Central Alabama
Soybean Variety Tests
1981

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Table of Contents

The following is a suggested list of varieties by planting date for central Alabama. Within planting dates, varieties are listed alphabetically by maturity group.

Plantings May 1 to 15

V	VI	VII	VIII
Forrest	Centennial Coker 156 Davis Deltapine 105 Lee 74 McNair 600 Tracy Tracy M		

Plantings May 16 to June 5

V	VI	VII	VIII
	Centennial Coker 156 Davis McNair 600 RA 680 Tracy Tracy M	Agripro 70 Bragg Braxton Coker 237 RA 700 Ransom	Coker 338 Coker 488 Hutton

Plantings June 6 to 30

V	VI	VII	VIII
	Davis	Bragg Braxton Coker 237 Ransom	Cobb Coker 338 Coker 488 Hutton

INTRODUCTION

To properly evaluate a soybean variety it is necessary that it be grown at a number of locations, at various planting dates, and over a period of years. This will subject the variety to differences in soil and climatic conditions that occur throughout the State. The most common limiting factor in soybean production is inadequate moisture during pod development and filling. Since soybeans are highly photo periodic, the blooming period, period of pod development and fill, and maturity date of a particular variety do not vary greatly from year to year for a given planting date. Thus, it is important that varieties from more than one maturity group be evaluated at each location. Continued testing and evaluation of soybean varieties and experimental strains by agricultural experiment stations are essential if farmers, county extension agents, seedsmen, and other agricultural workers are to be provided with information to help them select varieties best adapted to their locality and management needs.

EXPERIMENTAL PROCEDURES

Tests in central Alabama were conducted at five substations or experiment fields of the Alabama Agricultural Experiment Station of Auburn University. A randomized block design with 2 to 4 replications was used at each location with the first planting made at the optimum time for maximum yield. Plots were planted with regular commercial soybean planters equipped with special seed hoppers adapted for small plots. Plots were four rows wide and 23 feet long with 16 feet of the two inner rows harvested for yield determinations. Harvest was done with a small plot combine at all locations. Row width varied from 36 to 39 inches depending on location. Seeding rates were 10 viable seed per foot of row based on germination at 75°F. All plot areas were fertilized according to soil test.

The entries in these tests included varieties released prior to 1981, a number of unreleased lines in the late stages of development from the USDA Regional Testing Program, and some commercial lines. Sources of seed are listed on pages 11 to 13.

The tests in central Alabama were located on Houston clay and Vaiden clay near Marion Junction, Lucedale sandy loam near Prattville, Cahaba sandy loam near Camden, Wickham sandy loam near Tallassee, and Orangeburg sandy loam near Shorter. Soybeans of maturity groups VII and VIII are full season varieties in this area. Varieties of maturity groups V and VI are very early and early, respectively.

The test near Camden had irrigation water applied with overhead sprinklers to half of the six replication tests. Two inches of water was applied to the irrigated plots on each of the following dates: 08/06, 08/18, 08/26, 09/25, and 10/01.

DISCUSSION OF DATA

Since results of field plot research are influenced by inherent soil differences and soil moisture availability, it is not possible to determine exactly the yield potential of a variety at a given location. Varietal performance may also vary from year to year because of variation in rainfall, temperature, diseases, and nematodes. Therefore, long term yield averages are more reliable in evaluating varietal performance.

Differences in yield for 1981 have been computed using Duncan's Multiple Range Test at the 5% level of probability. Yields followed by the same letter are not considered to be significantly different.

Seasonal Conditions

Early season moisture was adequate in central Alabama in 1981 and good stands were obtained at all May plantings. Inadequate stands were attained from the June planting at Prattville Field; therefore, the test was abandoned. However, good stands were obtained at the Black Belt Substation on June 2 and June 26 plantings.

There were three severe drought stress periods in central Alabama during the growing season. These periods lasted for 2 weeks in late June, 4 weeks in late July and early August, and 4 weeks in late September and early October.

The dry period in June 1981 was a stress period during vegetative growth resulting in short plants at all locations. The dry period in late July and early August came during the bloom and early pod development of the early and very early varieties and the late vegetative and bloom stages of the full season and late maturing cultivars. The dry period in late September and early October was during the pod fill period of the maturity groups VI, VII, and VIII. Lowest yields were made by the late Maturity Group VIII cultivars.

Marion Junction (tables 3-19)

Plantings were made on May 12 at two different sites on the Black Belt Substation in 1981. The Sumter soil site had been in row crops for more than 15 years and had been in soybeans for the past 3 years. In 1980, the Vaiden soil site was rotated from pasture to soybeans in 1981. Soybean innoculum (granular Nitragin) was placed in the drill with the seed at planting. The severely dry June (1.96 inches total rainfall) resulted in stunted and iron chlorotic soybeans on the Sumter soil. The cultivars were rated on the degree of stunting and chlorosis and these ratings had a significant negative correlation with final yield, table 18. The Vaiden soil did not show any moisture stress during this period as all entries continued to grow and were taller than 30 inches with the exception of two Group V entries. In the Sumter soil only 5 full season entries were taller than 30 inches. The second stress period occurred

July 12 through August 7 when only 2 inches of rainfall occurred during during the early bloom stages and pod set period for the late Group VI entries and the full season varieties of Groups VII and VIII. The final yield was a good indication of the moisture relations during pod fill. The highest yielding varieties as a group were the Group VI entries. On the Vaiden soil 9 of the 10 leading varieties were Group VI with average yields of 44.3 bu./a. The 5.7 inches of rainfall in August and first week in September favored pod fill of the Group VI entries. However, rainfall of only 0.7 inches in late September resulted in the lowest average yields of 32 bu./a. from Maturity Group VIII entries. The yields from the Sumter soil averaged 13.6 bu./a. while the Vaiden soil averaged 35.4 bu./a. for the same 47 entries planted the same day.

The soybean yields at the Black Belt Substation were also affected by a fungus disease, stem canker, caused by Diaporthe phaseolorum var. caulivora. There was a disease rating taken on the soybean plots grown on both soils. This disease was more severe on the Sumter soil where beans had been grown in previous years. The damage also showed up earlier on the Sumter soil than on the Vaiden soil. The disease ratings are shown in table 19 on a scale of 1 to 5. A rating of one was given to plants with no disease evident while 5 showed very severe infection. These disease ratings were highly negatively correlated with yield.

Prattville (tables 24-28)

The early drought stress period at Prattville was the most severe as there was only 1.1 inches of rainfall the first 2 weeks in June and 0.3 inches the last 2 weeks of June. Plant height of the early (Group VI) and very early (Groups IV and V) entries were extremely short (14 to 34 inches at harvest). The 26-day period from July 12 to August 7 was more damaging to the Group IV and Group V entries as they were under a moisture stress during pod set, early pod development, and early pod fill. The rainfall of 5.2 inches during August 8 through September 5 was most favorable for Group VI entries as five of the leading eight varieties were in this maturity group. The third drought stress during late September and early October was most injurious to the Group VIII entries as they were the lowest yielding as a group. Coker 488 yielded 34 bu./a. compared to 23 bu./a. for the average of eight Group VIII entries. The highest yielding cultivars over the past 4 or 5 years have been in Group V or very early maturity group. This has been due to very low rainfall in four of the past 5 years during the period of August 15 through September 30, table 1.

Shorter (tables 29 and 30)

The yields at Shorter during the past 2 years have been very similar to those at Prattville. The early moisture stress resulted in a very short plant and only a few of the Group VIII cultivars had enough foliage to close the middle of the 39-inch rows.

Camden (tables 20-23)

The variety test at Camden consisted of 46 entries that were both irrigated and non-irrigated. The rainfall at Camden was very similar to the other locations in central Alabama with the exception that 2 inches of rainfall fell in late July as compared to 0.2, 0.9, and 1.0 inch at Marion Junction, Prattville, and Shorter, respectively. Despite this rainfall there was moisture stress during this period. Irrigation was started August 6. Group IV entries responded less (only 5.9 bu./a. increase) to irrigation than did any other maturity group. The full season varieties were the lowest yielding group without irrigation (21.5 bu./a.) and showed the greatest response to irrigation of 17.3 bu./a. average for the 11 entries. Group VII entries averaged 40.3 bu./a. as compared to 38.8 bu./a. for both Group VIII and Group VI entries. The Group V and Group IV entries averaged 36.4 and 32.8 bu./a., respectively, under irrigation. The yield of Dowling was increased the most, 23.2 bu./a. with irrigation; however, Deltapine 105 was the highest yielding entry 48.5 and 33.8 bu./a. with and without supplemental irrigation, respectively.

Effect of Planting Date on Yield

The highest yielding cultivars at the Black Belt Substation over the past 4 years have been the Maturity Group VI cultivars with an average yield of 27 bu./a. when planted in mid-May. The 4-year mean yields of Group VII and Group VIII cultivars planted in mid May were 26 and 24 bu./a., respectively. When planting was delayed by 3 weeks the above yields were 23, 24, and 21 bu./a. for the maturity groups VI, VII, and VIII, respectively. Another 3-week delay in planting to the last week of June resulted in yields of 18, 18, and 16 bu./a. for the above groups, respectively. When soybeans were grown on Sumter clay near Marion Junction during the year 1978 through 1981, an 8% to 15% reduction in yield occurred due to delayed planting by 3 weeks after May 10 and a 31% to 33% reduction in yield when planting was delayed 6 weeks to the third week in June.

Seed Quality and Purple Stain (tables 31 and 32)

Seed quality and purple stain ratings are shown in tables 31 and 32. Generally, in 1981 the seed quality was poorer in central Alabama than it was in north Alabama. Also, the seed quality was poorer on the Sumter soil at Marion Junction than the Vaiden soil location. It was also poorer on the non-irrigated test at Camden than under irrigation. The seed quality at Marion Junction appeared to be associated with both early maturity entries and those entries that showed a high level of stem canker disease, table 19.

Seed Size (table 33)

Seed size (g/100 seed) is usually affected by two factors, genetic and soil moisture availability during late stages of pod fill, table 33. The seed size was much larger from the irrigated area at Camden than from the non-irrigated area, indicating very severe moisture stress particularly in the late maturing cultivars. Seed size was much larger at the Marion Junction Vaiden soil location indicating a much more favorable moisture relationship of the soil recently taken out of pasture.

USDA Regional Test (tables 34-36)

A preliminary test in Maturity Group VII and uniform tests in maturity groups VII and VIII were evaluated at Tallassee in 1981. These tests are shown in tables 34, 35, and 36. In the preliminary Group VII test, Braxton is used as the standard variety. Braxton and Wright are the standard varieties in Uniform VII tests and Cobb and Hutton are the standard varieties in Uniform VIII tests. In the preliminary tests only one line yielded better than Braxton, however, in the Uniform VII test there were five lines that yielded better than the standard entries with D77-7920 and F77-1576 yielding 7.0 and 9.0 bu./a., respectively, better than Braxton. In the Uniform VIII test a number of lines yielded lower due to stem canker disease, e.i. Hutton only yielded 18.4 bu./a. One line F77-1797 yielded 3 bu./a. better than did Cobb, and it is being increased for release in 1983.

Table 1. Rainfall by Location During the Period August 15 through September 30 for 1977 through 1981

Location	1977	1978	1979	1980	1981
	In.	In.	In.	In.	In.
Black Belt Substation (Marion Junction)	6.31	2.75	5.12	1.96	4.04
E. V. Smith Research Center (Shorter)				2.64	4.51
Lower Coastal Plain Substation (Camden)	--	1.80	9.95	--	2.93*
Prattville Experiment Field (Prattville)	5.88	2.36	6.43**	1.81	3.68

*Water was applied to irrigated test August 6, 18, and 26 and September 25 and October 1 at rate of 2 inches per irrigation.
**Four inches fell after September 27.

DATA RECORDED

The yield of a crop is the primary factor of production when profits are to be maximized. Other characteristics which are important are plant height, height of lowest pod, maturity, lodging, and size and quality of seed.

Yield of soybeans was determined by harvesting the two center rows of each plot with a small plot combine. Plot yields were adjusted to 13% moisture and converted to bushels (60 pounds) per acre.

First bloom was taken as the date when there was one flower at any node on 10% of the plants.

Maturity was rated as the date when the pods were dry and most of the leaves had dropped. Under most conditions, the stems were also dry. Harvest date was approximately 7-10 days later than maturity date.

Lodging was based on a scale of 1 to 5 according to the following criteria, see page 8 for illustrations:

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% of the plants down.
4 - either all plants leaning (more than 45°) or 50 to 80% of the plants down.
5 - all plants down.

Shattering ratings were based on shattering of the border rows 14 days after maturity. The visual estimates were rated on a scale of 1 to 5 as follows:

1 - no shattering.
2 - 1 to 3% shattering.
3 - 4 to 8% shattering.
4 - 9 to 19% shattering.
5 - 20% or more shattering.

Plant height was determined as the average length of plants from the ground to the top extremity at time of maturity.

