

North Alabama  
Soybean Variety Tests  
1981

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

Plantings May 1 to 30

V	VI	VII
Bay Deltapine 105 Deltapine 345 Essex Forrest	Coker 156 Davis Lee 74 McNair 600 RA 604 Tracy Tracy M	

Plantings June 1 to 30

V	VI	VII
Essex Forrest	Centennial Coker 156 Davis Lee 74 McNair 600 Tracy Tracy M	Bragg Braxton Coker 237 Ransom

Lines and New Releases to Look At

V	VI	VII
Agripro 55 Wilstar 550	NAPB 611 RAX 9 Green Seed 737 Green Seed 791	

## 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. 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 each locality and suited to meet individual management requirements.

## EXPERIMENTAL PROCEDURES

Tests in north Alabama were conducted at three substations of the Alabama Agricultural Experiment Station of Auburn University. A randomized block design with four replications was used at each location with the first plantings made at the optimum time for maximum growth and 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 was 36 inches at all locations. 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 released varieties and breeding lines in the late stages of development from the USDA Regional Testing Program, and commercial companies. Sources of seed are listed on pages 10, 11, and 12.

The tests in northern Alabama were located on Decatur clay loam soil near Belle Mina, Harsells fine sandy loam soil near Crossville, and Savannah sandy loam near Winfield.

## DISCUSSION OF DATA

Since plant growth and seed yield are influenced by inherent soil differences and 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 nematode pressures. Therefore, long term yield averages are more reliable in evaluating varietal performance in a given production area.

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. Coefficients of variation (C.V.) are footnoted in the tables. This value reflects the relative precision of the experiment.

### Seasonal Conditions

Early season moisture was adequate at both Crossville and Winfield and good stands were attained on all tests except the July 1 planting at Crossville. This test planting date was delayed until sufficient moisture was present for germination but still poor stands were obtained for some entries. The test at Belle Mina had good subsoil moisture at planting but the surface dried out during seed bed preparation which resulted in thin stands in some plots.

#### Belle Mina (tables 16-20)

There were three periods of severe drought stress at Belle Mina during the growing season. The first drought stress period was a 17-day period in July (9-25) which adversely affected Maturity Group's IV and V pod set and early development stages. The second drought stress period was a 10-day period in August (6-16) which again caught the Group IV entries in mid pod development causing a reduced yield for these entries. A third drought stress period was in September when only 0.47 inches of rainfall fell from September 4 through October 1. This third stress period resulted in all entries maturing in early October and reduced yields on the full season Group VI and later maturing entries (Group VII and VIII). In between the second and third moisture stress periods was a period from August 17 through September 4 that 7.4 inches of rain fell which was at a period that favored the late Group V and early Group VI. These 10 varieties yielded from 49 to 52 bu./a.

#### Crossville (tables 3-15)

Drought periods at Crossville were similar to those at Belle Mina in mid July and September through early October. The 4.7 inches of rainfall in the first 2 weeks of June produced adequate plant height on all entries in the first planting (May 13) at Crossville. This coupled with 1.5 inches in the first week in July was ideal for blooming and pod set for Group IV and V and early Group VI entries. This June and early July rainfall was not good for the later maturing Group VI, Group VII, and Group VIII varieties, however, and excess lodging occurred. Pod set

was also poor on the later maturing entries due to only 1.2 inches of rainfall from July 6th through August 5th. Rainfall of 6.8 inches in August after the 5th resulted in excellent pod fill of varieties of the Maturity Group V and early Group VI. This wet period followed by a period of 32 days with only 0.9 inches of rainfall from September 3 through October 9 left the full season (Group VI) and later entries short on yield and small seed size, table 32. The yield of the second planting (May 28), followed somewhat the same pattern as the earlier planting. However the yield of the third planting (July 1) was obtained from the 3.2 inches of rainfall in October.

#### Winfield (tables 21-28)

The three dry periods at Winfield were similar to those at Crossville and in addition Winfield did not have the 2 inches of rainfall in late August. Thus a period of 23 days with only 0.5 inch of rainfall during the late stages of pod fill of Group IV to early pod fill on Group VIII resulted in poor pod set and pod fill. There was 1.7 inches on September 15 and 16th followed by another 21 days without precipitation. This resulted in very low yields 16 to 25 bu./a. on the first planting (May 25) and 19 to 28 bu./a. on the second planting (June 15). The higher yields in the second planting were a result of the 1.7 inches in September which favored the late planting in 1981 more than the earlier planting.

