

*Performance
of Soybean
Varieties in
Alabama,
2002*

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PERFORMANCE OF SOYBEAN VARIETIES IN ALABAMA, 2002

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INTRODUCTION

Soybean variety tests are conducted annually by the Alabama Agricultural Experiment Station. The 7 locations used represent the major soil and climatic regions of Alabama. These locations are divided into logical soybean growing regions. The regions and locations are:

<u>Region</u>	<u>Location</u>
Northern	Belle Mina, Crossville
Central	Prattville, Shorter
Southern	Brewton
Black Belt	Marion Junction (2 soils)
Gulf Coast	Fairhope

EXPERIMENTAL PROCEDURES

The standard tests were conducted as a randomized complete block design with four replications. Standard plot size was four 30- to 38-inch rows by 20 feet long. Fifteen feet of the middle two rows were harvested for yield. Seeding rate was 10 viable seeds per foot of row. The Group IV test was drilled with seven 7-inch rows. Seeding rate was five viable seeds per foot of row. The Early Planted test at Brewton was arranged in an incomplete lattice square design with four replications.

Data were collected on seed yield, moisture, lodging, shattering, plant height, and maturity date. Plot yields were adjusted to 13 percent moisture and converted to bushels (60 pounds) per acre. Lodging was scored on a scale of 1 to 5 as follows:

- 1 - almost all plants erect.
- 2 - either all plants leaning slightly (less than 45%) or a few plants down.
- 3 - either all plants leaning moderately (approximately 45%) or 25 to 50 percent of the plants down.
- 4 - either all plants leaning more than 45% or 50 to 80 percent of the plants down.
- 5 - more than 80 percent of the plants down.

Shattering was rated on a scale of 1 to 5 based on performance of the border rows 14 days after maturity. A rating of 1 indicates no shattering, a rating of 3 indicates a 4 to 8 percent shattering, and a rating of 5 is 20 percent or more shattering. Plant height was determined by measuring from the ground to the top of the plant at maturity. Maturity date was the day 95 percent of the pods achieved mature pod color. Harvest was approximately 7 to 10 days later.

SEASONAL CONDITIONS

Rainfall for 2002 is shown in Table 16. The normal planting dates for the standard tests are the first week in May, May 15-25, and May 25 to June 5 for northern, central, and southern Alabama locations, respectively. The Early Planted test at Brewton was not planted due to wet soil conditions. The Standard test at Prattville was not harvested due to extreme insect damage. Harvest was delayed at Fairhope due to very wet soil conditions.

COMPARING VARIETIES

To aid in determining real yield differences, a statistical analysis of variance was performed on the data from each location. The L.S.D. (least significant difference) and C.V. (coefficient of variation) are reported for each location's 2002 test, and for the location's or region's 2- and 3-year averages. The difference in yield of two varieties must exceed the L.S.D. value for one variety to be considered superior to others in yield in that particular test. The C.V. is a measure of the variability in an experiment. An increase in its value indicates an increase in the unexplained variability.

Since the performance of varieties varies with location and year, long-term averages from several locations are more reliable than 1-year performance. Three-year regional averages are considered a reliable evaluation of the relative performance of varieties. However varietal rankings may change among years and among locations.

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TABLE 1. PERFORMANCE OF GROUP IV SOYBEAN VARIETIES AT BELLE MINA, ALABAMA, 2002

Brand-Variety	Yield	Lodging score	Shattering score	Plant height	Maturity date
	- bu/acre -			- inches -	
Maturity Group IV					
Delta King 4763RR	29.4	1.0	1.3	23	8-29
USG 7499nRR	28.0	1.0	2.0	28	8-29
Delta King 4868RR	26.6	1.0	2.0	23	8-27
Deltapine DP 4690RR	20.9	1.0	1.0	31	9-17
SS RT 4702	20.7	1.0	3.0	27	8-30
Armor 47-G7	19.9	1.0	1.5	23	8-27
SS RT 5001N	19.8	1.0	1.5	31	9-14
USG 7489RR	19.0	1.0	2.8	24	8-30
AgriPro 4888RR	18.8	1.0	3.3	26	8-28
SS RT 4980	18.7	1.0	3.0	24	8-28
Pioneer 94B74	18.3	1.0	2.8	26	8-28
Pioneer 9492	18.1	1.0	2.3	23	8-28
Armor 44-R4	17.8	1.0	3.5	22	8-24
Pioneer 94B54	17.2	1.0	3.5	25	8-27
Dyna-Gro 3463	16.9	1.0	2.3	26	8-28
Dyna-Gro DGX419	14.3	1.0	2.5	21	8-27
SS RT 4502	12.7	1.0	3.5	27	8-29
SS RT 4902	10.2	1.0	4.0	28	9-6
Trial mean	19.3				
LSD(0.10)	8.6				
CV (%)	26				