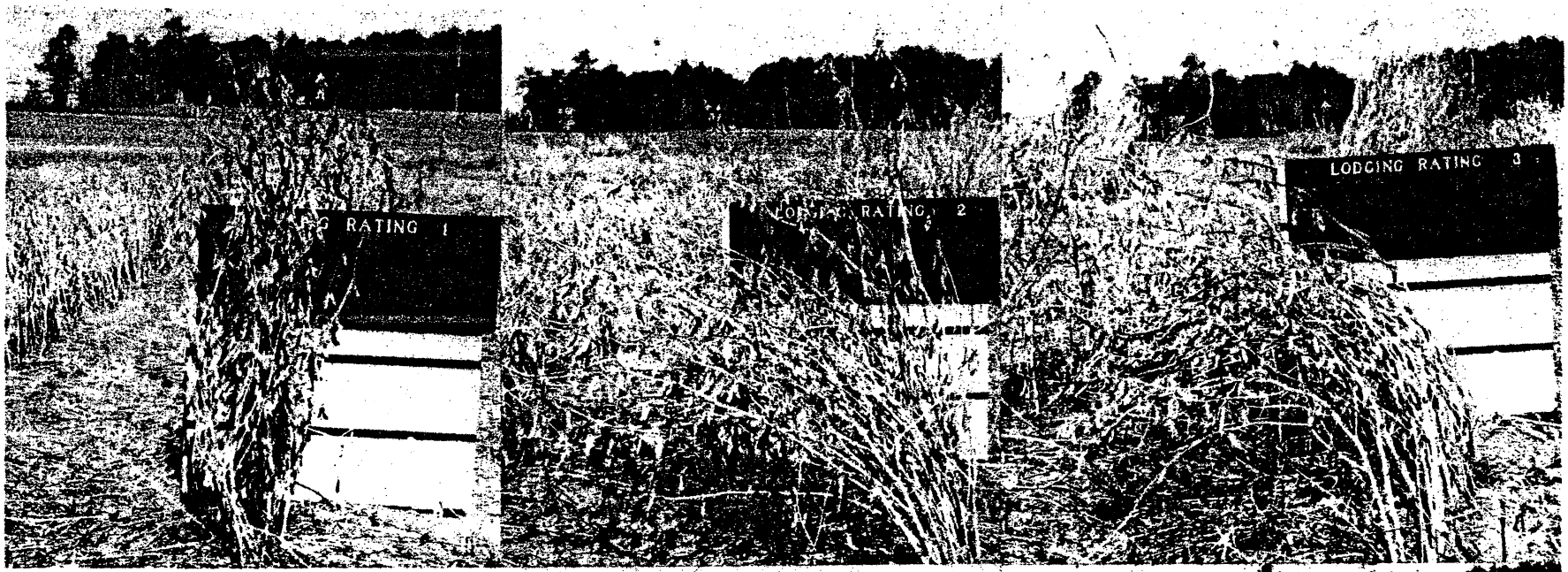
Height of first pod was determined as the average height of the lowest pods from the ground at maturity.

Seed size for each variety was determined from a composite sample of all replications at a given planting date and location. Seed size is reported as g per 100 seeds. Small, medium, and large seed size will be 8-12, 13-16, and 17-20 g/100 seed, respectively, and will have approximately 5,700 to 3,800, 3,500 to 2,800, and 2,700 to 2,300 seeds per pound, respectively.

Seed quality was based on a rating from 1 to 5 according to the following scale: (1) very good, (2) good, (3) fair, (4) poor, and (5) very poor. The factors considered were development of seed, wrinkling due to late harvesting, and to excess rain.

Purple stain ratings were given to seed samples on a scale of 1 to 5 as follows:

1 - no purple staining.
2 - 1 to 3% purple staining.
3 - 4 to 8% purple staining.
4 - 9 to 19% purple staining.
5 - 20% or more staining.



Lodging was based on a scale of 1 to 5 according to the following criteria and illustrated by figures 1 through 5 respectively.

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% of the plants down.

4 - either all plants leaning considerably (more than 45°) or 50 to 80% of the plants down.

5 - all plants down.

Table 2. Physical Descriptions and Disease Resistance of Some Soybean Varieties Tested in 1981

Group	Variety	Plant characteristics				Reaction to individual diseases[1]					Nematode resistance[1]		
		Pubescence	Flower color	Pod color	Hilum color	Bacteria pustule	Wildfire	Target spot	Phytophthora rot	Purple seed stain	Cyst (Race 3)	Root-knot M.i.[6]	Root-knot M.a.[6]
IV	RA 401	Gray	Purple	Brown	Black	4/	4/	4/	S	MR	S	S	S
	RA 480	Tawny	Purple	Tan	Black	R	R	R	MR	MR	MR	S	S
	Wilstar 430	Tan	Purple	Lt.Tan	Brown	S	S	S	S	S	S	S	S
V	Bedford	Tawny	White	Tan	Black	R	R	R	R	R	3/	MR	R
	Bay	Gray	Purple	Tan	Gr.Bf.	R	4/	4/	S	4/	S	S	S
	Essex	Gray	Purple	Tan	Buff	R	R	R	MR	R	S	MR	S
	Forrest	Tawny	White	Tan	Black	R	R	R	MR	MR	R	R	R
	Wilstar 550	Tawny	Pruple	Tan	Bf.Bl.	MR	MR	MR	MR	MR	S	MR	MR
	Terra-Vig 505	Tawny	Purple	Tan	Gr.Bl.	R	R	R	R	R	S	S	S
	Deltapine 345	Tawny	Purple	Tan	Black	4/	4/	4/	VR	R	S	S	S
VI	Lee 74	Tawny	Purple	Tan	Black	R	R	R	MR	R	S	R	MR
	Tracy 2/ 5/	Tawny	White	Tan	Black	R	R	R	R	MR	S	S	S
	Tracy M 5/	Tawny	White	Tan	Black	R	R	R	R	MR	S	S	S
	Centennial	Tawny	Purple	Tan	Black	R	R	R	R	MR	R	R	S
	Davis	Gray	White	Lt.Tan	Buff	R	R	R	R	MR	S	S	S
	RA 604	Tawny	Purple	Tan	Black	4/	R	R	R	MR	R	MR	S
	RA 680	Tawny	Purple	Tan	Black	R	R	R	R	MR	R	MR	VS
	Deltapine 506	Tawny	Purple	Brown	Black	4/	4/	4/	VR	R	S	S	S
	Brysoy 9	Brown	Purple	Buff	Imp.Bl.	R	R	R	R	MR	R	S	S
	Terra-Vig 606		White	Gray	Buff	R	R	R	R	R	S	S	S
	Gold Kist 49		White	Brown	Buff	R	4/	4/	4/	MR	S	R	R
	Coker 156 2/	Gray	White	Tan	Buff	R	R	4/	R	R	S	MR	4/
	McNair 600	Tawny	Purple	Lt.Tan	Black	R	4/	4/	S	R	S	R	S

Continued on page 10.

Table 2. Continued from page 9

Group	Variety	Plant characteristics				Reaction to individual diseases[1]					Nematode resistance[1]		
		Pubescence	Flower color	Pod color	Hilum color	Bacteria pustule	Wildfire	Target spot	Phytophthora rot	Purple seed stain	Cyst (Race 3)	Root-knot M.i.[6]	Root-knot M.a.[6]
VII	Bragg	Tawny	White	Tan	Black	R	R	R	R	S	S	R	R
	Braxton	Tawny	Purple	Tan	Black	R	R	R	R	S	S	R	R
	GA-Soy 17	Gray	White	Tan	Buff	R	R	R	R	MR	S	S	S
	Wright	Tawny	Purple	Tan	Black	R	R		R	4/	S	MR	MR
	Ransom	Tawny	Purple	Tan	Black	R	R	R	MS	R	S	S	S
	RA 701	Tawny	White	Tan	Black	R	R	R	R	MR	R	MR	MR
	Wilstar 790	Brown	White	Tan	Black	MR	MR	MR	MR	MR	S	4/	4/
	HB-50701-7	Tawny	White		Black	4/	4/	4/	R	MR	4/	4/	4/
	Terra-Vig 708	Tan	White	Brown	Brown	R	R	R	R	R	S	S	S
	H76-672-3A	Brown	Purple		Black	R	4/	4/	S	4/	4/	S	S
	Brooks		White	Brown	Brown	R	4/	4/	4/	4/	S	MS	S
	Agripro 70	Tan	White	Black		R	R	4/	S		S	MR	4/
	Agripro 71	Gray	White		Buff	R	R	4/	R		S	MR	4/
	Coker 237	Tawny	White	Tan	Black	R	R	4/	MR	4/	S	S	S
	McNair 770	Gray	Purple	Brown	Imp.Bl.	4/	4/	4/	S	4/	R	4/	4/
	Coker 317	Gray	Purple	Tan	Imp.Bl.	R	R	4/	4/	4/	R	S	4/
VIII	Cobb	Gray	Purple	Tan	Buff	R	R	R	S	S	S	R	S
	Dowling	Gray	White	Tan	Buff	R	R	R	R	R	S	S	S
	Hutton	Brown	Purple	Tan	Black	R	R	R	S	S	S	R	S
	Coker 338	Gray	White	Brown	Brown	R	R	4/	S	4/	S	S	S
	Coker 488	Tawny	Purple	Tan	Brown	R	R	4/	S	4/	S	MR	MR
	RA 800	Tawny	White	Tan	Black	R	R	R	R	MR	R	MR	S
	Agripro 80	Gray	White		Buff	R	4/	4/	4/	4/	S	MR	4/
	Foster	Gray	Purple	Tan	Buff	R	4/	R	4/	4/	R	R	S

[1]VR - very resistant; R - resistant; MR - moderately resistant; S - susceptible; VS - very susceptible.
[2]These are ratings given these varieties by the breeders.
[2]Sensitive to herbicide metribuzin (Sencor and Lexon).
[3]Resistant to Race 4 cyst nematode.
[4]Data not available.
[5]Tracy and Tracy M have good tolerance to herbicide 2, 4-DB.
[6]Meloidogyne incognita (M.i.); Meloidogyne arenaria (M.a.)

SEED SOURCE FOR 1981

Soybean varieties grown in Central Alabama tests are in Maturity Groups IV, V, VI, VII, and VIII. The following is a list of the varieties and lines with source of seed for 1981 listed by maturity groups. For more information on these varieties see Table 2.

Maturity Group IV Varieties

BD 483	Big D Seed Co., Catlin, Il
RA 401	Ring Around Research, Plainview, TX
RA 480	Ring Around Research, Plainview, TX
Wilstar 430	Helena Chemical Co., Selma, AL

Maturity Group V Varieties

Agripro 55	North American Plant Breeders, W. Memphis, AR
Bay	USDA Delta Branch Exp. Sta., Stoneville, MS
Bedford	USDA Delta Center, Portageville, MO
BD 501	Big D Seed Co., Catlin, IL
BD 502	Big D Seed Co., Catlin, IL
Deltapine 105	Delta and Pine Land Co., Scott, MS
Deltapine 345	Delta and Pine Land Co., Scott, MS
Essex	Alabama Crop Improvement Assoc., Auburn, AL
Forrest	Alabama Crop Improvement Assoc., Auburn, AL
Terra-Vig 505	Terral-Norris Seed Co. Inc., Lake Providence, LA
Wilstar 550	Helena Chemical Co., Selma, AL

Maturity Group VI Varieties

Brysoy 9	Helena Chemical Co., Selma, AL
Centennial	Alabama Crop Improvement Assoc., Auburn, AL
Coker 156	Coker's Pedigreed Seed Co., Hartsville, SC
Davis	Alabama Crop Improvement Assoc., Auburn, AL
Deltapine 416	Delta and Pine Land Co., Scott, MS

Maturity Group VI Varieties (continued)

Deltapine 506	Delta and Pine Land Co., Scott, MS
Gold Kist 49	Gold Kist Inc., Ashburn, GA
Lee 74	Alabama Crop Improvement Assoc., Auburn, AL
McNair 600	Northrup King Co., Bolivar, TN
RA 604	Ring Around Research, Plainview, TX
RA 680	Ring Around Research, Plainview, TX
Terra-Vig 606	Terral-Norris Seed Co. Inc., Lake Providence, LA
Tracy	Alabama Crop Improvement Assoc., Auburn, AL
Tracy M	USDA Delta Branch Exp. Sta., Stoneville, MS

Maturity Group VII Varieties

Agripro 70	North American Plant Breeders, W. Memphis, AR
Agripro 71	North American Plant Breeders, W. Memphis, AR
Bragg	Alabama Crop Improvement Assoc., Auburn, AL
Braxton	USDA Delta Branch Exp. Sta., Stoneville, MS
Brooks	Gold Kist Inc., Ashburn, GA
Coker 237	Coker's Pedigreed Seed Co., Hartsville, SC
Coker 317	Coker's Pedigreed Seed Co., Hartsville, SC
Deltapine 497	Delta and Pine Land Co., Scott, MS
GA-Soy 17	Coastal Plains Exp. Sta., Tifton, GA
H76-672-3A	Jacob Hartz Seed Co., Stutgart, AR
HB-507D1-7	Helena Chemical Co., Selma, AL
McNair 770	Northrup King Co., Bolivar, TN
RA 701	Ring Around Research, Plainview, TX
Ransom	Alabama Crop Improvement Assoc., Auburn, AL
Terra-Vig 708	Terral-Norris Seed Co. Inc., Lake Providence, LA
Wilstar 790	Helena Chemical Co., Selma, AL
Wright	Coastal Plains Exp. Sta., Tifton, GA

Maturity Group VIII Varieties

Agripro 80	North American Plant Breeders, W. Memphis, AR
Cobb	Alabama Crop Improvement Assoc., Auburn, AL
Coker 338	Coker's Pedigreed Seed Co., Hartsville, SC
Coker 488	Coker's Pedigreed Seed Co., Hartsville, SC
Dowling	Texas A&M University, College Station, TX
Foster	Florida Agriculture Exp. Sta., Gainesville, FL
Hutton	Alabama Crop Improvement Assoc., Auburn, AL
Matija 1	Joe Matija, Baldwin County, AL
RA 800	Ring Around Research, Plainview, TX