#### Effect of Planting Date on Yield

The highest yielding cultivars at Crossville were the Group V in 1981. When the average of Essex and Forrest are compared at the three planting dates their yield of 50 bu./a. on the May 13 planting was reduced by 8.3 bu./a. by a 3-week delay in planting to May 28 and a decrease of another 19.3 bu./a. for a delayed planting another 4 weeks to July 1. This was a yield of only 54% and 83% of the May 13 yield when planted July 1 or May 28, respectively, in 1981. Maturity Group VI varieties were the highest yielding cultivars at the latest planting date. A similar pattern to the 1981 data is shown when looking at multi-year data. The Group V varieties Essex and Forrest average 38 bu./a. on a 3-year average and yields were reduced 4.2 and 13.5 bu./a. when planting was delayed 3 or 6 weeks, respectively, from the early May planting. Again, the leading varieties at Crossville for the early and late May plantings have been Group V cultivars when averaged over the 3-, 4-, or 5-year period. However, the leading cultivars in the mid-June planting have been Group VI for years 1980 and 1981 and Group VII for the 3- and 4-year averages during years 1979-1981 and 1978-1981, respectively. For the 5-year period 1977-1981, there was only a 1 bu. difference in the average for the four maturity groups V, VI, VII, and VIII.

### Seed Quality and Purple Stain (tables 33 and 34)

Seed quality and purple stain ratings are shown in tables 33 and 34. The only problem with seed quality in northern Alabama in 1981 was in the Maturity Group IV soybeans. These are the early maturing entries that usually mature in early to mid September when the temperature is usually still high. Seed deterioration is more rapid during high temperatures when moisture is present than later in the season when temperatures have dropped even though moisture may be present. The pod and stem blight and purple stain infections are usually favored more by high humidity during the early pod development. There is usually a higher probability of humid conditions during this period for the very early varieties than the later ones when the former are usually starting to develop pods by mid July to early August.

### Seed Size (table 32)

Seed size (g/100 seed) is usually affected by two factors, genetic potential and soil moisture availability during late stages of pod fill, table 32. In general, the seed size was largest at Crossville and smallest at Winfield. This is much the same as the yields at these two locations. Seed size was smaller with the later planting also indicating a severe moisture stress period during September and October in northern Alabama in 1981.

### USDA Regional Tests (tables 29-31)

A preliminary test in Maturity Group VI and Uniform tests in Maturity Groups V and VI were evaluated at Belle Mina in 1981. These tests are shown in tables 29, 30, and 31. In the preliminary Group VI test, table 30, Centennial is used as the standard variety. Six breeding lines were as good or better than Centennial. A number of these lines will be advanced in the Uniform VI test in 1982. In the Uniform Group V and VI tests, Forrest and Centennial are the standard varieties, respectively. Nathan and Jeff are recent releases in Groups V and VI, respectively.



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

Location	1977 In.	1978 In.	1979 In.	1980 In.	1981 In.
Sand Mountain Substation (Crossville)	11.07	3.05	15.69	10.58*	5.56
Upper Coastal Plain Substation (Winfield)	9.01	1.98	10.68	7.61*	4.13
Tennessee Valley Substation (Belle Mina)	6.20	2.91	8.10	7.46*	7.84

\*Rainfall after September 25 was 8.92, 5.24, and 4.86 inches for Crossville, Winfield, and Belle Mina, respectively.