TABLE 2. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 2002

Brand-Variety	Belle Mina	Cross-ville	Regional Average				Maturity date
			Yield	Lodging score	Shattering score	Plant height	
	----- bu/acre -----					- inches -	
Maturity Group IV							
Delta King 4763RR	26.3	49.3	37.8	1.0	1.1	30	9-13
Delta King 4868RR	21.1	43.1	32.1	1.0	1.1	28	9-13
SS RT 5001N	20.6	42.5	31.5	1.9	1.9	39	9-21
Maturity Group V							
Pioneer 95B42	25.4	45.4	35.4	1.5	1.1	39	9-23
Armor 52-C2	27.4	42.4	34.9	1.0	1.5	31	9-21
Armor 53-K3	23.1	43.0	33.1	1.1	1.1	31	9-28
Delta King 5465RR	24.4	40.8	32.6	1.3	1.1	35	9-25
Pioneer 95B32	23.1	41.8	32.4	1.1	1.0	29	9-23
SS RT 557N	26.0	38.3	32.2	1.8	1.3	37	9-27
Deltapine DP 5414RR	20.6	43.7	32.1	1.0	1.0	30	9-19
USG 510nRR	25.1	37.2	31.2	1.0	1.1	36	9-24
Armor 54-Z4	25.2	37.2	31.2	1.0	1.1	35	9-27
USG Exp 570	22.5	39.6	31.0	1.3	1.3	36	10-1
Pioneer 95B43	23.3	38.5	30.9	1.1	1.3	36	9-23
USG 540NRR	21.6	39.4	30.5	1.4	1.1	35	9-26

continued

TABLE 2, CONTINUED. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 2002

Brand-Variety	Belle Mina	Cross- ville	Regional Average				Maturity date
			Yield	Lodging score	Shattering score	Plant height	
----- <i>bu/acre</i> -----			- inches -				
Maturity Group V, continued							
SS RT 5302N	22.4	38.5	30.5	1.1	1.0	38	9-27
Croplan Genetics RC 5454	24.4	36.1	30.2	1.0	1.0	35	9-27
Dyna-Gro 3562NRR	21.4	38.0	29.7	1.6	1.3	34	9-25
AgriPro/Garst 5512 RR/N	24.5	34.8	29.7	1.0	1.0	35	9-26
USG 7582nRR	23.4	35.8	29.6	1.1	1.0	37	9-28
Croplan Genetics RC 5252	20.3	38.3	29.3	1.1	1.0	35	9-24
ES Prairie RRI	20.2	38.2	29.2	1.0	1.0	32	9-21
Delta King 5366RR	21.3	36.8	29.0	1.1	1.1	36	9-28
USG 7547RR	23.1	34.8	29.0	1.3	1.0	33	9-27
Pioneer 95B96	22.4	35.4	28.9	1.1	1.0	36	9-28
Croplan Genetics RC 5332	21.8	35.7	28.7	1.1	1.0	38	9-27
Delta King 5668RR	22.1	35.3	28.7	1.4	1.3	33	9-27
Hutcheson	20.1	37.1	28.6	1.3	1.0	34	9-24
Delta King 5661RR	23.4	33.3	28.4	1.4	1.0	35	10-3
ES Ranger RR	23.3	33.0	28.2	1.4	1.5	32	9-22
Armor 56-J6	21.1	34.9	28.0	1.0	1.0	39	10-2
Deltapine DP 5806 RR	20.7	35.2	28.0	1.9	1.1	38	10-4
Deltapine DPX 5915RR	22.3	32.6	27.5	1.1	1.0	37	10-5
SS RT 5702N	19.0	35.3	27.2	1.3	1.1	38	9-28
Deltapine DPX5734RR	20.0	34.1	27.0	1.3	1.1	38	9-30
SS RT-5999N	20.9	32.9	26.9	1.3	1.0	39	10-1
ES Punch RR	17.4	32.5	25.0	1.5	1.1	39	10-1
Croplan Genetics RC 5892	19.6	29.1	24.3	1.4	1.1	38	10-2
Delta King 5961 RR	19.5	25.6	22.5	1.8	1.0	38	10-9
ES Trooper RR	17.3	27.6	22.4	1.3	1.1	37	10-5
ES Marshall RR	14.9	28.3	21.6	1.5	1.0	38	10-2
Maturity Group VI							
Musen	22.2	34.5	28.3	1.0	1.0	38	11-10
Croplan Genetics RC 6767	22.4	32.1	27.3	1.0	1.0	38	11-16
GARST 6112RR/N	23.1	31.4	27.2	1.1	1.0	38	10-10
USG 620NRR	22.8	31.3	27.1	1.4	1.0	38	10-4
USG 7662nRR	20.6	33.3	26.9	1.0	1.0	37	11-16
SS RT 6202	19.3	34.0	26.6	1.4	1.0	38	10-6
Dyna-Gro 3614NRR	20.8	30.3	25.6	1.3	1.1	37	10-4
Croplan Genetics RC 6262	20.8	30.1	25.4	1.0	1.0	37	11-16
Trial mean	21.9	36.1	29.0	1.2	1.1	34	10-1
LSD(0.10)	5.5	8.4	5.0	0.6	0.3	3.6	4
CV (%)	15	14	10	27	17	6	1

TABLE 3. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA,
THREE-YEAR SUMMARY, 2000 - 2002