Table 3. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1981, on Vaiden Clay Soil on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Deltapine 506	47.1 a	07/12	10/11	40	2.0	3.0	1.0
Coker 156	46.1 a-b	07/12	10/10	36	2.5	1.0	1.0
Tracy M	45.5 a-b	07/04	10/05	35	2.0	1.5	1.0
Tracy	45.1 a-b	07/04	10/10	36	2.0	2.0	1.0
RA 604	43.0 a-c	07/03	10/02	37	2.5	1.3	1.0
Wright	42.7 a-d	07/14	10/14	41	2.0	3.0	1.0
Lee 74	42.6 a-d	07/13	10/10	32	2.0	1.8	1.0
Terra-Vig 606	42.5 a-d	07/13	10/07	38	2.5	2.0	1.0
McNair 600	41.9 a-e	07/05	10/06	38	1.5	1.8	1.0
RA 680	41.8 a-e	07/13	10/10	35	1.5	1.5	1.0
Centennial	40.5 a-f	07/13	10/14	36	2.0	2.0	1.0
Terra-Vig 708	40.5 a-f	07/14	10/14	37	2.5	2.5	1.0
HB-50701-7	40.2 a-f	07/10	10/15	36	2.5	2.3	1.0
Dowling	40.1 a-f	07/20	10/21	48	2.5	2.5	1.0
Coker 237	39.8 a-g	07/13	10/14	39	4.5	1.0	1.0
Terra-Vig 505	39.6 a-g	07/02	09/28	32	2.5	2.3	1.0
Forrest	39.3 a-g	06/25	09/26	33	1.5	1.0	1.0
Ransom	38.7 a-g	07/14	10/15	37	5.5	1.5	1.0
Essex	38.7 a-g	06/24	10/13	20	1.0	1.0	1.5
Davis	38.2 a-g	07/13	10/06	40	2.5	2.0	1.0
Deltapine 105	38.0 a-g	07/02	09/28	35	2.0	2.0	1.0
Bedford	37.7 a-h	06/28	09/22	36	2.0	1.0	1.0
Deltapine 416	37.5 a-i	07/10	10/17	48	4.0	2.5	1.0
Deltapine 345	37.2 a-i	07/01	09/29	33	2.0	2.0	1.0
H76-672-3A	37.2 a-i	07/10	10/14	42	1.5	1.5	1.0

Table 3. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Brysoy 9	36.7 a-j	07/10	10/10	34	2.5	3.5	1.0
RA 480	36.4 a-j	06/29	09/18	47	3.5	2.5	1.5
GA-Soy 17	36.3 a-j	07/17	10/14	44	2.5	1.8	1.0
Wilstar 790	35.4 b-j	07/13	10/15	42	3.5	1.8	1.0
Bay	33.4 c-k	06/29	09/29	25	1.0	1.0	1.0
Foster	33.4 c-k	07/15	10/15	43	5.5	4.0	1.0
Coker 488	32.7 c-l	07/20	10/21	48	4.0	3.0	1.0
Matija 1	32.6 c-l	07/19	10/15	43	6.0	4.0	1.0
Agripro 55	32.1 d-l	07/01	09/21	35	1.5	2.0	1.0
Bragg	31.3 e-l	07/15	10/14	42	3.0	2.5	1.0
Coker 317	31.2 e-l	07/17	10/14	42	4.5	3.0	1.0
Braxton	31.1 e-l	07/13	10/16	45	2.0	1.5	1.0
Coker 338	30.1 f-l	07/18	10/21	42	3.5	3.5	1.0
Cobb	29.8 f-l	07/23	10/21	48	3.5	2.5	1.0
Agripro 70	29.2 g-l	07/16	10/15	47	3.0	2.5	1.0
RA 701	29.1 g-l	07/15	10/15	30	4.0	2.0	1.0
RA 401	27.1 h-m	06/29	09/08	41	6.0	1.5	3.5
Brooks	27.0 i-m	07/17	10/15	44	3.0	2.5	1.0
RA 800	27.0 i-m	07/09	10/14	44	2.5	3.5	1.0
Big-D 501	26.2 j-m	06/25	09/10	37	3.5	2.0	3.5
Agripro 80	23.9 k-m	07/21	10/17	46	3.5	3.5	1.0
Hutton	22.5 l-m	07/17	10/17	37	3.5	4.0	1.0
Big-D 483	18.9 m	06/30	08/31	37	4.5	2.0	3.0

C.V.% = 12.3% $L.S.D._{.05}$ = 8.7

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 4. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1981, on Sumter Clay, Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Tracy	23.4 a	07/10	10/09	30	5.0	1.5	1.0
Coker 156	22.9 a	07/08	10/06	26	3.5	1.0	1.0
Wright	21.4 a-b	07/12	10/10	27	3.0	3.0	1.0
Deltapine 105	21.1 a-c	07/01	09/15	20	2.0	1.0	1.5
Braxton	19.8 a-d	07/14	10/14	30	5.0	1.0	1.0
Bragg	19.4 a-e	07/19	10/09	29	5.5	2.0	1.0
Davis	17.7 a-f	07/09	09/25	24	2.5	1.0	1.5
Lee 74	17.7 a-f	07/10	10/10	17	1.0	1.0	1.0
Cobb	17.7 a-f	07/17	10/15	29	3.0	1.8	2.5
Deltapine 506	17.7 a-f	07/09	10/07	24	2.5	2.0	1.0
Agripro 70	17.6 a-f	07/16	10/10	34	4.5	1.3	1.0
Matija 1	17.4 a-g	07/26	10/07	35	6.0	3.0	1.0
Terra-Vig 606	16.4 a-h	07/09	10/02	22	2.0	1.0	1.0
McNair 600	16.2 a-h	07/09	10/05	19	1.5	1.0	1.0
Coker 488	16.2 a-h	07/15	10/13	28	3.5	1.0	1.0
GA-Soy 17	16.2 a-h	07/14	10/06	32	2.5	1.3	1.0
Dowling	16.2 a-h	07/17	10/17	28	4.5	1.5	1.0
RA 480	16.2 a-h	07/02	09/15	29	5.0	1.5	2.5
Big-D 501	15.9 a-h	06/25	09/08	23	3.5	1.0	4.0
Centennial	15.3 a-h	07/08	10/06	21	1.5	1.0	1.0
Coker 317	14.9 a-i	07/16	10/13	26	4.0	1.0	1.0
Ransom	14.5 a-j	07/10	10/06	22	4.0	1.0	1.0
Terra-Vig 505	14.4 a-j	07/02	09/17	17	1.5	1.0	2.5
Deltapine 345	13.8 a-j	07/01	09/15	21	1.5	1.0	1.0
Brooks	13.7 a-j	07/16	10/14	35	6.5	1.5	1.0
Big-D 483	13.7 a-j	06/25	08/29	25	3.5	1.0	3.0

Table 4. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
RA 701	13.1 b-j	07/15	10/10	31	2.5	2.0	1.0
Tracy M	12.8 b-k	07/10	10/09	22	4.0	1.0	1.0
Agripro 55	12.6 b-k	07/02	09/15	17	1.5	1.0	1.5
Wilstar 790	11.7 b-k	07/09	10/11	25	2.5	1.0	1.0
RA 604	11.4 c-k	07/07	09/22	21	2.0	1.0	1.0
Foster	10.8 d-k	07/13	10/13	22	2.0	1.5	1.0
Brysoy 9	10.7 d-k	07/08	10/05	18	1.0	1.0	2.0
HB-50701-7	10.6 d-k	07/08	10/11	18	1.5	1.0	1.0
Terra-Vig 708	10.5 d-k	07/12	10/06	25	1.5	1.0	1.0
Deltapine 416	9.9 e-k	07/08	10/06	26	2.0	1.0	1.5
RA 680	9.4 f-k	07/10	10/06	19	1.5	1.0	1.0
Agripro 80	9.2 f-k	07/22	10/13	25	4.5	2.0	1.0
Forrest	9.0 f-k	06/30	09/22	16	1.0	1.0	1.0
Coker 237	8.9 f-k	07/10	10/05	22	3.5	1.0	1.0
Hutton	8.8 f-k	07/16	10/10	28	2.5	1.3	1.0
RA 800	8.8 f-k	07/11	10/14	24	2.0	1.0	1.0
Coker 338	8.5 f-k	07/16	10/14	25	3.5	1.0	1.0
H76-672-3A	7.7 g-k	07/10	10/09	20	2.0	1.0	1.0
Bedford	7.5 h-k	07/02	09/17	23	2.5	1.0	2.5
Bay	5.3 i-k	06/29	09/15	12	1.0	1.0	2.0
Essex	4.9 j-k	06/26	09/05	9	1.0	1.0	2.5
RA 401	3.2 k	06/24	09/20	19	2.0	1.0	3.5
C.V.% = 28.8%	L.S.D.$_{.05}$ = 6.4						

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 5. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1980-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Tracy	23.6	07/15	10/04	32	3.8	1.5	1.0
Braxton	22.4	07/19	10/12	35	5.8	1.4	1.0
McNair 600	22.1	07/16	10/04	26	2.8	1.2	1.0
Coker 156	21.6	07/13	10/05	28	3.4	1.0	1.0
Davis	21.2	07/16	09/24	28	2.8	1.3	1.4
Centennial	21.0	07/14	10/04	27	1.9	1.3	1.0
Tracy M	20.9	07/13	10/04	27	3.4	1.5	1.0
Coker 488	20.8	07/23	10/14	35	4.8	1.4	1.0
Deltapine 345	20.7	07/08	09/18	27	2.1	1.0	1.0
Ransom	20.4	07/15	10/06	28	5.0	1.3	1.0
Agripro 70	20.4	07/24	10/09	38	5.0	1.5	1.0
Coker 317	20.1	07/24	10/10	31	4.6	1.5	1.0
Bragg	19.3	07/22	10/09	35	5.9	1.9	1.0
Dowling	19.1	07/23	10/18	33	5.1	1.8	1.0
Lee 74	18.4	07/14	10/07	21	1.5	1.1	1.0
GA-Soy 17	18.4	07/20	10/07	34	3.8	1.5	1.0
Cobb	18.2	07/24	10/16	36	5.1	1.9	1.8
Deltapine 506	18.1	07/14	10/06	28	2.4	1.8	1.0
RA-701	17.2	07/20	10/07	32	3.3	1.9	1.0
Terra-Vig 708	16.9	07/17	10/06	31	3.4	1.4	1.0

Table 5. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
RA 680	16.6	07/15	10/05	25	2.3	1.0	1.0
Coker 237	15.3	07/16	10/04	28	3.6	1.1	1.0
Brooks	15.3	07/21	10/11	39	6.4	2.0	1.1
Wilstar 790	15.0	07/14	10/09	31	4.5	1.3	1.0
RA 604	14.8	07/13	09/23	26	2.6	1.0	1.0
Essex	14.1	07/02	09/05	15	1.4	1.0	2.3
Coker 338	13.0	07/21	10/13	32	4.8	1.4	1.0
Bay	12.0	07/06	09/16	21	1.5	1.0	1.5
Forrest	11.8	07/06	09/19	21	1.6	1.0	1.0
Hutton	11.4	07/22	10/09	32	3.9	1.9	1.0
Bedford	10.1	07/09	09/18	26	2.9	1.5	1.8