#### 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 7 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.

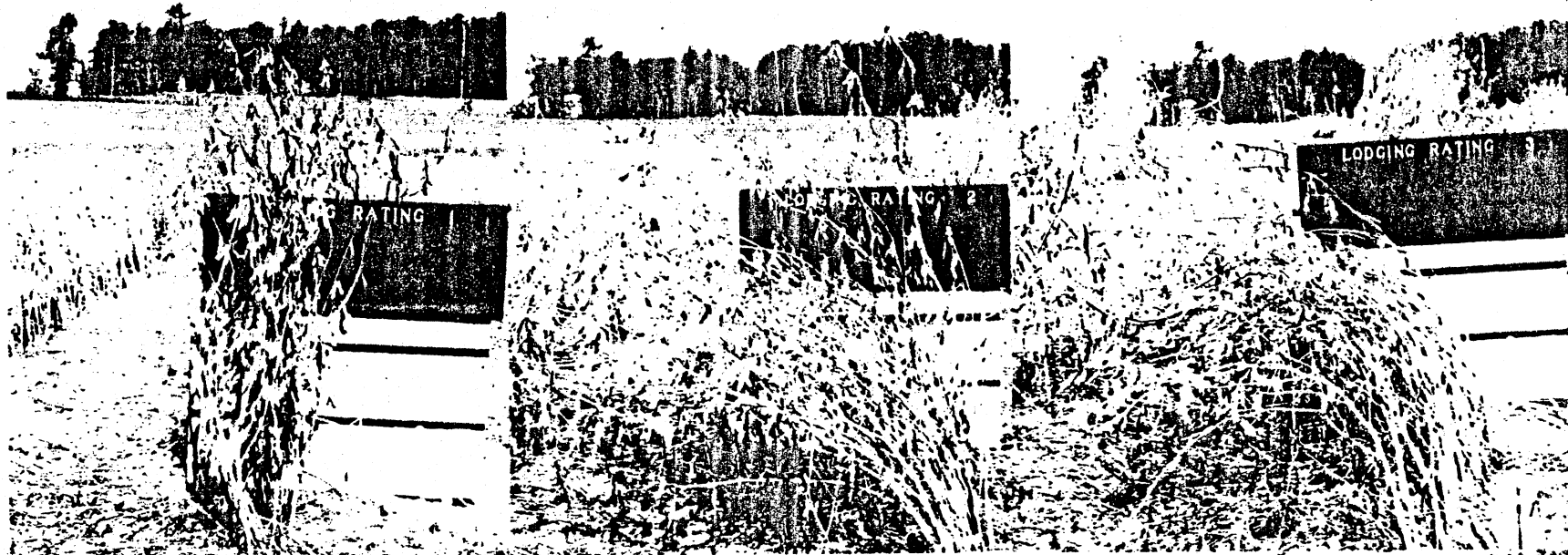
Height of first pod was determined as the average height of the lowest pods from the ground at maturity.

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 <sup>1</sup>					Nematode resistance <sup>1</sup>		
		Pubes- cence	Flower color	Pod color	Hilum color	Bacteria pustule	Wild- fire	Tar- get spot	Phyto- phthora rot	Purple seed stain	Cyst (Race 3)	Root- knot M.i. <sup>6</sup>	M.a. <sup>6</sup>
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
	Rax 25	Gray	Purple	Brown	Brown	R	4/	R	R	4/	R	MR	MR
	Stevens	Gray	Purple		Buff	4/	4/	4/	R	MR	S	S	S
	Wilstar 430	Tan	Purple	Lt.Tan	Brown	S	S	S	S	S	S	S	S
V	Rax 9	Tan	Purple	Tan	Black	R	4/	R	MR	4/	R	4/	4/
	Rax 13	Tan	White	Tan	Buff	R	4/	R	R	4/	R	MR	4/
	H-76-558	Brown	White	Tan	Black	R	4/	4/	S	4/	R	S	S
	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	Purple	Tan	Bf.Bl.	MR	MR	MR	MR	MR	S	MR	MR
	HB-466DI-5	Tawny	White	Tan	Black	4/	4/	4/	MR	MR	S	S	S
	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 <sup>2/</sup> 5/	Tawny	White	Tan	Black	R	R	R	R	MR	S	S	S
	Tracy M <sup>5/</sup>	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
	HB-468DI-6	Tawny	Purple		Black	4/	4/	4/	R	MR	S	S	S