Brand-Variety	Yield			Lodging score	Shattering score	Plant height	Maturity date
	2002	2-yr avg	3-yr avg				
	----- bu/acre -----						
Maturity Group IV							
Delta King XTJ 174RR	38	47	.	1.6	1.1	29	9-19
SS RT 5001N	32	40	.	2.1	1.5	39	9-22
Delta King 4868RR	32	.	.	1.0	1.1	.	9-11
Maturity Group V							
Deltapine DPX 5915RR	27	44	37	1.2	1.0	32	10-7
Delta King 5465RR	33	45	37	1.3	1.4	30	9-29
Delta King 5668RR	29	43	36	1.6	1.1	30	10-2
Delta King 5366RR	29	42	35	1.3	1.0	33	10-2
Pioneer 95B32	32	42	35	1.3	1.1	28	9-27
SS RT-5999N	27	40	34	1.4	1.0	36	10-3
Delta King 5661RR	28	41	34	1.5	1.2	33	10-5
Hutcheson	29	40	34	1.4	1.1	30	9-30
Deltapine DP 5806 RR	28	39	33	1.7	1.0	33	10-6
Armor 54-Z4	31	44	.	1.1	1.1	32	9-28
Armor 56-J6	28	44	.	1.4	1.0	37	10-3
Armor 53-K3	33	44	.	1.4	1.1	31	9-28
USG 540NRR	30	43	.	1.3	1.1	32	9-28
Armor 52-C2	35	43	.	1.3	1.3	28	9-24
USG Exp 570	31	43	.	1.4	1.1	38	10-3
Croplan Genetics RC 5454	30	43	.	1.1	1.0	32	9-28
Dyna-Gro 3562NRR	30	43	.	1.9	1.2	33	9-28
Deltapine DP 5414RR	32	42	.	1.6	1.1	38	9-24
Croplan Genetics RC 5252	29	41	.	1.3	1.0	33	9-26
AgriPro/Garst 5512 RR/N	30	41	.	1.0	1.1	31	9-27
ES Ranger RR	28	40	.	2.0	1.3	27	9-26
Pioneer 95B96	29	39	.	1.3	1.2	35	10-1
USG 7547RR	29	37	.	1.5	1.0	32	9-27
ES Prairie RRI	29	37	.	1.9	1.0	35	9-23
ES Punch RR	25	37	.	1.6	1.2	37	9-30
ES Trooper RR	22	35	.	1.7	1.2	32	10-7
ES Marshall RR	22	33	.	1.9	1.0	36	10-5
Pioneer 95B42	35	.	.	1.5	1.1	.	9-21
SS RT 557N	32	.	.	1.8	1.3	.	9-25
USG 510nRR	31	.	.	1.0	1.1	.	9-22
Pioneer 95B43	31	.	.	1.1	1.3	.	9-21
SS RT 5302N	30	.	.	1.1	1.0	.	9-25
USG 7582nRR	30	.	.	1.1	1.0	.	9-26
Croplan Genetics RC 5332	29	.	.	1.1	1.0	.	9-25
SS RT 5702N	27	.	.	1.3	1.1	.	9-26
Deltapine DPX5734RR	27	.	.	1.3	1.1	.	9-28
Croplan Genetics RC 5892	24	.	.	1.4	1.1	.	9-30
Delta King 5961 RR	23	.	.	1.4	1.0	28	10-8

continued

**TABLE 3, CONTINUED. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA,
THREE-YEAR SUMMARY, 2000 - 2002**

Brand-Variety	Yield			Lodging score	Shattering score	Plant height	Maturity date
	2002	2-yr avg	3-yr avg				
	----- <i>bu/acre</i> -----						
Maturity Group VI							
Musen	28	38	32	1.5	1.0	31	10-25
USG 620NRR	27	41	.	1.6	1.1	38	10-7
Dyna-Gro 3614NRR	26	39	.	1.5	1.1	38	10-6
Croplan Genetics RC 6767	27	.	.	1.0	1.0	.	11-14
GARST 6112RR/N	27	.	.	1.1	1.0	.	10-8
USG 7662nRR	27	.	.	1.0	1.0	.	11-14
SS RT 6202	27	.	.	1.4	1.0	.	10-4
Croplan Genetics 6299RR	25	.	.	1.0	1.0	.	11-14
Trial mean	29	37	32				
LSD(0.10)	5	5	4				
%CV	10	8	7				

TABLE 4. PERFORMANCE OF SOYBEAN VARIETIES AT PRATTVILLE, ALABAMA, 2002

This test was not harvested in 2002 due to severe insect damage.

TABLE 5. PERFORMANCE OF SOYBEAN VARIETIES AT SHORTER, ALABAMA, 2002

Brand-Variety	Yield - bu/acre -	Lodging score	Shattering score	Plant height - inches -	Maturity date
Maturity Group IV					
Delta King 4763RR	34.9	1.0	0.0	32	8-27
Delta King 4868RR	32.2	1.0	0.0	31	8-27
Maturity Group V					
Croplan Genetics RC 5252	28.9	0.8	0.0	37	9-5
USG 7582nRR	27.7	0.8	0.0	36	9-6
Hutcheson	27.6	0.0	0.0	34	9-5
USG 540NRR	27.4	0.0	0.0	34	9-4
USG 7547RR	26.5	0.3	0.0	34	9-4
Pioneer 95B97	26.5	1.3	0.0	35	9-6
USG 510nRR	26.2	0.8	0.0	36	9-4
Delta King 5465RR	26.1	0.0	0.0	34	9-4
Pioneer 95B96	24.3	0.5	0.0	36	9-6
Delta King 5668RR	22.7	1.0	0.0	35	9-6
Delta King 5366RR	22.6	0.8	0.0	39	9-6
Croplan Genetics RC 5892	22.5	0.5	0.0	37	9-7
Delta King 5961 RR	22.2	0.3	0.0	37	9-12
USG Exp 570	20.3	0.5	0.0	35	9-8
Delta King 5661RR	18.5	0.0	0.0	32	9-6
Maturity Group VI					
USG 620NRR	27.5	1.3	0.0	42	9-14
Musen	15.0	0.8	0.0	42	10-21
Croplan Genetics RC 6262	14.0	0.8	0.0	41	10-27
Croplan Genetics RC 6767	11.3	0.5	0.0	44	10-15
USG 7662nRR	8.4	0.5	0.0	42	10-25
Maturity Group VII					
Haskell	19.3	1.0	0.0	42	11-6
Pioneer 97B52	16.0	1.3	0.0	43	11-5
Stonewall	15.0	1.3	0.0	43	10-12
Trial mean	22.5	0.7		37.1	9-19
LSD(0.10)	5.4	0.9		3.7	9
CV (%)	14	78		6	2