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 6. Three-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1979-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Braxton	27.8	10/13	37	4.6	1.5	1.0
Tracy	27.6	10/01	33	3.6	1.8	1.0
Davis	26.5	09/23	30	2.6	1.3	1.3
Coker 488	26.5	10/17	37	4.7	1.3	1.0
Coker 156	26.4	10/03	29	3.3	1.0	1.0
McNair 600	26.3	10/02	29	2.5	1.2	1.0
Agripro 70	25.2	10/12	40	4.6	1.4	1.0
Ransom	24.6	10/10	30	4.8	1.3	1.0
Centennial	23.9	10/05	30	2.2	1.4	1.0
Coker 237	23.5	10/02	30	3.7	1.1	1.1
Bragg	23.3	10/09	37	5.1	1.9	1.0
GA-Soy 17	22.8	10/09	36	4.2	1.8	1.0
Dowling	22.7	10/20	34	5.1	1.8	1.2
Cobb	22.6	10/21	38	4.9	2.0	1.8
Deltapine 506	22.5	10/06	30	2.3	1.6	1.0
Lee 74	22.1	10/07	23	1.8	1.0	1.0
Terra-Vig 708	21.9	10/09	32	3.3	1.3	1.0
Essex	21.1	09/08	16	1.4	1.0	1.8
Forrest	20.9	09/17	22	1.7	1.1	1.0
Coker 338	20.5	10/18	34	4.7	1.4	1.0
Hutton	18.2	10/13	34	3.9	2.2	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 7. Four-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1978-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Coker 156	28.5	10/05	28	3.2	1.0	1.0
Tracy	28.2	10/03	31	3.4	1.8	1.0
Coker 488	27.1	10/20	36	4.4	1.3	1.0
Davis	27.0	09/27	29	2.8	1.2	1.3
McNair 600	27.0	10/03	29	2.7	1.2	1.0
Ransom	26.7	10/13	29	4.3	1.2	1.0
Agripro 70	26.5	10/14	38	4.4	1.4	1.0
Coker 237	26.1	10/06	30	3.4	1.1	1.1
Centennial	25.6	10/07	29	2.3	1.3	1.0
GA-Soy 17	25.6	10/12	36	4.3	1.6	1.0
Deltapine 506	24.8	10/08	30	2.3	1.5	1.0
Bragg	24.4	10/12	36	4.8	1.8	1.0
Cobb	24.3	10/23	37	4.4	1.8	1.8
Lee 74	23.4	10/08	22	1.8	1.0	1.0
Coker 338	23.4	10/21	33	4.1	1.3	1.0
Terra-Vig 708	22.7	10/11	30	3.3	1.2	1.0
Hutton	20.9	10/15	33	3.9	1.9	1.0
Essex	19.5	09/09	15	1.4	1.0	1.8
Forrest	19.4	09/20	20	1.6	1.1	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 8. Five-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1977-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Coker 156	31.6	10/06	29	3.3	1.0	1.0
Tracy	29.8	10/04	31	3.7	1.9	1.0
McNair 600	29.7	10/04	29	2.8	1.2	1.0
Centennial	28.4	10/07	30	2.4	1.4	1.0
Davis	27.9	09/27	28	2.6	1.2	1.3
Ransom	27.7	10/14	30	4.3	1.2	1.0
Lee 74	26.4	10/08	23	2.2	1.2	1.0
Coker 338	25.9	10/20	34	4.0	1.4	1.0
Bragg	25.6	10/12	36	4.7	1.8	1.0
Cobb	25.4	10/23	38	4.4	1.7	1.8
Essex	23.4	09/11	17	1.5	1.0	1.8
Hutton	23.1	10/16	33	3.8	2.0	1.0
Forrest	22.4	09/20	22	1.9	1.1	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 9. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 2, 1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Agripro 70	26.6 a	08/02	10/13	35	5.8	1.9	1.0
Braxton	26.5 a	08/01	10/13	33	4.8	1.0	1.0
Wright	25.3 a-b	07/31	10/12	32	4.3	2.3	1.0
Tracy M	24.8 a-b	07/26	10/04	26	4.0	1.8	1.0
Dowling	22.3 a-b	08/03	10/21	31	5.5	1.5	1.5
Deltapine 497	22.0 a-b	07/31	10/14	28	3.8	1.0	1.0
GA-Soy 17	21.7 a-b	08/02	10/13	28	1.8	1.4	1.5
Ransom	21.6 a-b	07/27	10/12	25	2.5	1.0	1.0
Deltapine 105	20.8 a-b	07/20	09/24	24	3.3	1.0	1.3
Davis	20.7 a-b	07/30	09/29	25	4.3	1.0	1.5
Cobb	20.6 a-b	08/03	10/20	33	3.8	1.3	1.5
Coker 488	20.4 a-b	08/04	10/18	28	4.0	1.0	1.0
Coker 237	19.3 a-b	07/30	10/11	29	4.5	1.0	1.0
Bragg	18.6 a-b	07/31	10/11	30	5.0	1.4	1.0
Coker 156	18.6 a-b	07/27	10/07	22	3.0	1.0	1.0
Forrest	18.0 a-b	07/20	09/23	21	2.3	1.0	1.3
Coker 338	17.9 a-b	08/04	10/17	28	5.5	1.5	1.0
Wilstar 790	17.8 a-b	07/30	10/14	32	6.0	1.3	1.0
Centennial	16.6 b	07/29	10/12	20	2.3	1.3	1.0
Hutton	16.3 b	08/02	10/15	30	4.0	1.3	1.0
Terra-Vig 708	15.9 b	07/30	10/13	27	3.3	1.3	1.0
Essex	6.5 c	07/15	09/16	12	1.5	1.0	1.8

C.V.% = 28.0% $L.S.D._{.05}$ = 7.9

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 10. Two-Year Averages of Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 7, 1980-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Agripro 70	24.4	08/07	10/18	33	4.9	1.6	1.0
Braxton	23.6	08/06	10/18	30	4.0	1.0	1.0
Coker 156	22.4	08/01	10/12	23	3.3	1.0	1.0
Tracy M	20.7	07/31	10/11	26	3.8	2.0	1.5
Ransom	20.3	08/02	10/17	24	2.5	1.0	1.0
GA-Soy 17	20.1	08/06	10/19	28	2.0	1.2	1.3
Bragg	19.9	08/05	10/17	29	3.9	1.6	1.0
Deltapine 105	18.8	07/26	09/28	23	2.4	1.1	1.4
Coker 237	18.7	08/04	10/15	27	4.8	1.0	1.0
Davis	18.6	08/03	10/05	23	3.1	1.1	2.1
Coker 488	18.4	08/08	10/25	30	4.0	1.1	1.0
Dowling	18.4	08/06	10/25	28	4.0	1.4	1.4
Cobb	17.8	08/06	10/24	31	4.1	1.4	2.4
Terra-Vig 708	17.4	08/04	10/16	28	3.5	1.3	1.1
Centennial	16.4	08/02	10/16	22	2.1	1.1	1.1
Coker 338	16.3	08/08	10/23	28	5.0	1.8	1.0
Forrest	16.0	07/24	09/28	21	2.1	1.0	1.3
Hutton	14.2	08/06	10/19	28	3.5	1.5	1.0
Essex	10.5	07/19	09/20	14	1.6	1.0	1.8

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 11. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 7, 1979-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	24.0	08/05	10/17	30	4.6	1.0	1.0
Agripro 70	22.9	08/06	10/16	33	5.2	1.4	1.0
Coker 156	21.7	08/01	10/10	24	3.5	1.1	1.0
Tracy M	21.7	07/30	10/08	27	3.4	2.1	1.3
Ransom	20.4	08/02	10/16	26	3.7	1.2	1.0
Davis	20.3	08/03	10/05	26	3.3	1.5	1.9
Dowling	20.2	08/07	10/25	30	4.9	1.5	1.3
Bragg	20.1	08/04	10/15	31	4.7	1.8	1.0
Coker 488	19.9	08/08	10/23	32	4.6	1.5	1.0
GA-Soy 17	19.8	08/06	10/17	28	3.3	1.3	1.2
Centennial	19.3	08/01	10/14	25	3.1	1.4	1.1
Terra-Vig 708	19.0	08/04	10/15	29	3.9	1.5	1.1
Coker 237	18.6	08/03	10/12	28	5.1	1.2	1.0
Coker 338	18.5	08/07	10/23	30	5.0	2.0	1.0
Cobb	17.6	08/07	10/24	33	5.3	1.6	1.9
Forrest	16.6	07/25	09/26	23	2.4	1.1	1.2
Hutton	14.8	08/06	10/18	29	4.2	2.2	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 12. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 7, 1978-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	27.5	08/04	10/20	33	4.8	1.1	1.0
Agripro 70	26.4	08/05	10/18	35	4.7	1.4	1.0
Coker 156	24.2	08/01	10/10	26	3.6	1.1	1.0
Ransom	23.7	08/02	10/17	27	3.9	1.2	1.0
Davis	23.3	08/02	10/04	28	3.3	1.4	1.9
Bragg	23.3	08/03	10/17	33	4.6	1.9	1.0
GA-Soy 17	23.1	08/05	10/18	31	3.6	1.6	1.2
Terra-Vig 708	23.1	08/02	10/17	30	3.8	1.4	1.1
Coker 338	22.6	08/06	10/27	32	5.0	1.8	1.0
Coker 488	22.4	08/07	10/25	33	5.2	1.5	1.0
Centennial	22.2	07/31	10/14	28	3.3	1.4	1.1
Coker 237	22.1	08/02	10/12	29	4.9	1.2	1.0
Dowling	22.1	08/06	10/26	32	5.3	1.8	1.3
Forrest	20.5	07/24	09/25	23	2.6	1.1	1.2
Cobb	19.7	08/07	10/27	35	5.9	1.7	1.9
Hutton	18.1	08/05	10/20	31	4.6	2.3	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 13. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 26, 1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Wright	23.3 a	08/16	10/17	23	2.5	1.3	1.0
Coker 237	21.0 a-b	08/16	10/16	21	1.8	1.0	1.0
Coker 156	20.9 a-b	08/14	10/14	19	1.5	1.0	1.3
Terra-Vig 708	20.8 a-b	08/16	10/21	21	1.8	1.0	1.5
GA-Soy 17	20.4 a-b	08/17	10/20	23	1.8	1.0	1.0
Bragg	20.2 a-b	08/16	10/18	25	2.3	1.0	1.0
Ransom	19.6 a-c	08/15	10/21	20	1.5	1.0	1.0
Braxton	18.5 a-c	08/18	10/21	22	1.5	1.0	1.0
Coker 488	18.3 a-c	08/19	10/27	25	2.8	1.0	1.0
Centennial	18.2 a-c	08/15	10/15	21	1.5	1.0	1.0
Tracy M	17.8 a-c	08/16	10/13	19	1.0	1.1	1.0
Coker 338	17.5 a-c	08/19	10/28	24	1.8	1.1	1.5
Davis	17.2 a-c	08/14	10/15	17	1.0	1.0	1.3
Dowling	15.7 b-d	08/19	10/28	22	1.8	1.0	1.3
Hutton	12.8 c-d	08/19	10/24	21	1.5	1.0	1.0
Cobb	12.6 c-d	08/19	10/28	21	1.5	1.0	1.0
Forrest	10.1 d	08/13	10/13	13	1.8	1.0	1.0

C.V.% = 24.0% $L.S.D._{.05}$ = 6.1

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 14. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 26, 1980-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
GA-Soy 17	20.3	08/17	10/23	24	1.9	1.0	1.0
Coker 156	20.2	08/14	10/16	20	1.8	1.0	1.1
Ransom	19.1	08/15	10/21	21	2.6	1.0	1.1
Terra-Vig 708	18.9	08/15	10/24	23	3.0	1.0	1.6
Bragg	18.7	08/15	10/21	26	3.3	1.1	1.1
Braxton	17.8	08/17	10/24	25	2.6	1.0	1.0
Tracy M	17.5	08/14	10/21	21	2.0	1.1	1.6
Davis	17.3	08/15	10/15	20	2.0	1.0	1.4
Coker 237	17.3	08/15	10/19	21	2.4	1.0	1.3
Centennnial	16.8	08/14	10/21	22	1.5	1.0	1.1
Coker 488	16.7	08/19	10/31	24	2.9	1.0	1.1
Coker 338	15.4	08/19	11/04	25	3.9	1.1	1.3
Dowling	14.6	08/18	10/30	21	2.6	1.0	1.6
Hutton	13.1	08/18	10/26	23	2.8	1.0	1.1
Cobb	12.8	08/18	10/30	22	2.4	1.0	2.4
Forrest	10.1	08/11	10/16	16	1.9	1.0	1.3

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 15. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 26, 1979-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 156	18.3	08/13	10/16	19	2.1	1.0	1.1
Ransom	17.7	08/15	10/21	22	2.9	1.5	1.1
GA-Soy 17	17.4	08/17	10/22	24	2.4	1.4	1.0
Davis	17.3	08/15	10/15	20	2.0	1.3	1.3
Braxton	17.1	08/17	10/23	24	2.9	1.1	1.0
Coker 237	16.9	08/15	10/18	21	2.9	1.0	1.2
Coker 488	16.8	08/20	10/29	25	3.3	1.4	1.1
Centennial	16.7	08/14	10/20	22	2.6	1.4	1.1
Terra-Vig 708	16.7	08/16	10/24	22	3.0	1.3	1.4
Bragg	16.6	08/16	10/21	25	3.6	1.5	1.1
Coker 338	15.2	08/19	11/01	24	3.8	1.5	1.2
Dowling	14.3	08/19	10/29	22	3.0	1.5	1.4
Cobb	13.2	08/20	10/28	24	3.3	1.3	1.9
Hutton	13.0	08/19	10/25	23	3.0	1.8	1.1
Forrest	10.3	08/10	10/15	16	2.3	1.3	1.2

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 16. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 27, 1978-1981, on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 156	19.7	08/13	10/18	20	2.3	1.0	1.1
Braxton	19.0	08/16	10/27	25	3.4	1.1	1.0
Terra-Vig 708	18.9	08/15	10/29	24	3.3	1.3	1.4
GA-Soy 17	18.3	08/16	10/25	24	2.7	1.3	1.0
Coker 338	18.2	08/19	11/08	25	4.6	1.4	1.2
Bragg	18.0	08/15	10/23	26	4.0	1.4	1.1
Coker 237	17.1	08/14	10/20	21	3.0	1.0	1.2
Davis	16.9	08/15	10/17	20	2.3	1.2	1.3
Coker 488	16.8	08/19	11/02	25	3.4	1.3	1.1
Cobb	16.2	08/19	10/31	26	3.9	1.3	1.9
Centennial	16.1	08/14	10/22	22	2.8	1.3	1.1
Ransom	15.1	08/15	10/25	21	2.6	1.4	1.1
Hutton	15.0	08/18	10/29	24	3.5	1.6	1.1
Dowling	14.8	08/18	11/01	23	3.7	1.4	1.4
Forrest	11.5	08/10	10/15	18	2.2	1.2	1.2

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 17. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Black Belt Substation, Marion Junction

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
			Five-Year Averages, Planting Date June 8, 1977-1981				
Coker 156	26.0	07/31	10/11	26	3.6	1.0	1.0
Ransom	25.9	08/01	10/19	27	3.8	1.1	1.0
Bragg	24.3	08/02	10/18	32	4.3	1.8	1.0
Davis	23.7	08/01	10/06	27	3.1	1.3	1.9
Centennial	23.7	07/30	10/14	28	3.3	1.3	1.1
Coker 338	23.1	08/07	10/28	32	4.4	1.8	1.0
Cobb	20.3	08/06	10/29	34	5.2	1.6	1.9
Hutton	20.3	08/05	10/21	30	4.1	2.0	1.0
Forrest	20.0	07/24	09/27	22	2.3	1.1	1.2
			Five-Year Averages, Planting Date June 25, 1977-1981				
Bragg	19.2	08/15	10/24	26	3.7	1.4	1.1
Coker 338	18.6	08/18	11/08	25	4.2	1.3	1.2
Coker 156	18.2	08/13	10/19	20	2.1	1.0	1.1
Davis	17.0	08/15	10/19	20	2.1	1.2	1.3
Cobb	16.2	08/19	11/01	26	3.8	1.2	1.9
Centennial	16.1	08/14	10/23	22	2.5	1.3	1.1
Ransom	14.9	08/15	10/28	20	2.4	1.3	1.1
Hutton	14.5	08/18	10/29	23	3.1	1.5	1.1
Forrest	11.8	08/10	10/16	18	1.9	1.2	1.2