Table 2. Continued

Group	Variety	Plant characteristics				Reaction to individual diseases <sup>1</sup>					Nematode resistance <sup>1</sup>		
		Pubes- cence	Flower color	Pod color	Hilum color	Bacteria pustule	Wild- fire	Tar- get spot	Phyto- phthora rot	Purple seed stain	Cyst (Race 3)	Root-knot M.i. <sup>6</sup>	M.a. <sup>6</sup>
	Terra-Vig 606		White	Gray	Buff	R	R	R	R	R	S	S	S
	H-76-587	Gray	Purple		Black	R	4/	4/	R	4/	R	S	S
	Gold Kist 49		White	Brown	Buff	R	4/	4/	4/	MR	S	R	R
	Coker 156 <sup>2/</sup>	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
	Green Seed 737	Tawny	White	Tan	Black	4/	4/	4/	R	MR	S	4/	4/
	Green Seed 791	Gray	White	Tan	Black	4/	4/	4/	R	MR	S	4/	4/
	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
	Wright	Tawny	Purple	Tan	Black	R	R	R	R	4/	S	MR	MR
	Ransom	Tawny	Purple	Tan	Black	R	R	R	MS	R	S	S	S
	Coker 237	Tawny	White	Tan	Black	R	R	4/	MR	4/	S	S	S
	VIII 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
	Foster	Gray	Purple	Tan	Buff	R	4/	R	4/	4/	R	R	S

<sup>1</sup>VR - very resistant; R - resistant; MR - moderately resistant; S - susceptible; VS - very susceptible. These are ratings given these varieties by the breeders.

<sup>2</sup>Sensitive to the herbicide metribuzin (Sencor and Lexon).

<sup>3</sup>Resistant to Race 4 cyst nematode.

<sup>4</sup>Data not available.

<sup>5</sup>Tracy and Tracy M have good tolerance to the herbicide 2, 4-DB.

<sup>6</sup>Meloidogyne incognita (M.i.); Meloidogyne arenaria (M.a.)

## SEED SOURCE FOR 1981

Soybean varieties grown in North 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
Douglas	Kansas State University, Manhattan, KS
K 1041	Kansas State University, Manhattan, KS
RA 401	Ring Around Research, Plainview, TX
RA 480	Ring Around Research, Plainview, TX
Rax 25	Ring Around Research, Plainview, TX
Stevens	Helena Chemical Co., Selma, AL
Wilstar 430	Helena Chemical Co., Selma, AL

### Maturity Group V Varieties

A 5474	Asgrow Seed Co., Marion, AR
A 5618	Asgrow Seed Co., Marion, AR
A 5939	Asgrow Seed Co., Marion, AR
Agripro 55	North American Plant Breeders, W. Memphis, AR
Bay	USDA Delta Branch Exp. Sta., Stoneville, MS
Bedford	USDA Delta Center, Portageville, MD
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
H-76-558	Jacob Hartz Seed Co., Stuttgart, AR

Maturity Group V Varieties (continued)

HB-466DI-5	Helena Chemical Co., Selma, AL
NK 76-1214	Northrup King Co., Bolivar, TN
NK 77-0414	Northrup King Co., Bolivar, TN
Rax 9	Ring Around Research, Plainview, TX
Rax 13	Ring Around Research, Plainview, TX
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
Deltapine 506	Delta and Pine Land Co., Scott, MS
Gold Kist 49	Gold Kist Inc., Ashburn, GA
Green Seed 737	Green Seed Co., Gallatin, TN
Green Seed 791	Green Seed Co., Gallatin, TN
H-76-587	Jacob Hartz Seed Co., Stuttgart, AR
HB-468DI-6	Helena Chemical Co., Selma, AL
Lee 74	Alabama Crop Improvement Assoc., Auburn, AL
McNair 600	Northrup King Co., Bolivar, TN
NAPB 611	North American Plant Breeders, W. Memphis, AR
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

Bragg	Alabama Crop Improvement Assoc., Auburn, AL
Braxton	USDA Delta Branch Exp. Sta., Stoneville, MS
Coker 237	Coker's Pedigreed Seed Co., Hartsville, SC
Ransom	Alabama Crop Improvement Assoc., Auburn, AL
Wright	Coastal Plains Exp. Sta., Tifton, GA