TABLE 6. PERFORMANCE OF SOYBEAN VARIETIES AT SHORTER, ALABAMA,
THREE-YEAR SUMMARY, 2000-2002

Brand-Variety	Yield			Lodging score	Shattering score	Plant height -- inch --	Maturity date
	2002	2-yr avg	3-yr avg				
	----- bu/acre -----						
Maturity Group IV							
Delta King XTJ 174RR	35	.	.	1.0	0.0	.	8-27
Delta King 4868RR	32	.	.	1.0	0.0	.	8-27
Maturity Group V							
Hutcheson	28	39	38	0.6	0.0	29	9-22
Delta King 5465RR	26	37	.	0.0	0.0	35	9-14
Delta King 5668RR	23	35	.	1.4	0.0	33	9-16
USG 7547RR	27	34	.	0.5	0.0	35	9-14
Pioneer 95B96	24	33	.	0.5	0.0	35	9-16
USG 540NRR	27	33	.	0.0	0.0	33	9-14
Delta King 5366RR	23	33	.	1.0	0.0	35	9-15
Delta King 5661RR	18	30	.	0.4	0.0	37	9-16
USG Exp 570	20	29	.	0.5	0.0	36	9-18
Croplan Genetics RC 5252	29	.	.	0.8	0.0	.	9-5
USG 7582nRR	28	.	.	0.8	0.0	.	9-6
Pioneer 95B97	26	.	.	1.3	0.0	.	9-6
USG 510nRR	26	.	.	0.8	0.0	.	9-4
Croplan Genetics RC 5892	22	.	.	0.5	0.0	.	9-7
Delta King 5961 RR	22	.	.	0.3	0.0	.	9-12
Maturity Group VI							
Pioneer 96B21	33	36	.	0.8	0.0	40	9-19
USG 620NRR	28	33	.	0.9	0.0	38	9-22
Croplan Genetics 6299RR	14	.	.	0.8	0.0	.	10-27
Croplan Genetics RC 6767	11	.	.	0.5	0.0	.	10-15
USG 7662nRR	8	.	.	0.5	0.0	.	10-25
Maturity Group VII							
Stonewall	15	26	30	0.8	0.0	34	10-12
Haskell	19	26	29	1.2	0.0	34	10-21
Pioneer 97B52	16	24	.	1.5	0.0	39	10-23
Trial mean	22	31	29				
LSD(0.10)	5	5	7				
%CV	15	9	12				

TABLE 7. PERFORMANCE OF SOYBEAN VARIETIES ON SUMTER SOIL,
MARION JUNCTION, ALABAMA, 2002

Brand-Variety	Yield	Lodging score	Shattering score	Plant height	Iron Chlorosis*	Maturity date
	- bu/acre -			- inches -		
Maturity Group V						
Pioneer 95B97	39.8	1.5	1.0	21	1.5	9-17
Croplan Genetics RC 5892	32.0	2.0	1.0	28	4.0	9-24
Delta King 5366RR	29.5	1.8	1.0	23	5.0	9-20
Delta King 5668RR	29.4	1.0	1.0	23	3.8	9-17
ES Marshall RR	26.2	1.8	1.0	25	7.1	10-2
Pioneer 95B96	25.6	1.5	1.0	23	3.0	9-25
Croplan Genetics RC 5252	23.5	1.3	1.0	19	5.0	9-20
Croplan Genetics RC 5332	23.4	1.0	1.0	20	5.4	9-20
Delta King 5661RR	22.6	1.3	1.0	17	7.0	9-21
Delta King 5465RR	19.5	1.0	1.0	18	5.1	9-18
Delta King 5961 RR	17.2	1.3	1.0	17	6.1	9-22
Croplan Genetics RC 5454	10.3	1.0	1.0	13	8.4	9-19
Hutcheson	9.9	1.3	1.0	16	6.8	9-19
Maturity Group VI						
Croplan Genetics RC 6262	31.8	1.0	1.0	20	3.4	10-8
Croplan Genetics RC 6767	21.9	1.0	1.0	17	5.1	10-8
Musen	21.5	2.0	1.0	22	5.3	10-14
Pioneer 96B21	17.0	1.8	1.0	22	6.0	9-24
Maturity Group VII						
Pioneer 97B52	36.3	2.3	1.0	30	2.3	10-15
Stonewall	32.3	1.5	1.0	26	3.0	10-8
G99-G6682	32.0	2.5	1.0	33	2.0	10-15
Haskell	30.9	2.8	1.0	29	2.3	10-15
Trial mean	25.4	1.5		21.9		9-26
LSD(0.10)	17.2	0.8		9.7		4
CV (%)	41	32		26		1