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 18. Iron Chlorosis Rating of Soybean Varieties and Lines on July 2, 1981, When Grown on Sumter Clay Soil at Black Belt Substation

Variety	Maturity group	Iron chlorosis rating[1] by planting date	
		Planted May 12	Planted June 2
Big-D 483	IV	1.8	--
RA 480	IV	2.6+[2]	--
RA 401	IV	5.0+	--
Deltapine 345	V	1.0	--
Agripro 55	V	1.8	--
Deltapine 105	V	2.0	2.0
Big-D 501	V	2.3	--
Terra-Vig 505	V	2.8+	--
Bay	V	3.8+	--
Bedford	V	3.8+	--
Essex	V	3.8+	2.1
Forrest	V	3.8+	2.7
Coker 156	VI	1.8	2.8
Davis	VI	1.8	2.1
Brysoy 9	VI	2.3	--
Deltapine 506	VI	2.3	--
McNair 600	VI	2.6+	--
Centennial	VI	3.0+	3.3
Lee 74	VI	3.1+	--
RA 604	VI	3.1+	--
Terra-Vig 606	VI	3.5+	--
Tracy	VI	3.5+	--
Tracy M	VI	4.0+	1.8
Deltapine 416	VI	4.5+	--
RA 680	VI	5.0+	--

Table 18. Continued

Variety	Maturity group	Iron chlorosis rating[1] by planting date	
		Planted May 12	Planted June 2
Braxton	VII	1.1	1.3
Bragg	VII	1.4	2.0
Brooks	VII	1.4	--
Coker 237	VII	1.6	1.3
Ransom	VII	1.8	2.4
Agripro 70	VII	2.5+	2.0
Wilstar 790	VII	2.5+	1.8
RA 701	VII	2.8+	--
GA Soy 17	VII	3.0+	3.6
Coker 317	VII	3.5+	--
HB-50701	VII	3.5+	--
Wright	VII	3.5+	3.1
Terra-Vig 708	VII	4.0+	2.9
H 76-672-3A	VII	4.8+	--
Hutton	VIII	1.6	1.3
Dowling	VIII	2.0	1.6
Cobb	VIII	2.5+	1.8
Coker 488	VIII	2.8+	2.6
Coker 338	VIII	3.8+	3.2
Foster	VIII	3.8+	--
Agripro 80	VIII	4.3+	--
RA 800	VIII	4.5+	--
$L.S.D._{.05}$		1.3	N.S.
C.V.%		22.6%	44.9%

[1]Iron chlorosis rating on a scale of 1 to 5: 1 = free of chlorosis; 2 = good growth, some chlorosis; 5 = severe chlorosis and starting to show brown spots on leaves.

[2]Values with + following are significantly more sensitive to iron chlorosis when compared to Braxton.

Table 19. Stem Canker Disease Rating Made on Soybean Varieties and Lines in September 1981 When Grown on Two Soils and Two Planting Dates Near Marion Junction

Variety	Maturity group	Ratings[1] by soil type and planting dates		
		Planted May 12		Planted June 2
		Vaiden clay	Sumter clay	Sumter Clay
Tracy M	VI	1.0	1.0	1.0
RA 680	VI	1.0	1.0	--
Tracy	VI	1.5	1.0	--
Coker 156	VI	1.3	1.3	1.5
Davis	VI	1.5	1.0	1.5
McNair 600	VI	1.8	1.0	--
Centennial	VI	2.0+	1.3	1.5
Terra-Vig 606	VI	2.0+	1.3	--
Deltapine 506	VI	2.0+	1.8	--
Deltapine 416	VI	2.0+	2.8+	--
Lee 74	VI	2.5+	1.8	--
Brysoy 9	VI	3.0+	2.3+	--
RA 604	VI	2.5+	3.5+	--
Braxton	VII	1.5	1.0	1.3
Wright	VII	1.5	1.0	1.5
HB 50701	VII	1.5	1.0	--
Coker 317	VII	1.5	1.5	--
H-76-672-3A	VII	1.5	1.5	--
Ransom	VII	2.0+	1.5	2.3+
Agripro 70	VII	2.0+	2.0+	2.3+
GA-Soy	VII	2.0+	2.0+	2.0+
Bragg	VII	2.0+	2.3+	3.0+
Wilstar 790	VII	2.0+	3.3+	3.0+
Terra-Vig 708	VII	2.5+	2.5+	3.3+
Coker 237	VII	3.0+	2.5+	3.0+
Brooks	VII	3.0+	2.8+	--
RA 701	VII	4.0+	2.5+	--
Coker 488	VIII	1.0	1.3	1.8
Dowling	VIII	1.5	1.0	1.3
Cobb	VIII	1.5	1.8	1.5
Agripro 80	VIII	1.5	2.3+	--
Foster	VIII	2.0+	1.3	--
Coker 338	VIII	3.0+	3.5+	3.3+
Hutton	VIII	3.5+	2.8+	3.5+
RA 800	VIII	4.0+	2.5+	--
L.S.D. .05		1.0	0.9	.82
C.V.%		25.0%	25.4%	27.5%

[1]Rating for disease: 1 = none found to 5 = very severely infected. Values with + following are significantly more susceptible as compared to Tracy M.

Table 20. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 28, 1981, with Supplemental Irrigation, on Lower Coastal Plain Substation, Camden

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Deltapine 105	48.5 a	07/16	---	27	3.3	1.0	1
Coker 237	46.3 a-b	07/22	10/20	33	9.7	1.3	1
Wilstar 550	44.9 a-c	07/15	---	23	3.0	1.0	1
Dowling	43.8 a-d	07/28	10/28	36	9.3	1.0	1
RA 701	43.2 a-e	07/21	10/23	35	6.3	1.7	1
Coker 156	43.0 a-f	07/21	10/15	33	4.3	1.0	1
RA 800	43.0 a-f	07/23	10/28	38	11.7	1.7	1
Davis	42.4 a-f	07/21	10/14	36	8.7	1.3	1
Coker 338	41.5 a-g	07/28	10/29	38	9.0	1.7	1
Deltapine 497	41.1 a-g	07/28	10/23	35	10.3	1.3	1
Braxton	41.0 a-g	07/25	10/23	32	3.3	1.3	1
Agripro 70	40.9 a-g	07/28	10/22	38	9.0	1.3	1
McNair 770	40.7 a-g	07/24	10/23	31	4.3	1.0	1
Wright	40.1 b-g	07/22	10/23	36	8.0	1.7	1
Terra-Vig 708	39.8 b-g	07/23	10/21	31	6.0	1.3	1
Terra-Vig 606	39.8 b-g	07/21	10/15	35	8.0	1.3	1
Deltapine 506	39.7 b-g	07/21	10/17	33	4.7	1.7	1
Tracy M	39.5 b-g	07/16	10/20	33	8.7	2.0	1
Ransom	39.3 b-g	07/26	10/26	32	8.7	1.0	1
Coker 488	38.8 b-g	07/28	10/29	38	10.7	1.7	1
Lee 74	38.7 b-h	07/20	10/18	22	3.7	1.0	1
Bragg	38.6 b-h	07/24	10/21	38	10.0	1.0	1
Agripro 71	38.5 b-h	07/25	10/21	29	5.3	1.7	1
RA 680	38.5 b-h	07/21	10/13	35	4.3	1.0	1

Table 20. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
GA-Soy 17	38.2 b-h	07/24	10/23	35	7.7	1.7	1
RA 604	38.1 b-h	07/20	10/12	29	4.0	1.3	1
Matija 1	38.0 b-h	07/29	10/17	44	8.3	1.7	1
Centennial	37.5 c-h	07/21	10/16	29	5.3	1.3	1
Bedford	37.3 c-h	07/16	---	27	4.7	1.0	1
Foster	37.2 c-h	07/28	10/29	38	11.3	1.7	1
Brysoy 9	36.9 c-h	07/20	10/16	33	6.3	2.0	1
McNair 600	36.8 c-h	07/20	10/14	31	6.0	2.0	1
Cobb	36.8 c-h	08/01	10/29	40	6.7	1.7	1
Brooks	36.6 c-h	07/27	10/21	42	12.0	1.7	1
Hutton	35.9 d-i	07/25	11/01	35	8.3	1.3	1
Agripro 80	35.8 d-i	08/02	10/29	38	12.0	1.7	1
Coker 317	35.4 d-i	07/30	10/24	33	5.7	1.7	1
Deltapine 345	35.2 d-i	07/15	---	20	2.3	1.0	1
Forrest	34.9 e-i	07/09	---	18	2.3	1.0	1
RA 480	34.9 e-i	07/11	09/17	29	2.3	1.0	1
Tracy	34.7 e-i	07/18	10/22	36	7.0	2.3	1
Essex	34.4 f-i	07/11	---	16	2.0	1.0	1
RA 401	33.1 g-i	07/09	09/18	30	2.3	1.0	1
Big-D 483	30.3 h-i	07/10	09/17	31	1.3	1.0	2
Bay	28.2 i	07/14	---	19	3.3	1.0	1
Big-D 502	28.2 i	07/08	09/18	32	3.3	1.0	2

C.V.% = 11.1% L.S.D.$_{.05}$ = 6.9

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 21. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 28, 1981, on Lower Coastal Plain Substation, Camden

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Deltapine 105	33.9 a	07/15	---	32	5.0	1.0	1.0
Forrest	32.8 a-b	07/11	---	25	5.3	1.0	1.0
Deltapine 345	31.4 a-c	07/16	---	25	4.3	1.0	1.0
Wilstar 550	31.4 a-c	07/16	---	27	3.7	1.0	1.0
RA 480	30.1 a-d	07/11	09/17	29	2.7	1.0	1.0
Davis	29.2 a-e	07/21	10/10	37	9.0	1.7	1.0
Deltapine 506	28.9 a-f	07/21	10/09	35	8.7	1.0	1.0
Centennial	28.2 a-g	07/21	10/11	32	6.3	1.0	1.0
RA 680	27.3 b-h	07/21	10/10	30	6.3	1.0	1.0
McNair 600	27.2 b-h	07/20	10/11	32	6.7	1.0	1.0
RA 604	27.0 b-h	07/20	10/09	30	6.0	1.0	1.0
Wright	26.9 b-h	07/22	10/22	34	8.7	2.0	1.0
Brysoy 9	26.3 b-i	07/20	10/12	31	6.7	1.3	1.0
Coker 156	25.9 c-j	07/21	10/12	29	5.7	1.0	1.0
Coker 237	25.8 c-j	07/22	10/21	28	8.7	1.3	1.0
RA 401	25.7 c-j	07/06	09/18	30	2.7	1.0	2.3
Terra-Vig 708	25.4 c-j	07/23	10/22	30	8.0	1.7	1.0
Tracy M	25.4 c-j	07/16	10/12	31	8.0	1.0	1.0
Lee 74	25.3 c-j	07/20	10/12	25	5.7	1.0	1.0
Terra-Vig 606	25.0 c-j	07/20	10/12	33	7.0	1.0	1.0
Big-D 483	24.9 c-j	07/09	09/17	33	2.0	1.0	2.0
Essex	24.7 c-j	07/11	---	19	3.3	1.0	2.3
Braxton	24.7 c-j	07/25	10/21	36	8.0	1.3	1.0

Table 21. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
RA 800	24.6 c-j	07/23	10/27	36	9.0	1.3	1.0
Big-D 502	24.6 c-j	07/09	09/18	31	3.7	1.0	1.0
Agripro 71	24.5 d-j	07/25	10/21	34	9.7	2.3	1.0
McNair 770	24.3 d-j	07/24	10/21	30	7.7	1.3	1.0
Bedford	24.2 d-j	07/15	---	28	6.7	1.0	1.0
RA 701	24.2 d-j	07/21	10/19	37	9.7	1.7	1.0
Bay	24.1 d-j	07/14	---	20	2.0	1.0	1.0
Bragg	23.5 d-j	07/24	10/19	38	9.0	1.0	1.0
GA-Soy 17	22.9 e-j	07/24	10/21	33	9.3	1.3	1.0
Agripro 70	22.7 e-j	07/28	10/21	37	8.3	2.0	1.0
Ransom	22.6 e-j	07/26	10/22	32	9.0	1.3	1.0
Hutton	22.5 e-j	07/25	10/27	31	7.7	2.0	1.0
Tracy	22.3 f-j	07/18	10/11	31	7.0	1.0	1.0
Foster	22.3 f-j	07/28	10/27	37	11.0	1.7	1.0
Coker 488	22.2 f-j	07/28	10/28	38	10.3	1.7	1.0
Matija 1	21.8 g-j	07/29	10/12	39	6.3	1.0	1.0
Coker 338	21.4 g-j	07/28	10/27	37	9.3	1.3	1.0
Deltapine 497	20.9 h-j	07/28	10/21	38	11.3	1.0	1.0
Dowling	20.6 h-j	07/28	10/29	35	10.7	2.0	1.0
Brooks	20.5 h-j	07/27	10/21	43	10.7	1.3	1.0
Coker 317	19.6 i-j	07/30	10/22	31	8.3	1.3	1.0
Cobb	19.2 j	08/01	10/29	37	9.3	2.0	1.0
Agripro 80	19.2 j	08/02	10/27	37	10.7	2.0	1.0