Maturity Group VIII Varieties

Agripro 80	North American Plant Breeders, W. Memphis, AR
Coker 338	Coker's Pedigreed Seed Co., Hartsville, SC
Foster	Florida Agriculture Exp. Sta., Gainesville, FL
Hutton	Alabama Crop Improvement Assoc., Auburn, AL
Matija 1	Joe Matija, Baldwin County, AL





Table 3. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 13, 1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Green Seed 737	53.5 a	07/13	10/03	29	5.8	1.3	1.0
Forrest	50.5 a-b	07/09	09/22	35	6.0	2.0	1.0
Green Seed 791	50.2 a-c	07/13	10/07	27	4.5	1.0	1.0
Deltapine 105	49.9 a-c	07/16	10/02	36	7.0	2.5	1.0
Essex	49.1 a-d	07/06	09/21	23	4.8	1.0	1.0
Rax-9	48.4 a-e	07/09	09/25	33	5.5	2.3	1.0
Wilstar 550	45.8 b-f	07/17	09/30	35	5.5	3.0	1.0
Deltapine 345	45.7 b-f	07/15	09/30	35	6.5	2.8	1.0
Bay	45.6 b-f	07/11	09/27	31	4.8	1.5	1.0
Terra-Vig 505	45.6 b-f	07/16	10/02	36	5.8	3.3	1.0
RA 604	44.8 c-g	07/17	10/12	39	6.5	3.0	1.0
H-76-558	44.2 d-h	07/10	09/28	35	4.8	3.8	1.0
Rax-13	43.5 d-i	07/24	10/09	40	7.0	3.8	1.0
Bedford	43.3 e-i	07/15	09/25	41	5.8	4.0	1.0
RA 480	43.1 e-j	07/07	09/20	40	6.5	3.3	1.0
HB-466D1-5	42.8 e-k	07/10	09/21	36	5.3	2.8	1.0
Tracy M	42.7 e-k	07/14	10/12	37	6.3	4.0	1.5
Coker 156	42.3 f-l	07/20	10/13	34	6.3	2.0	1.0
Tracy	41.2 f-m	07/15	10/17	39	4.0	4.0	1.0
H-76-587	41.1 f-m	07/21	10/14	37	7.0	2.8	1.0
Davis	40.8 f-m	07/29	10/08	40	6.3	3.8	1.0

Table 3. Continued

Variety	Yield <sup>1</sup>	First bloom <sup>2</sup>	Maturity <sup>2</sup>	Plant ht. <sup>2</sup>	Ht. first pod <sup>2</sup>	Lodging <sup>2</sup>	Shattering <sup>2</sup>
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Terra-Vig 606	40.6 f-m	07/21	10/16	38	6.8	2.5	1.0
McNair 600	40.3 f-m	07/17	10/13	38	5.8	3.5	1.0
Lee 74	40.2 f-m	07/21	10/13	33	6.8	2.5	1.0
Matija 1	40.2 f-m	08/05	10/20	45	6.5	5.0	1.0
RA 680	40.0 f-m	07/21	10/16	37	6.0	2.5	1.0
Ransom	39.9 f-m	07/21	10/20	38	9.3	2.0	1.0
A5939	39.9 f-m	07/11	09/24	35	7.0	3.5	1.0
Braxton	39.4 g-n	07/27	10/20	44	8.0	2.8	1.0
A5618	39.0 g-o	07/10	09/24	31	5.8	1.3	1.0
NAPB 611	38.7 h-o	07/25	10/15	36	7.3	2.0	1.0
Centennial	38.3 i-o	07/21	10/16	38	6.3	3.5	1.0
Hutton	38.0 i-p	07/29	10/20	40	7.0	4.5	1.0
N-K 77-0414	37.3 j-p	07/24	10/17	37	6.3	3.8	1.0
Wilstar 430	37.0 k-p	06/24	09/25	31	5.0	2.3	1.0
Brysoy 9	36.8 l-p	07/17	10/18	39	7.3	4.5	1.0
RA 401	35.5 m-p	06/27	09/16	31	7.3	1.5	1.0
Stevens	34.2 n-p	06/23	09/16	34	5.0	3.0	1.0
Deltapine 506	33.7 o-p	07/21	10/16	40	7.3	3.8	1.0
Big-D 501	33.3 o-p	06/24	09/22	31	4.8	3.0	1.0
Big-D 483	32.5 p	06/23	09/19	31	5.3	2.0	1.3