* Iron chlorosis was rated on July 26, 2002 on a scale of 1 = no chlorosis to 10= plants losing leaves due to necrotic spots in leaves

TABLE 8. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL,
MARION JUNCTION, ALABAMA, 2002

Brand-Variety	Yield	Lodging score	Shattering score	Plant height	Maturity date
	- bu/acre -			- inches -	
Maturity Group V					
Pioneer 95B97	58.7	1.0	1.0	29	9-24
Delta King 5366RR	55.9	1.0	1.0	33	9-26
Pioneer 95B96	55.9	1.0	1.0	31	9-25
Delta King 5668RR	54.6	1.0	1.0	30	9-25
Delta King 5465RR	54.2	1.0	1.0	31	9-21
Croplan Genetics RC 5892	54.2	1.0	1.0	34	9-22
Croplan Genetics RC 5332	53.2	1.0	1.0	33	9-27
Hutcheson	52.1	1.0	1.0	30	9-21
Delta King 5961 RR	50.3	1.0	1.0	31	9-20
Croplan Genetics RC 5454	49.5	1.0	1.0	28	10-5
Croplan Genetics RC 5252	49.4	1.0	1.0	31	10-6
Delta King 5661RR	45.7	1.0	1.0	26	9-28
ES Marshall RR	45.6	1.0	1.0	35	9-21
Maturity Group VI					
Pioneer 96B21	56.0	1.0	1.0	32	9-19
Croplan Genetics RC 6767	48.6	1.0	1.0	31	10-10
Croplan Genetics RC 6262	48.0	1.0	1.0	27	10-10
Musen	43.9	1.3	1.0	32	10-8
Maturity Group VII					
Stonewall	50.9	1.3	1.0	32	10-8
Pioneer 97B52	50.7	1.5	1.0	38	9-23
G99-G6682	49.4	2.0	1.0	36	9-28
Haskell	48.8	2.0	1.0	35	10-5
Trial mean	51.2	1.1		31.5	9-26
LSD(0.10)	7.0	0.3		4.0	3
CV (%)	8	17		8	1

**TABLE 9. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL,
MARION JUNCTION, ALABAMA, THREE-YEAR SUMMARY, 2000-2002**

Brand-Variety	Yield			Lodging score	Shattering score	Plant height -- inch --	Maturity date
	2002	2-yr avg	3-yr avg				
	----- bu/acre -----						
Maturity Group V							
Hutcheson	52	47	37	1.0	2.3	23	9-29
Pioneer 95B96	56	50	.	1.0	1.0	27	10-6
ES Marshall RR	46	45	.	1.3	1.0	35	10-8
Croplan Genetics RC 5252	49	43	.	1.1	1.1	25	9-29
Croplan Genetics RC 5454	50	42	.	1.0	1.0	26	10-4
Pioneer 95B97	59	.	.	1.0	1.0	.	9-24
Delta King 5366RR	56	.	.	1.0	1.0	.	9-25
Delta King 5668RR	55	.	.	1.0	1.0	.	9-21
Delta King 5465RR	54	.	.	1.0	1.0	.	9-22
Croplan Genetics RC 5892	54	.	.	1.0	1.0	.	9-27
Croplan Genetics RC 5332	53	.	.	1.0	1.0	.	9-21
Delta King 5961 RR	50	.	.	1.0	1.0	.	9-28
Delta King 5661RR	46	.	.	1.0	1.0	.	9-23
Maturity Group VI							
Pioneer 96B21	56	53	43	1.0	2.3	30	10-5
Musen	44	44	37	1.1	1.5	32	10-14
Croplan Genetics RC 6767	49	.	.	1.0	1.0	.	10-8
Croplan Genetics 6299RR	48	.	.	1.0	1.0	.	10-8
Maturity Group VII							
Stonewall	51	48	40	1.1	1.5	29	10-17
Haskell	49	47	39	1.9	1.0	33	10-20
G99-G6682	49	51	.	1.6	1.0	38	10-16
Pioneer 97B52	51	49	.	1.3	1.0	34	10-14
Trial mean	51	47	40				
LSD(0.10)	7	6	5				
%CV	8	8	7				