C.V.% = 11.7% L.S.D.$_{.05}$ = 5.5

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 22. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 23, 1979 and 1981, on Lower Coastal Plain Substation, Camden

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 237	35.8	07/19	10/18	32	6.8	1.4	1.0
Deltapine 345	35.1	07/13	---	30	4.2	1.5	1.0
RA 604	34.7	07/16	10/08	33	5.8	1.5	1.0
Forrest	34.2	07/09	---	27	4.9	1.8	1.1
RA 680	34.0	07/18	10/09	33	6.0	1.3	1.0
Deltapine 506	33.9	07/18	10/10	36	6.3	1.8	1.0
Centennial	33.8	07/18	10/10	36	6.0	1.4	1.0
Braxton	33.4	07/23	10/17	37	6.5	1.3	1.0
McNair 600	33.0	07/19	10/11	33	5.7	1.3	1.0
Terra-Vig 708	32.8	07/20	10/17	33	6.8	1.7	1.0
Coker 156	32.0	07/18	10/09	32	5.6	1.3	1.1
Agripro 70	31.6	07/25	10/17	41	7.3	1.9	1.0
Davis	31.5	07/21	10/07	38	7.8	1.5	1.0
Wright	31.2	07/21	10/17	37	7.5	1.8	1.0
Lee 74	31.1	07/18	10/11	27	4.2	1.3	1.0
Essex	30.9	07/09	---	20	3.2	1.0	2.2
Ransom	30.5	07/21	10/18	33	7.6	1.4	1.0
Coker 488	30.2	07/26	10/27	39	7.3	1.7	1.0
McNair 770	30.1	07/19	10/14	32	5.5	1.5	1.0
Bragg	30.0	07/22	10/16	39	7.8	1.3	1.0
Bay	30.0	07/10	---	26	3.0	1.4	1.5
Coker 338	29.9	07/25	10/29	39	6.9	1.5	1.0

Table 22. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Tracy	29.6	07/16	10/08	32	6.1	1.6	1.0
GA-Soy 17	29.3	07/22	10/16	37	7.8	1.5	1.0
Bedford	29.2	07/12	---	32	5.7	1.8	1.1
Tracy M	29.1	07/12	10/08	32	6.1	1.6	1.0
Dowling	28.3	07/27	10/31	37	8.0	2.0	1.0
Hutton	28.1	07/24	10/29	35	6.1	2.4	1.0
Brooks	27.4	07/25	10/16	42	8.7	1.9	1.0
Coker 317	26.7	07/26	10/16	34	7.3	1.3	1.0
Cobb	25.5	07/30	10/30	40	7.2	1.9	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 23. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 20 1978, 1979, and 1981, on Lower Coastal Plain Substation, Camden

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 237	29.1	07/26	10/16	31	6.2	1.4	1.0
Forrest	27.2	07/15	---	26	4.7	1.8	1.1
Centennial	27.2	07/24	10/12	33	5.4	1.5	1.0
Braxton	27.0	07/28	10/21	36	6.3	1.2	1.0
RA 680	26.9	07/24	10/10	32	5.8	1.3	1.0
McNair 600	26.7	07/24	10/11	31	5.2	1.4	1.0
Deltapine 506	26.3	07/24	10/11	33	5.6	1.9	1.0
Coker 156	26.1	07/23	10/09	31	5.1	1.2	1.1
Terra-Vig 708	25.9	07/26	10/20	32	6.0	1.6	1.0
Essex	25.5	07/14	---	19	3.0	1.0	1.8
Agripro 70	25.5	07/31	10/19	40	7.3	1.6	1.0
Davis	25.3	07/27	10/08	35	6.7	1.6	1.0
Ransom	25.1	07/28	10/19	32	6.9	1.3	1.0
Lee 74	24.7	07/23	10/11	25	3.6	1.3	1.0
GA-Soy 17	24.5	07/29	10/18	37	7.5	1.4	1.0
Coker 488	24.3	08/01	10/28	38	6.9	1.6	1.0
Bragg	24.2	07/29	10/19	37	7.1	1.4	1.0
Tracy	23.9	07/22	10/09	31	5.7	1.6	1.0
Coker 338	23.5	07/31	10/30	37	6.5	1.6	1.0
McNair 770	23.4	07/23	10/13	31	5.1	1.4	1.0
Hutton	22.9	07/30	10/29	34	6.2	1.9	1.0
Dowling	21.8	08/01	11/01	36	7.5	1.8	1.0
Cobb	19.8	08/04	10/31	39	6.8	1.7	1.1

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 24. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 12, 1981, on Prattville Experiment Field, Prattville

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Deltapine 105	35.8 a	06/28	09/24	26	2.0	1.0	1.0
Davis	35.6 a	07/09	09/29	30	2.8	1.1	1.0
Coker 488	33.8 a-b	07/23	10/15	39	4.5	1.0	1.0
McNair 770	32.1 a-c	07/15	10/07	29	4.3	1.3	1.0
Terra-Vig 606	31.0 a-d	07/09	10/04	32	3.5	1.0	1.0
RA 604	30.9 a-d	07/05	09/29	27	2.3	1.3	1.0
Deltapine 345	30.9 a-d	06/30	09/24	28	2.0	1.0	1.0
Terra-Vig 708	30.7 a-d	07/14	10/05	30	4.0	1.3	1.0
HB-50701-7	30.4 a-d	07/15	10/07	32	4.0	1.0	1.0
Agripro 71	30.1 a-e	07/15	10/05	32	4.0	1.6	1.0
Gold Kist 49	30.1 a-e	07/12	10/04	40	4.5	1.5	1.0
RA 480	29.7 a-f	06/22	09/12	33	2.5	1.1	1.8
RA 401	29.2 a-g	06/27	09/06	33	3.8	1.0	2.5
Wilstar 550	29.2 a-g	06/30	09/24	21	1.5	1.0	1.0
RA 680	29.2 a-g	07/08	10/01	33	2.5	1.1	1.0
GA-Soy 17	29.0 a-g	07/16	10/08	39	6.3	1.3	1.0
Forrest	28.8 a-g	06/22	09/19	24	1.5	1.0	1.3
Coker 156	28.6 b-g	07/08	10/01	31	4.3	1.0	1.0
McNair 600	28.5 b-h	07/08	10/01	32	2.8	1.1	1.0
Wright	28.2 b-i	07/15	10/05	33	4.5	1.5	1.0
Bedford	28.1 b-i	06/28	09/22	26	2.5	1.0	1.5
Deltapine 497	28.1 b-i	07/19	10/05	43	6.5	1.0	1.0
Tracy M	27.9 b-i	07/08	10/07	30	2.8	1.3	1.4

Table 24. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	27.4 b-i	07/15	10/07	38	5.0	1.0	1.0
Agripro 55	27.4 b-i	06/30	09/18	28	1.8	1.1	1.5
Centennial	27.2 b-i	07/09	10/05	31	3.5	1.0	1.0
Coker 317	27.1 b-i	07/20	10/08	37	6.0	1.4	1.0
Lee 74	27.0 b-i	07/10	10/01	25	2.8	1.0	1.0
Big-D 483	26.8 b-i	06/22	09/05	34	1.8	1.3	2.8
Foster	26.7 c-i	07/21	10/08	34	5.0	1.9	1.0
Essex	25.8 c-j	06/22	09/15	14	1.0	1.0	1.8
Deltapine 506	25.6 c-j	07/10	10/05	32	3.0	1.5	1.0
Ransom	24.9 d-j	07/12	10/05	31	4.8	1.1	1.0
Bay	24.8 d-j	06/27	09/19	16	1.0	1.0	2.0
Hutton	24.2 d-j	07/21	10/10	36	4.8	2.1	1.0
Coker 338	24.2 d-j	07/21	10/08	34	4.3	1.5	1.0
Bragg	23.2 e-j	07/14	10/02	35	5.8	1.1	1.0
Agripro 70	23.1 e-j	07/19	10/07	44	5.8	1.3	1.0
Matija 1	22.8 f-j	07/24	10/04	42	5.5	1.6	1.0
Coker 237	22.5 g-j	07/16	10/05	31	5.8	1.1	1.0
Brysoy 9	22.3 g-j	07/08	10/03	30	3.5	1.1	1.0
Wilstar 790	22.2 g-j	07/14	10/10	36	6.5	1.1	1.0
Cobb	21.5 h-j	07/22	10/13	41	5.3	1.0	1.0
Brooks	21.2 i-j	07/21	10/08	43	9.3	1.3	1.0
Dowling	19.6 j	07/22	10/15	37	5.5	1.1	1.0
Tracy	19.2 j	07/08	10/05	33	3.0	1.0	1.5

C.V.% = 15.1% $L.S.D._{.05}$ = 5.6

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 25. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 19, 1980-1981, on Prattville Experiment Field, Prattville

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 488	22.4	07/27	10/30	40	5.8	1.0	1.0
RA 401	21.6	07/03	09/12	33	4.3	1.0	2.6
Big-D 483	21.6	07/01	09/10	34	3.1	1.2	3.4
Deltapine 105	20.7	07/08	09/30	28	3.4	1.1	1.0
GA-Soy 17	20.1	07/22	10/18	39	6.0	1.1	1.0
Davis	20.0	07/17	10/03	33	4.9	1.1	1.0
Essex	19.8	07/03	09/21	19	2.5	1.0	1.9
McNair 770	19.8	07/20	10/21	32	5.1	1.1	1.0
Terra-Vig 606	19.8	07/16	10/20	33	4.8	1.0	1.0
Coker 156	19.7	07/15	10/23	34	5.0	1.0	1.1
RA 680	19.6	07/15	10/20	34	3.6	1.1	1.0
Agripro 71	19.2	07/19	10/23	34	4.8	1.6	1.0
Terra-Vig 708	19.1	07/19	10/24	33	4.3	1.3	1.0
Braxton	19.0	07/21	10/24	38	5.5	1.0	1.0
RA 604	18.6	07/11	10/06	29	4.3	1.1	1.0
Wright	18.6	07/21	10/22	35	5.0	1.4	1.0
Centennial	18.2	07/16	10/18	33	4.6	1.1	1.0
McNair 600	18.1	07/15	10/17	33	4.5	1.1	1.0
Tracy M	18.1	07/12	10/24	33	4.4	1.1	1.2

Table 25. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 317	17.7	07/26	10/24	38	6.1	1.3	1.0
Forrest	17.5	07/04	09/25	26	2.8	1.0	1.1
Deltapine 506	17.1	07/17	10/21	35	4.5	1.4	1.0
Bedford	17.0	07/08	09/27	29	4.5	1.1	1.3
Hutton	16.8	07/25	10/26	37	5.3	1.6	1.0
Lee 74	16.7	07/17	10/20	28	4.0	1.1	1.0
Ransom	16.7	07/19	10/19	33	5.1	1.1	1.0
Coker 338	16.7	07/25	10/26	37	5.1	1.5	1.0
Bragg	16.3	07/19	10/20	38	5.9	1.4	1.0
Wilstar 550	16.0	07/10	09/28	26	2.8	1.1	1.0
Cobb	15.4	07/26	10/27	40	5.8	1.1	1.0
Bay	15.2	07/06	09/26	22	2.3	1.0	1.5
Wilstar 790	15.2	07/19	10/25	37	6.3	1.1	1.0
Agripro 70	15.1	07/25	10/23	43	6.1	1.1	1.0
Coker 237	14.7	07/19	10/19	33	5.5	1.1	1.0
Dowling	14.7	07/26	10/27	38	5.0	1.1	1.0
Tracy	14.5	07/14	10/21	35	4.1	1.0	1.3
Brooks	14.0	07/25	10/22	41	7.8	1.1	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 26. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 17, 1979-1981, on Prattville Experiment Field, Prattville

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
RA 401	24.0	07/01	09/08	32	3.8	1.0	2.4
Essex	20.4	07/02	09/16	19	2.9	1.0	2.3
Coker 488	20.0	07/25	10/28	40	6.2	1.0	1.0
GA-Soy 17	19.5	07/21	10/18	39	6.6	1.2	1.0
Braxton	18.3	07/20	10/23	38	5.9	1.0	1.0
Wright	17.8	07/20	10/20	36	5.3	1.3	1.0
Forrest	17.6	07/04	09/21	27	3.4	1.0	1.1
RA 680	17.3	07/13	10/16	35	4.1	1.0	1.0
Davis	17.2	07/16	10/01	33	4.9	1.1	1.0
Terra-Vig 606	17.2	07/15	10/14	34	5.0	1.0	1.0
Coker 156	17.0	07/13	10/17	34	4.9	1.0	1.0
Terra-Vig 708	17.0	07/16	10/19	34	4.5	1.2	1.0
Bedford	16.8	07/07	09/22	31	5.1	1.1	1.2
Bay	16.8	07/06	09/22	24	2.7	1.0	1.4
Tracy M	16.8	07/11	10/17	33	4.1	1.1	1.1
Centennial	16.7	07/13	10/16	34	4.7	1.0	1.0
Coker 317	16.7	07/24	10/22	37	6.4	1.2	1.0
RA 604	16.5	07/11	10/03	31	4.6	1.1	1.0

