.9						1.2

The shaded values are not different from the highest value at the 5% probability level.

Table 6 . Roundup Ready Late Maturity Group V Soybean Variety Trial planted April 24, 2008 on a Leeper silty clay loam soil, Verona, MS.

Variety	Brand Name	Yield bu/ac 2008	Yield bu/ac 2007	Yield bu/ac 2006	-----2008-----			
					Maturity Date	Plant Height Inches	Lodging Rating	Green Stem Rating
USG 75J97	USG	64.4	----	----	10/06	38	1	2.0
Morsoy RT5906N	Morsoy	64.1	----	----	10/02	39	1	1.8
AG5905	Asgrow	61.6	----	----	9/29	43	2	1.0
DG5970RR	Delta Grow	61.2	58.5	----	10/05	40	1	1.3
95Y70	Pioneer	58.0	----	----	10/02	41	3	1.0
HBK R5727	Hornbeck	57.8	----	----	9/29	31	1	1.0
DP 5915RR	Asgrow	55.8	55.3	41.7	10/06	41	2	1.5
Progeny 570RR	Progeny	54.8	54.3	----	10/05	37	2	1.5
TV57R16	Terral	54.4	56.6	49.3	10/02	40	2	1.0
DG 33C59	Dyna-Gro	53.2	58.5	----	10/05	35	2	1.5
TV59R16	Terral	53.2	53.4	50.5	10/06	35	1	2.0
AGS 606RR	AgSouth	52.8	----	----	10/05	28	1	1.3
DG 36T60	Dyna-Gro	51.0	----	----	10/05	29	1	1.3
AV 57D7NRR	Agventure	50.9	56.6	40.4	9/25	29	1	1.3
DG 32B57	Dyna-Gro	50.3	45.2	----	9/25	33	1	1.0
HBK R5825	Hornbeck	49.5	48.8	----	10/05	32	1	1.3
USG 75Z98	USG	49.5	----	----	10/06	32	1	1.8
USG 7582nRR	USG	45.2	----	----	10/06	31	1	1.3
AG5803	Asgrow	35.1	----	----	9/29	35	1	1.3
LSD (P=0.05)		8.8						0.7
CV		11.5						33.9
Grand Mean		53.8						1.4

The shaded values are not different from the highest value at the 5% probability level.

Table 7. Conventional Maturity Group IV and V Soybean Variety Trial planted April 24, 2008 on a Leeper silty clay loam soil, Verona, MS.

Variety	Brand Name	MG	Yield bu/ac 2008	Yield bu/ac 2007	Yield bu/ac 2006	-----2008-----			
						Maturity Date	Plant Height Inches	Lodging Rating	Green Stem Rating
Stoddard	Public	EV	72.4	54.3	41.7	9/25	28	1	1.0
USG 5002T	USG	EV	68.6	63.2	50.9	9/29	26	1	1.3
Jake	Public	EV	66.7	60.2	51.9	10/02	27	1	1.5
HBK C5894	Hornbeck	LV	64.7	49.6	----	10/02	39	5	1.3
Osage	Public	EV	61.7	----	----	10/02	24	1	1.3
Ozark	Public	EV	57.7	50.7	38.4	10/02	30	1	1.0
HBK C4926	Hornbeck	LV	52.6	45.2	43.2	9/25	23	5	1.0
AV 49X0NRR	Agventure	LV	51.4	----	----	9/22	44	5	1.0
UA 4805	Public	LV	46.4	56.2	45.2	9/25	28	1	1.0
HBK C5025	Hornbeck	EV	45.5	49.1	----	10/02	49	5	1.3
LSD (P=0.05)			10.7						0.5
CV			12.5						32.2
Grand Mean			58.8						1.2

The shaded values are not different from the highest value.

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