TABLE 10. PERFORMANCE OF SOYBEAN VARIETIES AT BREWTON, ALABAMA, 2002

Brand-Variety	Yield	Lodging score	Shattering score	Plant height	Maturity date
	- bu/acre -			- inches -	
Maturity Group V					
Pioneer 95B97	44.5	2.0	1.0	29	9-21
Pioneer 95B96	42.3	1.0	1.0	33	9-18
Deltapine DP 5806 RR	40.2	2.5	1.0	34	9-24
Delta King 5366RR	39.5	2.0	1.0	31	9-17
Hutcheson	39.1	1.5	1.0	32	9-16
Deltapine DPX 5915RR	37.7	1.3	1.0	33	9-19
Delta King 5961 RR	36.7	1.3	1.0	33	9-24
Delta King 5668RR	34.9	1.8	1.0	30	9-18
Croplan Genetics RC 5892	33.8	2.3	1.0	39	9-20
Deltapine DPX5734RR	32.9	2.0	1.0	33	9-10
Delta King 5465RR	31.8	1.0	1.0	31	9-12
Croplan Genetics RC 5454	31.7	1.0	1.0	29	9-10
SS RT-5999N	30.1	1.8	1.0	40	9-22
Croplan Genetics RC 5332	29.3	1.3	1.0	32	9-9
Croplan Genetics RC 5252	29.0	1.3	1.0	28	9-12
Delta King 5661RR	27.3	1.3	1.0	26	9-11
Maturity Group VI					
Musen	47.4	2.3	1.0	34	10-4
Croplan Genetics RC 6767	41.1	1.5	1.0	33	10-2
Croplan Genetics RC 6262	40.1	1.3	1.0	33	10-2
SS RT 6202	39.8	1.8	1.0	34	9-30
Deltapine DP 6880 RR	36.0	1.8	1.0	31	10-3
Pioneer 96B21	34.6	2.0	1.0	35	9-20
Maturity Group VII					
Deltapine DP 7220RR	39.7	1.8	1.0	33	10-3
G99-G6682	38.9	1.8	1.0	34	10-7
Haskell	37.6	2.0	1.0	29	10-7
Pioneer 97B52	37.2	2.0	1.0	32	10-4
SS RT 7499N	37.2	1.5	1.0	33	10-6
Stonewall	34.4	1.8	1.0	33	10-3
Maturity Group VIII					
Pritchard RR	50.4	2.0	1.0	35	10-14
Kuell	50.2	2.0	1.0	34	10-11
Au 97-10	46.2	1.5	1.0	34	10-5
Cook	40.3	1.3	1.0	31	10-10
Trial mean	37.9	1.7		32.5	9-23
LSD(0.10)	6.1	0.9		4.7	5
CV (%)	10	33		9	1

**TABLE 11. PERFORMANCE OF SOYBEAN VARIETIES AT BREWTON, ALABAMA,
THREE-YEAR SUMMARY, 2000-2002**

Brand-Variety	Yield			Lodging score	Shattering score	Plant height -- inch --	Maturity date
	2002	2-yr avg	3-yr avg				
	----- bu/acre -----						
Maturity Group IV							
Maturity Group V							
Hutcheson	39	44	45	1.2	0.0	20	9-18
Deltapine DP 5806 RR	40	43	44	1.5	0.0	27	9-23
Deltapine DPX 5915RR	38	40	43	1.1	0.0	23	9-20
SS RT-5999N	30	35	34	1.4	3.8	29	9-21
Pioneer 95B96	42	44	.	1.0	0.0	23	9-27
Croplan Genetics RC 5252	29	35	.	1.1	0.0	20	9-21
Croplan Genetics RC 5454	32	35	.	1.0	0.0	20	9-20
Pioneer 95B97	45	.	.	2.0	0.0	.	9-21
Delta King 5366RR	40	.	.	2.0	0.0	.	9-17
Delta King 5961 RR	37	.	.	1.3	0.0	.	9-24
Delta King 5668RR	35	.	.	1.8	0.0	.	9-18
Croplan Genetics RC 5892	34	.	.	2.3	0.0	.	9-20
Deltapine DPX5734RR	33	.	.	2.0	0.0	.	9-10
Delta King 5465RR	32	.	.	1.0	0.0	.	9-12
Croplan Genetics RC 5332	29	.	.	1.3	0.0	.	9-9
Delta King 5661RR	27	.	.	1.3	0.0	.	9-11
Maturity Group VI							
Musen	47	48	47	1.4	0.0	24	10-4
Deltapine DP 6880 RR	36	39	45	1.3	0.0	27	10-1
Pioneer 96B21	35	38	.	1.5	0.0	27	9-27
Croplan Genetics RC 6767	41	.	.	1.5	0.0	.	10-2
Croplan Genetics 6299RR	40	.	.	1.3	0.0	.	10-2
SS RT 6202	40	.	.	1.8	0.0	.	9-30
Maturity Group VII							
Deltapine DP 7220RR	40	46	50	1.3	0.0	27	10-4
G99-G6682	39	43	47	1.3	0.0	29	10-4
SS RT 7499N	37	41	46	1.2	0.0	27	10-6
Haskell	38	40	45	1.5	0.0	27	10-4
Stonewall	34	39	43	1.3	0.0	24	10-3
Pioneer 97B52	37	41	.	1.5	0.0	28	10-5
Maturity Group VIII							
Kuell	50	49	53	1.6	0.0	32	10-10
Pritchard RR	50	52	.	1.5	0.0	32	10-17
Cook	40	44	.	1.3	0.0	31	10-11
Au 97-10	46	.	.	1.5	0.0	.	10-5
Trial mean	36	39	42				
LSD(0.10)	6	5	6				
%CV	10	8	8				