Table 26. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Hutton	16.3	07/23	10/26	38	5.3	1.5	1.0
McNair 770	16.3	07/16	10/09	33	4.8	1.1	1.0
Coker 338	16.2	07/22	10/25	37	5.6	1.4	1.0
Dowling	16.1	07/25	10/26	38	5.8	1.0	1.0
Bragg	15.9	07/18	10/19	39	6.4	1.3	1.0
Deltapine 506	15.7	07/14	10/18	36	4.3	1.3	1.0
Cobb	15.6	07/25	10/26	40	5.8	1.2	1.0
McNair 600	15.3	07/15	10/14	33	5.1	1.1	1.0
Ransom	15.2	07/17	10/17	34	5.4	1.0	1.0
Agripro 70	15.2	07/25	10/22	44	6.4	1.2	1.0
Lee 74	14.6	07/15	10/17	28	3.8	1.1	1.0
Tracy	13.7	07/13	10/17	34	4.3	1.0	1.2
Brooks	13.7	07/24	10/21	41	7.8	1.2	1.0
Coker 237	13.1	07/16	10/16	33	5.4	1.0	1.1

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 27. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 17, 1978-1981, on Prattville Experiment Field, Prattville

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Essex	22.7	07/02	09/14	19	3.3	1.0	2.3
Forrest	20.0	07/04	09/19	27	3.8	1.0	1.1
Coker 488	18.2	07/24	10/27	40	6.6	1.0	1.0
Davis	18.0	07/16	09/29	34	5.3	1.4	1.0
GA-Soy 17	17.5	07/20	10/19	39	6.7	1.1	1.0
Braxton	17.2	07/19	10/22	38	6.0	1.0	1.0
Coker 156	17.0	07/12	10/13	32	4.4	1.0	1.0
RA 680	16.6	07/11	10/12	34	3.8	1.0	1.0
Terra-Vig 708	15.7	07/15	10/17	34	4.8	1.2	1.0
Centennial	15.5	07/13	10/14	34	4.8	1.0	1.0
Coker 338	15.4	07/22	10/25	37	5.9	1.4	1.0
Dowling	15.3	07/24	10/26	39	6.4	1.1	1.0
McNair 600	14.9	07/13	10/11	32	4.8	1.1	1.0
Hutton	14.8	07/22	10/24	37	5.6	1.5	1.0
Lee 74	14.4	07/14	10/15	26	3.5	1.1	1.0
Ransom	14.4	07/16	10/15	34	5.7	1.1	1.0
Tracy	14.3	07/11	10/13	34	4.1	1.1	1.2
Bragg	14.1	07/17	10/17	39	6.3	1.3	1.0
Cobb	14.0	07/24	10/26	41	6.4	1.2	1.0
Agripro 70	13.8	07/24	10/20	44	6.4	1.1	1.0
Deltapine 506	13.7	07/13	10/16	35	4.1	1.3	1.0
Coker 237	12.8	07/15	10/13	32	5.4	1.0	1.1

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 28. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 19, 1977-1981, on Prattville Experiment Field, Prattville

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Essex	23.3	07/04	09/12	19	3.0	1.0	2.3
GA-Soy 17	21.0	07/23	10/19	40	6.8	1.3	1.0
Forrest	20.6	07/06	09/17	27	3.8	1.0	1.1
Coker 488	20.4	07/25	10/26	41	6.6	1.0	1.0
Coker 156	20.3	07/13	10/12	33	4.4	1.0	1.0
Davis	19.5	07/17	09/29	35	5.4	1.4	1.0
Terra-Vig 708	19.3	07/16	10/16	34	4.8	1.2	1.0
Centennial	18.4	07/13	10/14	33	4.8	1.1	1.0
Lee 74	18.1	07/16	10/15	27	3.7	1.1	1.0
Bragg	18.0	07/19	10/17	40	6.4	1.4	1.0
Deltapine 506	17.9	07/15	10/16	35	4.3	1.4	1.0
McNair 600	17.8	07/15	10/10	34	4.8	1.3	1.0
Hutton	17.8	07/23	10/24	39	5.7	1.6	1.0
Coker 338	17.8	07/23	10/26	38	6.0	1.5	1.0
Cobb	17.7	07/24	10/26	42	6.5	1.2	1.0
Ransom	17.7	07/17	10/15	35	5.8	1.1	1.0
Tracy	17.4	07/12	10/11	35	4.2	1.4	1.2
Coker 237	17.1	07/17	10/14	33	5.4	1.0	1.1
Agripro 70	17.1	07/23	10/19	44	6.8	1.3	1.0

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 29. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 25, 1981, on E. V. Smith Research Center, Shorter

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Agripro 70	23.8 a	07/25	10/17	29	5.0	1	1.0
Wright	20.5 a-b	07/19	10/17	25	3.5	1	1.0
Deltapine 416	20.0 a-c	07/13	10/10	29	5.3	1	1.0
Cobb	19.5 b-d	07/26	10/29	27	4.5	1	1.0
Foster	19.2 b-d	07/23	10/20	23	4.0	1	1.0
Coker 237	18.8 b-d	07/10	10/14	23	3.3	1	1.0
H76-672-3A	18.1 b-e	07/20	10/10	21	3.8	1	1.0
Bragg	17.8 b-f	07/16	10/19	26	4.3	1	1.0
Tracy	17.6 b-f	07/10	10/12	22	4.0	1	1.0
Brooks	17.5 b-f	07/25	10/17	28	4.3	1	1.0
Deltapine 497	17.4 b-f	07/16	10/15	27	3.5	1	1.0
Terra-Vig 708	17.3 b-f	07/11	10/10	22	3.3	1	1.0
Agripro 71	17.3 b-f	07/18	10/11	20	3.5	1	1.0
Tracy M	17.1 b-g	07/10	10/05	21	4.3	1	1.0
Deltapine 506	16.7 b-g	07/18	09/28	20	3.3	1	1.0
Agripro 80	16.6 b-g	07/29	10/24	25	4.0	1	1.0
Coker 488	16.4 b-g	07/24	10/24	28	4.3	1	1.0
Centennial	16.3 b-g	07/10	10/16	22	3.5	1	1.0
GA-Soy 17	16.3 b-g	07/25	10/18	25	4.3	1	1.0
Ransom	15.8 b-h	07/14	10/15	19	3.3	1	1.0
Braxton	15.8 b-h	07/18	10/23	24	3.5	1	1.0
Dowling	15.6 c-h	07/28	10/25	25	4.5	1	1.0
HB-50701-7	15.5 c-h	07/17	10/15	22	3.8	1	1.0

Table 29. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Hutton	15.1 d-i	07/21	10/24	26	4.0	1	1.0
Coker 338	14.8 d-i	07/18	10/26	24	4.8	1	1.0
Terra-Vig 505	13.6 e-j	---	09/18	17	3.3	1	1.5
Deltapine 105	13.1 f-k	---	09/18	16	2.5	1	1.0
Coker 156	12.4 g-l	07/10	10/09	18	3.0	1	1.0
Forrest	11.4 h-m	---	09/16	16	2.0	1	1.0
Davis	10.9 i-n	07/15	09/29	21	3.8	1	3.0
Bedford	10.3 j-n	---	09/18	17	2.8	1	1.0
Wilstar 430	8.9 k-o	---	09/15	19	2.7	1	1.3
Lee 74	8.2 l-o	07/11	10/14	15	2.8	1	1.0
Agripro 55	8.2 l-o	---	09/18	15	2.0	1	1.8
Bay	8.1 l-o	---	09/16	12	1.0	1	1.0
Big-D 502	7.0 m-o	---	09/17	17	2.8	1	3.3
Big-D 483	6.5 n-o	---	09/14	18	3.0	1	3.0
Big-D 501	6.4 n-o	---	09/17	17	3.3	1	3.5
Essex	4.4 o	---	09/17	12	1.5	1	1.0

C.V.% = 19.4% $L.S.D._{.05}$ = 3.9

[1]Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different (P = .05).

[2]An explanation of data and ratings is given on page 6 of this report.

Table 30. Two-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 20, 1980-1981, on E. V. Smith Research Center, Shorter

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Agripro 70	16.3	10/19	29	4.1	1	1.0
Wright	14.9	10/20	26	3.4	1	1.0
Cobb	14.3	10/28	29	3.8	1	1.0
Bragg	13.0	10/20	28	3.9	1	1.0
Coker 237	12.9	10/18	24	3.3	1	1.0
Coker 488	12.6	10/25	28	3.8	1	1.0
Agripro 71	12.6	10/16	23	3.4	1	1.0
Tracy	12.5	10/11	23	3.4	1	1.0
Centennial	12.3	10/14	24	2.9	1	1.0
Agripro 80	12.1	10/24	27	3.8	1	1.0
Braxton	12.0	10/23	25	3.5	1	1.0
Tracy M	12.0	10/07	23	3.8	1	1.0
Brooks	11.9	10/19	29	4.1	1	1.0
GA-Soy 17	11.8	10/20	27	3.5	1	1.0
Terra-Vig 708	11.7	10/15	23	3.3	1	1.0
Deltapine 105	11.7	09/21	18	3.1	1	1.0
Dowling	11.7	10/24	27	3.8	1	1.0
Deltapine 506	11.4	10/05	24	3.1	1	1.0
Coker 338	11.1	10/25	26	3.9	1	1.0
Ransom	11.0	10/17	19	3.1	1	1.0
Hutton	10.6	10/24	27	3.5	1	1.0

Table 30. Continued

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Forrest	10.3	09/19	18	3.1	1	1.0
Coker 156	10.1	10/10	20	2.9	1	1.0
Bedford	9.4	09/20	20	4.0	1	1.2
Davis	9.0	10/02	22	3.6	1	2.4
Big-D 483	8.1	09/07	19	2.5	1	2.5
Big-D 501	7.6	09/12	19	2.6	1	2.8
Lee 74	7.1	10/16	18	2.5	1	1.0
Essex	6.9	09/13	14	1.9	1	1.5
Bay	6.8	09/19	17	2.0	1	1.5

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

Table 31. Seed Quality Ratings by Location and Irrigation on Soybean Varieties and Lines Grown in Central Alabama in 1981

Variety	Maturity group	Prattville	Marion Junction		Camden		Shorter
			Sumter clay	Vaiden clay	Irr.	Non irr.	
		May 12	May 12		May 28		May 25
RA 401	IV	3	2	2	2	2	--
RA 480	IV	2	3	2	2	2	--
Big D 483	IV	--	4	3	2	3	2
Deltapine 105	V	1	2	2	1	1	1
Bedford	V	3	2	1	1	1	1
Bay	V	1	2	2	2	2	1
Essex	V	2	2	2	2	1	1
Forrest	V	3	2	1	1	2	1
Wilstar 550	V	1	--	--	1	1	--
Terra-Vig 505	V	--	2	1	--	--	1
Big D 501	V	--	4	3	--	--	1
Big D 502	V	--	--	--	2	3	1
Deltapine 345	V	1	2	2	1	1	--
Agripro 55	V	1	2	2	--	--	1
Lee 74	VI	1	2	2	1	2	1
Tracy	VI	1	2	1	2	2	1
Tracy M	VI	2	3	2	2	2	2
Centennial	VI	1	2	2	2	1	1
Davis	VI	1	1	1	2	2	1
RA 604	VI	1	2	1	2	1	--
RA 680	VI	1	2	1	2	2	--
Deltapine 506	VI	1	2	1	1	2	1
Deltapine 416	VI	--	3	2	--	--	1
Brysoy 9	VI	1	2	1	1	2	--
Terra-Vig 606	VI	1	2	1	1	1	--
Gold Kist 49	VI	1	--	--	--	--	--
Coker 156	VI	1	2	1	1	1	1
McNair 600	VI	1	2	2	1	2	--

Table 31. Continued

Variety	Maturity group	Prattville	Marion Junction		Camden		Shorter
			Sumter clay	Vaiden clay	Irr.	Non irr.	
		May 12	May 12		May 28		May 25
Bragg	VII	1	2	2	2	1	1
Braxton	VII	1	2	2	1	2	1
GA Soy 17	VII	1	2	2	1	1	1
Wright	VII	1	2	1	1	2	1
Ransom	VII	1	2	1	1	2	1
RA 701	VII	--	3	2	1	1	--
Deltapine 497	VII	1	--	--	2	2	1
Wilstar 790	VII	2	2	2	--	--	--
HB-50701-7	VII	2	2	2	--	--	2
Terra-Vig 708	VII	1	2	2	1	2	1
H76-672-3A	VII	--	2	2	--	--	1
Brooks	VII	1	2	2	2	1	1
Agripro 70	VII	1	--	2	2	2	1
Agripro 71	VII	1	--	--	1	1	1
Coker 237	VII	1	2	2	1	2	--
McNair 770	VII	1	--	--	2	1	--
Coker 317	VII	1	2	2	1	2	--
Cobb	VIII	1	1	2	2	2	1
Dowling	VIII	1	2	2	1	2	1
Hutton	VIII	1	3	2	1	2	1
Coker 338	VIII	1	2	2	2	2	1
Coker 488	VIII	1	2	2	1	1	1
RA 800	VIII	--	2	2	2	2	--
Agripro 80	VIII	--	3	2	2	2	1
Matija 1	VIII	1	2	2	1	1	--
Foster	VIII	1	2	1	1	1	1

Table 32. Purple Seed Stain Ratings by Location and Irrigation on Soybean Varieties and Lines Grown in Central Alabama in 1981