C.V.% = 8.3% L.S.D.<sub>.05</sub> = 4.48

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 4. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 10, 1980-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Deltapine 105	35.0	07/12	10/11	31	6.4	1.8	1.0
Forrest	33.9	07/08	09/24	29	4.9	1.5	1.0
Essex	32.4	07/04	09/24	21	4.4	1.0	1.0
Deltapine 345	31.6	07/11	10/05	31	5.9	1.9	1.0
Coker 156	30.9	07/18	10/21	30	6.0	1.5	1.0
RA 604	30.7	07/14	10/20	34	6.9	2.0	1.3
Bay	30.4	07/08	10/08	29	4.8	1.3	1.1
Tracy M	30.4	07/12	10/23	32	5.8	2.6	1.4
RA 680	30.4	07/18	10/24	33	6.1	1.8	1.0
Davis	30.3	07/25	10/16	35	6.1	2.4	1.4
Braxton	30.3	07/24	10/27	38	7.3	1.9	1.0
Terra-Vig 606	30.3	07/19	10/23	33	6.3	1.8	1.0
Hutton	29.9	07/28	11/02	36	6.9	3.0	1.0
Ransom	29.8	07/16	10/25	31	7.5	1.5	1.0
Bedford	29.8	07/12	09/26	36	5.8	2.5	1.0
McNair 600	29.6	07/14	10/21	33	5.4	2.3	1.0
Lee 74	29.1	07/17	10/23	28	5.8	1.8	1.0
Tracy	28.7	07/13	10/25	34	5.4	2.6	1.1
RA 480	28.1	07/06	09/22	33	6.3	2.1	1.0
Centennial	27.8	07/18	10/27	34	6.0	2.3	1.0
Deltapine 506	25.5	07/18	10/25	36	7.5	2.8	1.0
Big-D 483	23.5	06/18	09/11	26	4.3	1.5	1.8
Big-D 501	22.5	06/18	09/17	28	4.1	2.0	1.1
RA 401	20.5	06/20	09/11	26	5.1	1.3	1.5

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 5. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 7, 1979-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Deltapine 105	39.5	07/13	10/11	34	6.8	2.2
Forrest	38.1	07/09	09/29	31	5.3	1.9
Essex	37.7	07/06	09/27	24	5.2	1.4
RA 604	36.0	07/15	10/19	36	7.1	2.3
Coker 156	35.9	07/18	10/20	31	6.2	1.9
Bay	35.8	07/10	10/09	31	5.1	1.5
Tracy M	35.5	07/12	10/21	33	5.1	2.7
Braxton	35.3	07/25	10/27	38	7.7	2.2
Deltapine 345	35.3	07/14	10/07	34	6.3	2.0
Tracy	34.7	07/14	10/22	34	5.3	2.6
Davis	34.6	07/27	10/18	36	6.2	2.8
RA 680	34.5	07/18	10/23	34	6.7	1.8
Terra-Vig 606	34.5	07/19	10/22	35	6.4	2.2
Bedford	34.4	07/15	10/01	39	6.3	2.8
Ransom	34.0	07/15	10/25	32	7.4	1.8
McNair 600	33.8	07/16	10/21	34	6.2	2.3
Hutton	33.2	07/27	11/02	36	7.2	3.1
Centennial	33.2	07/18	10/25	36	6.4	2.4
Lee 74	32.7	07/17	10/24	28	5.8	2.1
Deltapine 506	29.9	07/17	10/25	36	7.8	2.6
RA 401	23.5	06/23	09/12	26	4.8	1.5
Big-D 501	23.3	06/23	09/17	29	3.9	2.1
Big-D 483	22.3	06/22	09/12	26	3.9	1.6