TABLE 12. PERFORMANCE OF SOYBEAN VARIETIES AT FAIRHOPE, ALABAMA, 2002

Brand-Variety	Yield	Lodging score	Shattering score	Plant height	Maturity date
	- bu/acre -			- inches -	
Maturity Group V					
Delta King 5661RR	43.8	-	3.0	25	10-1
Pioneer 95B97	38.7	-	2.8	28	10-6
Delta King 5366RR	37.3	-	3.5	29	10-2
Deltapine DP 5806 RR	35.6	-	2.8	30	10-4
Pioneer 95B96	35.3	-	2.8	32	10-4
Croplan Genetics RC 5892	34.7	-	2.8	34	10-6
Croplan Genetics RC 5332	34.1	-	2.5	32	10-1
Deltapine DPX5734RR	33.6	-	3.0	31	10-1
Croplan Genetics RC 5454	33.1	-	2.5	27	10-3
AgriPro/Garst 5512 RR/N	32.6	-	2.8	27	10-2
Delta King 5668RR	32.6	-	3.8	28	10-2
Dyna-Gro 3562NRR	32.3	-	3.0	28	10-1
Delta King 5961 RR	32.0	-	2.8	31	10-8
Delta King 5465RR	31.7	-	2.3	28	10-1
Hutcheson	31.7	-	2.8	29	10-1
Croplan Genetics RC 5252	31.5	-	3.0	29	10-1
Maturity Group VI					
Deltapine DP 6880 RR	40.8	-	2.3	35	10-13
Pioneer 96B21	40.3	-	2.5	32	10-5
GARST 6112RR/N	39.4	-	2.8	34	10-3
Garst 6612RR/N	38.4	-	2.3	37	10-9
Dyna-Gro DGX421	38.1	-	2.0	35	10-8
Croplan Genetics RC 6767	37.8	-	2.3	31	10-8
Dyna-Gro 3614NRR	36.8	-	3.3	36	10-5
Croplan Genetics RC 6262	34.7	-	2.0	36	10-8
Musen	33.1	-	2.8	34	10-15
Maturity Group VII					
Haskell	46.0	-	2.0	31	10-16
G99-G6682	45.2	-	2.3	34	10-15
Pioneer 97B52	40.4	-	2.3	29	10-14
Deltapine DP 7220RR	39.8	-	2.5	36	10-14
Stonewall	38.1	-	2.0	32	10-13
Maturity Group VIII					
Kuell	53.1	-	2.3	31	10-24
Cook	44.7	-	2.3	31	10-17
Pritchard RR	34.0	-	2.5	37	10-19
Au 97-10	27.9	-	2.8	32	10-8
Trial mean	37.0		2.6	31.4	10-7
LSD(0.10)	5.1		0.8	5.1	2
CV (%)	8		18	10	1

TABLE 13. PERFORMANCE OF SOYBEAN VARIETIES AT FAIRHOPE, ALABAMA,
THREE-YEAR SUMMARY, 2000-2002

Brand-Variety	Yield			Lodging score	Shattering score	Plant height -- inch --	Maturity date
	2002	2-yr avg	3-yr avg				
	----- bu/acre -----						
Maturity Group V							
Deltapine DPX 5915RR	47	53	43	1.6	1.7	32	10-7
Deltapine DP 5806 RR	36	48	40	2.3	2.0	33	10-8
Hutcheson	32	47	37	1.5	3.0	29	9-30
AgriPro/Garst 5512 RR/N	33	47	.	1.3	1.9	31	10-6
Pioneer 95B96	35	46	.	2.3	2.0	33	10-8
Croplan Genetics RC 5454	33	46	.	1.3	2.0	29	10-6
Croplan Genetics RC 5252	32	46	.	1.0	2.5	31	10-4
Dyna-Gro 3562NRR	32	43	.	2.8	2.9	30	10-6
Delta King 5661RR	44	.	.	.	3.0	.	10-3
Pioneer 95B97	39	.	.	.	2.8	.	10-8
Delta King 5366RR	37	.	.	.	3.5	.	10-4
Croplan Genetics RC 5892	35	.	.	.	2.8	.	10-8
Croplan Genetics RC 5332	34	.	.	.	2.5	.	10-3
Deltapine DPX5734RR	34	.	.	.	3.0	.	10-3
Delta King 5668RR	33	.	.	.	3.8	.	10-4
Delta King 5961 RR	32	.	.	.	2.8	.	10-10
Delta King 5465RR	32	.	.	.	2.3	.	10-3
Maturity Group VI							
Deltapine DP 6880 RR	41	49	40	1.9	1.4	33	10-16
Musen	33	44	40	2.1	1.8	28	10-19
Dyna-Gro 3614NRR	37	46	39	1.8	1.8	33	10-11
Pioneer 96B21	40	48	.	2.3	1.8	35	10-9
GARST 6112RR/N	39	.	.	.	2.8	.	10-5
Garst 6612RR/N	38	.	.	.	2.3	.	10-11
Dyna-Gro DGX421	38	.	.	.	2.0	.	10-10
Croplan Genetics RC 6767	38	.	.	.	2.3	.	10-10
Croplan Genetics 6299RR	35	.	.	.	2.0	.	10-10
Maturity Group VII							
G99-G6682	45	54	44	2.0	1.4	33	10-21
Deltapine DP 7220RR	40	51	43	1.8	1.6	35	10-20
Haskell	46	50	41	1.9	1.5	30	10-17
Stonewall	38	46	38	1.5	1.7	30	10-18
Pioneer 97B52	40	48	.	2.3	1.6	33	10-17
Maturity Group VIII							
Kuell	53	56	48	2.4	1.8	35	10-26
Cook	45	52	.	3.5	1.6	36	10-23
Pritchard RR	34	44	.	3.8	1.8	40	10-26
Au 97-10	28	.	.	.	2.8	.	10-10
Trial mean	35	46	39				
LSD(0.10)	5	4	5				
%CV	9	5	7				