Variety	Maturity group	Purple seed stain rating by location and irrigation					
		Prattville	Marion Junction		Camden		Shorter
			Sumter clay	Vaiden clay	Irr.	Non irr.	
		May 12	May 12		May 28		May 25
RA 401	IV	3	2	2	3	3	--
RA 480	IV	1	2	2	2	2	--
Big D 483	IV	3	2	2	3	2	2
Deltapine 105	V	2	2	2	2	2	1
Bedford	V	2	2	2	1	1	1
Bay	V	2	2	2	2	2	1
Essex	V	3	2	2	2	2	1
Forrest	V	2	1	2	1	1	1
Wilstar 550	V	1	--	--	1	2	--
Terra-Vig 505	V	--	1	1	--	--	1
Big D 501	V	--	2	3	--	--	2
Big D 502	V	--	--	--	2	2	2
Deltapine 345	V	1	1	2	1	1	--
Agripro 55	V	1	1	1	--	--	1
Lee 74	VI	1	1	1	1	1	1
Tracy	VI	1	1	1	1	1	1
Tracy M	VI	2	1	1	1	1	1
Centennial	VI	1	1	1	1	1	1
Davis	VI	1	1	1	1	1	1
RA 604	VI	2	2	1	1	2	--
RA 680	VI	2	1	1	1	1	--
Deltapine 506	VI	1	1	1	2	1	1
Deltapine 416	VI	--	1	1	--	--	1
Brysoy 9	VI	1	1	2	2	1	--
Terra-Vig 606	VI	1	1	1	1	1	--
Gold Kist 49	VI	1	--	--	--	--	--
Coker 156	VI	1	1	1	1	1	1
McNair 600	VI	2	1	1	1	2	--

Table 32. Continued

Variety	Maturity group	Purple seed stain rating by location and irrigation					
		Prattville	Marion Junction		Camden		Shorter
			Sumter clay	Vaiden clay	Irr.	Non irr.	
		May 12	May 12		May 28		May 25
Bragg	VII	1	1	1	1	1	1
Braxton	VII	1	2	2	2	2	1
GA Soy 17	VII	1	1	2	2	2	1
Wright	VII	1	1	2	1	1	1
Ransom	VII	1	1	1	1	1	1
RA 701	VII	--	2	2	1	2	--
Deltapine 497	VII	1	--	--	1	1	1
Wilstar 790	VII	1	2	2	--	--	--
HB-50701-7	VII	1	2	1	--	--	1
Terra-Vig 708	VII	1	2	1	1	1	1
H76-672-3A	VII	--	2	1	--	--	1
Brooks	VII	1	2	1	2	1	2
Agripro 70	VII	1	1	1	2	1	1
Agripro 71	VII	1	--	--	1	1	1
Coker 237	VII	1	1	1	2	1	1
McNair 770	VII	1	--	--	2	1	--
Coker 317	VII	1	2	1	1	2	--
Cobb	VIII	2	3	2	1	2	1
Dowling	VIII	2	3	2	1	1	2
Hutton	VIII	1	2	1	1	1	1
Coker 338	VIII	1	2	2	2	3	2
Coker 488	VIII	1	3	2	1	2	1
RA 800	VIII	--	2	2	2	2	--
Agripro 80	VIII	--	3	2	1	2	2
Matija 1	VIII	1	1	1	2	1	--
Foster	VIII	1	2	2	1	1	1

Table 33. Seed Size of Soybean Varieties and Lines as Affected by Planting Dates, Location, and Irrigation When Grown in Central Alabama in 1981

Variety	Maturity group	Seed size (g/100 seed)							
		Prattville	Camden		Marion Junction				Shorter
			Irr.	Non irr.	Sumter clay			Vaiden clay	
		May 12	May 28		May 12	June 12	June 26	May 12	May 25
RA 401	IV	13.8	13.5	13.7	11.7	--	--	14.8	--
RA 480	IV	18.1	14.1	15.5	13.0	--	--	16.0	--
Big D 483	IV	15.3	15.7	14.5	13.7	--	--	13.6	15.4
Deltapine 105	V	15.8	15.3	13.7	12.7	12.6	--	17.1	14.2
Bedford	V	13.8	12.6	11.6	11.5	--	--	14.5	12.9
Bay	V	17.0	17.4	17.8	14.3	--	--	19.4	17.1
Essex	V	15.0	14.1	14.4	11.9	12.1	--	17.4	13.0
Forrest	V	13.8	12.0	11.5	12.6	10.8	11.7	12.8	12.7
Wilstar 550	V	12.8	11.3	12.2	--	--	--	--	--
Terra-Vig 505	V	--	--	--	11.7	--	--	15.5	13.3
Big D 501	V	--	--	--	14.0	--	--	14.1	14.1
Big D 502	V	--	14.8	13.8	--	--	--	--	14.5
Deltapine 345	V	14.8	13.3	12.6	11.5	--	--	15.5	--
Agripro 55	V	13.7	--	--	14.8	--	--	13.6	12.7
Lee 74	VI	11.8	13.2	11.3	11.3	--	--	13.8	13.1
Tracy	VI	15.0	15.8	13.5	14.8	--	--	16.8	15.8
Tracy M	VI	16.1	16.4	14.7	15.0	15.3	13.2	16.3	15.5
Centennial	VI	11.2	12.5	11.0	11.6	11.9	10.7	12.6	13.2
Davis	VI	15.9	14.6	13.8	14.9	14.1	12.5	15.5	14.7
RA 604	VI	15.7	14.3	13.0	11.5	--	--	15.3	--
RA 680	VI	12.6	13.4	11.1	12.0	--	--	13.5	--
Deltapine 506	VI	11.8	13.9	10.6	12.1	--	--	13.1	12.4
Deltapine 416	VI	--	--	--	11.0	--	--	12.7	14.6
Brysoy 9	VI	13.1	14.5	14.0	11.6	--	--	13.4	--
Terra-Vig 606	VI	12.7	13.9	13.8	12.3	--	--	12.0	--
Coker 156	VI	11.9	13.0	10.9	11.4	12.0	10.9	12.1	11.8
McNair 600	VI	12.8	13.0	10.7	10.5	--	--	14.0	--

Table 33. Continued

Variety	Maturity group	Seed size (g/100 seed)							
		Prattville	Camden		Marion Junction				Shorter
			Irr.	Non irr.	Sumter clay			Vaiden clay	
		May 12	May 28		May 12	June 12	June 26	May 12	May 25
Bragg	VII	11.8	14.5	11.0	11.5	12.2	11.3	13.1	13.0
Braxton	VII	13.0	16.7	11.7	12.7	13.6	13.6	15.3	14.5
GA-Soy 17	VII	11.6	13.2	10.6	12.0	12.2	11.7	13.2	13.2
Wright	VII	10.9	13.2	11.0	13.1	12.1	10.7	13.1	12.6
Ransom	VII	13.6	15.5	11.3	13.3	13.9	13.1	14.6	14.3
RA 701	VII	--	14.2	11.3	10.4	--	--	12.7	--
Deltapine 497	VII	11.3	13.8	10.9	--	11.9	--	--	13.3
Wilstar 790	VII	10.6	--	--	10.4	11.3	--	12.3	--
HB-50701-7	VII	13.2	--	--	13.5	--	--	13.2	14.4
Terra-Vig 708	VII	13.6	14.4	11.8	10.6	11.8	11.8	14.5	12.8
H 76-672-3A	VII	--	--	--	10.0	--	--	12.5	12.2
Brooks	VII	11.4	14.1	11.0	11.2	--	--	12.2	12.5
Agripro 70	VII	10.9	13.1	10.1	11.2	11.2	--	11.9	12.5
Agripro 71	VII	11.4	13.2	10.7	--	--	--	--	11.8
Coker 237	VII	13.2	15.4	11.0	12.2	11.8	12.0	14.1	13.5
McNair 770	VII	12.5	14.5	11.5	--	--	--	--	--
Coker 317	VII	10.4	13.3	10.3	11.0	--	--	12.0	--
Cobb	VIII	10.3	13.3	9.0	10.0	10.9	9.8	11.0	11.1
Dowling	VIII	9.4	14.4	12.5	11.4	12.4	11.4	12.1	11.6
Hutton	VIII	11.8	16.9	12.5	11.8	13.2	13.0	14.6	14.7
Coker 338	VIII	10.6	15.6	11.8	10.4	10.9	12.2	13.4	12.6
Coker 488	VIII	10.5	15.4	11.6	14.6	12.2	11.8	14.3	13.4
RA 800	VIII	--	14.5	11.3	10.9	--	--	13.2	--
Agripro 80	VIII	--	15.6	11.6	12.1	--	--	13.1	14.0
Matija 1	VIII	9.3	11.4	9.5	10.8	--	--	10.6	--
Foster	VIII	8.9	10.3	9.2	11.4	--	--	11.1	10.9

From USDA Preliminary VII

Table 34. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties or Strains Planted May 14, 1981, on the Plant Breeding Unit, Tallassee

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Centennial	33.6	07/14	10/01	30	2.5	1.0	1.0
F79-4092	33.1	07/20	10/09	30	5.5	1.0	1.0
Braxton	32.2	07/15	10/10	29	4.5	1.0	1.0
D78-4382	30.8	07/16	10/05	30	7.0	2.0	1.0
D79-10458	30.7	07/14	10/01	31	4.5	1.0	1.0
D79-10556	29.5	07/19	10/07	28	1.5	1.0	1.0
F78-6808	29.3	07/14	10/09	30	4.5	1.0	1.0
F77-2122	27.8	07/14	10/02	25	2.5	1.0	1.0
F79-3998	26.7	07/17	10/09	29	4.5	1.0	1.0
F79-4117	26.5	07/15	10/05	22	2.5	1.0	1.0
GA78-2485	26.4	07/14	10/08	27	5.0	1.0	1.0
D78-4471	26.3	07/17	10/05	26	6.0	1.0	1.0
GA78-2708	26.0	07/15	10/02	28	5.5	1.0	1.0
D79-10335	25.9	07/22	10/14	32	4.5	1.5	1.0
N79-1304	25.7	07/14	09/24	23	5.0	1.0	1.5
F77-2039	24.5	07/14	10/05	25	4.0	1.0	1.0
N79-782	24.3	07/14	09/17	25	4.0	1.0	2.5
GA78-625	23.8	07/14	10/01	27	4.0	1.0	1.0
F79-4252	23.6	07/14	10/05	29	2.0	1.0	1.0
D79-10426	23.3	07/22	09/24	27	2.0	1.0	1.0
GAT79-168	22.1	07/14	10/02	27	4.5	1.0	1.0

Table 34. Continued

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
D79-10540	21.8	07/16	10/09	23	3.0	1.0	1.0
GA78-2710	21.8	07/14	10/02	27	2.5	1.0	1.0
LA79-4656	21.2	07/14	10/02	22	2.5	1.0	1.0
F77-2020	21.0	07/14	09/28	25	2.0	1.0	1.0
N79-903	19.2	07/14	09/24	23	4.0	1.0	1.0
N79-4097	18.8	07/14	09/24	25	3.0	1.0	2.0
D78-4288	18.4	07/14	10/01	19	1.5	1.0	1.0
F77-6790	17.6	07/17	10/06	33	5.0	1.0	1.0
GAT79-177	16.0	07/14	09/24	23	3.5	1.0	1.0
GAT79-151	15.0	07/14	09/24	19	1.5	1.0	1.5
N79-4047	14.9	07/14	09/24	26	3.5	1.0	2.0
N79-856	14.8	07/14	09/24	16	1.0	1.0	3.0
GA78-2517	14.2	07/14	10/02	25	3.0	1.0	1.0
N79-872	12.5	07/14	09/24	13	1.0	1.0	1.0
N80-5023	10.6	07/14	10/04	28	3.5	1.0	2.0

C.V.% = 18.2% L.S.D.$_{.05}$ = 8.5

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

From USDA Uniform VII

Table 35. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties or Strains Planted May 14, 1981, on the Plant Breeding Unit, Tallassee

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
F77-1576	42.3	07/16	10/11	37	4.7	1.2
D77-7926	40.1	07/20	10/08	27	4.0	1.0
F77-1880	37.0	07/15	10/11	31	3.7	1.0
F77-2000	35.2	07/20	10/11	31	3.7	1.3
D77-6103	34.6	07/14	10/01	32	3.7	1.0
Braxton	33.1	07/15	10/08	30	4.7	1.0
Wright	32.1	07/14	10/05	31	5.0	1.0
F77-7142	30.4	07/15	10/10	35	5.0	1.0
F76-8757	29.2	07/15	10/08	31	4.0	1.0
F77-7016	26.7	07/15	09/24	35	4.3	1.0
N77-940	24.5	07/14	09/26	23	4.0	1.0
D76-9454	23.4	07/14	09/29	29	3.3	1.0

C.V.% = 22.6% $L.S.D._{.05}$ = N.S.

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

From USDA Uniform VIII

Table 36. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties or Strains Planted May 14, 1981, on the Plant Breeding Unit, Tallassee

Variety	Yield[1]	First bloom[2]	Maturity[2]	Plant ht.[2]	Ht. first pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
F77-1797	42.8	07/15	10/19	34	3.7	1.0
Cobb	39.7	07/18	10/19	38	5.3	1.2
F77-1995	38.2	07/15	10/11	34	5.0	1.3
F76-8827	37.0	07/15	10/15	34	5.3	1.0
F77-1840	33.9	07/15	10/12	35	6.0	1.0
C079-501	28.3	07/15	10/09	32	3.3	1.0
N76-1507	27.9	07/15	10/03	28	4.7	1.0
F77-1790	27.4	07/16	10/13	29	3.3	1.0
F77-7450	26.0	07/15	10/08	31	3.7	1.0
N77-1602	22.9	07/15	09/26	28	4.0	1.0
F77-1793	22.5	07/15	10/13	31	3.7	1.0
Hutton	18.4	07/15	09/26	32	4.3	1.2

C.V.% = 16.0% L.S.D.$_{.05}$ = 10.1

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.

[2]An explanation of data and ratings is given on page 6 of this report.

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