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 6. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 9, 1978-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Essex	37.3	07/08	09/26	25	5.5	1.3
Coker 156	36.6	07/18	10/17	32	6.4	1.9
Forrest	36.0	07/11	09/27	33	5.9	2.0
Bay	35.8	07/11	10/04	33	4.9	1.6
RA 604	33.4	07/16	10/15	37	7.8	2.2
Tracy	33.3	07/14	10/21	35	6.3	2.5
RA 680	33.3	07/17	10/21	36	7.1	1.9
Deltapine 345	33.1	07/14	10/03	35	6.3	2.0
Bedford	32.9	07/15	09/29	40	6.4	2.6
Centennial	32.8	07/18	10/22	37	6.8	2.3
Braxton	32.8	07/25	---	40	8.3	2.3
Davis	32.1	07/26	10/17	37	6.6	2.7
McNair 600	32.1	07/17	10/19	35	6.9	2.3
Ransom	32.1	07/16	10/24	34	8.1	2.0
Lee 74	32.0	07/18	10/23	30	6.3	2.2
Hutton	31.6	07/27	---	37	8.1	2.9
Deltapine 506	29.5	07/17	---	37	8.1	2.6
RA 401	23.6	06/28	09/13	27	4.6	1.4

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 7. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 7, 1977-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Coker 156	36.3	07/17	10/19	32	5.7	1.9
Essex	34.7	07/07	09/22	25	---	1.3
Forrest	33.6	07/09	09/24	33	5.1	1.9
Tracy	33.3	07/13	10/21	35	5.7	2.5
Centennial	32.9	07/17	10/23	37	6.3	2.4
McNair 600	32.7	07/15	10/20	36	6.3	2.4
Hutton	32.6	07/25	---	37	7.1	3.0
Lee 74	32.3	07/18	10/23	31	5.8	2.3
Deltapine 506	30.9	07/17	---	37	7.1	2.6
Davis	30.3	07/24	10/16	37	5.8	2.6
N-N Lee	10.0	07/21	10/20	25	4.6	1.0

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 8. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering<sup>3</sup> of Soybean Varieties Planted May 28, 1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Deltapine 345	42.8 a	07/22	10/05	35	5.8	2.0
Forrest	42.5 a-b	07/17	10/02	33	6.8	2.0
Wilstar 550	41.7 a-b	07/22	10/08	36	5.3	2.5
Deltapine 105	41.1 a-c	07/21	10/07	36	5.0	2.5
Essex	40.4 a-d	07/14	09/27	23	5.0	1.0
Bay	40.2 a-d	07/19	10/04	31	4.3	1.0
Coker 237	38.7 b-e	07/27	10/15	38	7.5	2.3
Bedford	38.5 b-e	07/23	10/05	39	8.0	2.8
Coker 156	38.4 b-e	07/25	10/14	36	6.0	1.8
Tracy M	37.4 c-f	07/22	10/13	36	5.8	2.3
Davis	36.7 d-g	08/02	10/15	37	5.8	2.3
Terra-Vig 505	36.3 d-g	07/22	10/07	37	6.5	3.3
Tracy	35.5 e-g	07/24	10/13	36	5.8	2.3
Lee 74	35.3 e-g	07/27	10/15	33	7.0	2.5
Braxton	35.3 e-g	07/31	10/17	43	8.3	2.0
Ransom	34.3 f-g	07/26	10/16	39	8.8	2.0
Big-D 501	33.7 f-g	06/30	09/20	29	4.5	2.0
Deltapine 506	33.1 g	07/27	10/17	41	6.8	3.0
Centennial	32.7 g	07/26	10/16	38	8.3	2.0
Hutton	28.4 h	08/02	10/20	41	9.0	3.5

C.V.% = 6.7%    L.S.D.<sub>.05</sub> = 3.5

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

<sup>3</sup>No shattering observed on any cultivars.