TABLE 14. CULTURAL PRACTICES FOR SOYBEAN VARIETY TESTS IN 2002

Location	Type of test	Date planted	Row width - inches -	Herbicide used	Fertilizer applied
Belle Mina	Group IV	April 25	7	Treflan	none recommended
	Standard	May 16	30	Treflan	none recommended
Crossville	Standard	May 14	30	Dual, Scepter	none recommended
Prattville	Standard	May 20	30	Not harvested - due to severe insect damage	
Shorter	Standard	May 7	30	Dual	none recommended
Marion Junction	Standard (Sumter)	May 16	36	Scepter	none recommended
	Standard (Vaiden)	May 16	36	Scepter	none recommended
Brewton	Early	Not planted - due to wet weather			
	Standard	May 23	36	Dual	400 lb. 5-10-15/acre
Fairhope	Standard	June 4	38	Prowl	165 lb. 0-24-24/acre

TABLE 15. SOIL TYPES FOR SOYBEAN TESTS, 2002

Location	Soil Type
Belle Mina	Emory silt loam
Crossville	Wynnvilleville fine sandy loam
Prattville	Lucedale fine sandy loam
Shorter	Cowarts loamy sand
Marion Junction	Vaiden clay
Marion Junction	Sumter clay (high pH soil)
Brewton	Benndale fine sandy loam
Fairhope	Malbis fine sandy loam

TABLE 16. RAINFALL AT TEST LOCATIONS DURING GROWING SEASON, 2002

Month	Days	Belle	Crossville	Shorter	Prattville	Marion	Brewton	Fairhope
		Mina				Junction		
----- inches -----								
May	1-5	3.87	3.18	0.11	0.20	0.00	0.00	0.00
	6-10	0.54	0.16	0.00	0.00	1.33	0.00	0.00
	11-15	0.93	0.00	0.10	0.09	0.12	0.12	0.59
	16-20	0.58	1.03	1.18	0.99	0.40	1.17	0.97
	21-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26-31	4.33	0.41	1.15	1.30	2.75	0.49	0.78
June	1-5	0.02	0.36	1.90	0.20	0.00	1.49	0.03
	6-10	0.00	0.15	0.00	0.05	0.02	0.70	0.25
	11-15	0.51	0.40	0.28	0.13	0.43	1.81	0.04
	16-20	0.00	0.00	0.56	0.10	0.05	1.27	0.13
	21-25	0.04	0.00	1.08	0.29	1.87	4.01	1.54
	26-31	0.31	0.98	1.78	1.12	1.26	3.18	1.41
July	1-5	0.25	1.22	0.31	0.62	0.82	2.13	1.31
	6-10	0.00	0.00	0.20	0.00	0.00	0.05	1.99
	11-15	2.04	2.14	0.25	2.74	2.34	0.14	1.00
	16-20	0.72	0.10	0.12	0.18	0.04	0.14	0.00
	21-25	0.40	0.22	0.69	0.18	0.35	7.01	5.71
	26-31	1.12	0.86	0.73	0.45	2.90	2.92	0.75
August	1-5	0.00	0.72	0.00	1.07	0.75	2.00	1.39
	6-10	0.00	0.70	1.67	0.14	0.00	0.64	0.13
	11-15	0.66	0.00	0.01	0.20	0.00	0.00	0.39
	16-20	0.21	1.03	0.12	0.10	1.30	1.58	0.05
	21-25	0.70	0.10	0.05	0.67	2.06	0.24	3.43
	26-31	0.09	0.10	0.04	0.00	0.15	1.22	0.44
September	1-5	0.00	0.00	0.06	0.00	0.00	0.55	0.69
	6-10	0.00	0.00	0.33	0.00	0.00	0.23	0.93
	11-15	0.29	0.69	0.87	0.86	0.16	0.84	2.26
	16-20	0.37	0.18	0.10	0.00	0.20	0.25	0.06
	21-25	1.82	5.10	2.66	3.74	5.95	2.14	4.06
	26-31	2.83	2.99	1.89	1.59	2.81	7.46	6.77
October	1-5	0.60	1.12	0.00	0.02	0.00	0.51	2.21
	6-10	0.73	0.52	0.00	0.00	0.35	0.04	0.26
	11-15	0.44	0.37	1.49	0.85	0.34	1.96	2.86
	16-20	0.28	0.90	0.33	0.39	0.88	0.30	0.25
	21-25	0.16	0.21	1.29	0.21	0.11	1.55	0.14
	26-31	0.98	1.30	1.13	1.58	1.58	2.54	2.72

TABLE 17. ENTRIES AND SOURCES OF SEED FOR SOYBEAN TESTS, 2002

Source	Entry
AG South Genetics, LLC Dunwoody, Georgia	Pritchard RR
Alabama Crop Imp. Assoc. Auburn, Alabama	Hutcheson, Stonewall, Kuell
Armor Seed Company Fisher, Arkansas	Armor brand varieties
Delta and Pine Land Company Scott, Mississippi	Deltapine brand varieties
Delta King Seed Co. McCrary, Arkansas	Delta King brand varieties
Department of Agronomy and Soils Auburn University, Alabama	Au 97-10
Eagle Seed Co. Weiner, Arkansas	ES brand varieties
Garst Seed Co. Memphis, Tennessee	AgriPro/Garst brand varieties
Land O' Lakes Blytheville, Arkansas	Croplan Genetics brand varieties
Pioneer, A DuPont Company Huntsville, Alabama	Pioneer brand varieties
South Carolina Foundation Seed Association Clemson, South Carolina	Musen
Southern States Coop. Richmond, Virginia	SS brand varieties
UniSouth Genetics, Inc. Nashville, Tennessee	USG brand varieties
United Agri-Products Madison, Alabama	Dyna-Gro brand varieties
University of Georgia Athens, Georgia	G99- G6682, Haskell, Cook