Table 9. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 29, 1980-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Coker 237	30.3	07/30	10/30	32	7.4	1.6	1.0
Forrest	30.2	07/19	10/12	31	6.5	1.5	1.0
Deltapine 345	30.1	07/24	10/13	31	7.0	1.5	1.0
Deltapine 105	29.2	07/23	10/16	33	6.1	1.8	1.1
Braxton	28.5	08/03	10/31	37	8.1	1.5	1.0
Essex	28.4	07/16	09/29	22	5.3	1.0	1.4
Coker 156	28.3	07/29	10/21	31	6.8	1.4	1.0
Bay	28.3	07/21	10/13	30	5.5	1.0	1.0
Davis	28.0	08/03	10/15	33	6.8	1.9	1.0
Ransom	28.0	07/29	10/30	34	8.6	1.5	1.0
Bedford	27.7	07/26	10/12	35	7.8	1.9	1.1
Deltapine 506	27.0	07/30	11/01	36	7.9	2.9	1.0
Tracy M	26.8	07/26	10/24	33	7.1	2.0	1.0
Lee 74	26.7	07/30	10/29	31	8.3	2.4	1.0
Tracy	25.5	07/27	10/28	33	7.5	2.3	1.0
Centennial	25.4	07/29	10/26	32	8.6	1.8	1.0
Hutton	23.5	08/04	11/02	35	7.4	2.4	1.0
Big-D 501	23.2	07/04	09/25	26	4.8	1.5	1.3

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 10. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 27, 1979-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Forrest	34.6	07/22	10/12	33	6.7	1.9
Deltapine 345	33.5	07/26	10/13	33	7.3	1.8
Coker 156	33.3	07/30	10/22	33	6.8	1.7
Braxton	32.9	08/04	10/30	38	8.7	2.1
Essex	32.8	07/18	09/30	25	5.9	1.6
Deltapine 506	32.3	07/31	10/30	37	8.3	2.9
Lee 74	32.0	07/31	10/28	33	8.3	2.7
Bedford	31.7	07/28	10/13	38	7.9	2.3
Davis	31.5	08/04	10/17	35	6.6	2.3
Ransom	31.4	07/30	10/29	35	8.8	1.9
Tracy M	31.4	07/26	10/21	34	6.8	2.3
Tracy	30.8	07/28	10/24	34	6.7	2.5
Centennial	30.2	07/30	10/25	35	8.8	1.9
Hutton	27.0	08/05	11/02	36	7.6	2.9

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 11. Four- and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Four-Year Average Planting Date May 27, 1978-1981						
Forrest	30.8	07/22	10/11	34	7.0	1.9
Coker 156	30.8	07/30	10/19	33	6.9	1.6
Deltapine 506	30.2	07/30	10/27	37	8.1	2.8
Lee 74	29.5	07/30	10/26	33	8.6	2.5
Essex	29.1	07/18	09/30	24	5.9	1.4
Braxton	28.7	08/04	---	39	8.3	2.1
Ransom	28.4	07/30	---	35	8.8	1.8
Davis	28.0	08/04	10/16	36	7.1	2.2
Centennial	28.0	07/29	10/23	36	8.9	1.9
Tracy	27.8	07/27	10/22	35	6.9	2.4
Hutton	24.9	08/05	---	36	8.7	2.7
Five-Year Average Planting Date May 26, 1977-1981						
Coker 156	32.6	07/29	10/20	33	6.1	1.6
Forrest	32.0	07/22	10/11	33	6.4	1.9
Lee 74	30.6	07/31	10/26	33	7.8	2.8
Ransom	30.3	07/30	---	35	7.8	1.9
Centennial	30.3	07/29	10/24	35	8.3	2.0
Tracy	29.2	07/27	10/22	35	6.0	2.6
Essex	28.3	07/19	10/01	23	5.3	1.3
Davis	28.0	08/03	10/18	35	6.3	2.4
Hutton	26.5	08/05	---	36	7.8	3.0

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 12. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted July 1, 1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Coker 156	30.1 a	08/14	10/20	26	3.0	1.0
Coker 237	29.5 a	08/18	10/20	23	2.8	1.0
Wilstar 550	28.5 a-b	08/14	10/20	25	3.0	1.0
Deltapine 105	28.0 a-c	08/20	10/20	23	2.3	1.0
Tracy	27.1 a-c	08/16	10/20	25	2.3	1.0
Davis	26.9 a-c	08/22	---	28	4.0	1.3
Deltapine 345	26.8 a-c	08/13	10/20	25	2.3	1.0
Bedford	26.7 a-c	08/15	10/20	30	4.3	1.0
Bay	26.7 a-c	08/22	---	24	1.0	1.0
Deltapine 506	24.5 b-d	08/14	10/20	27	2.0	1.5
Lee 74	24.2 b-d	08/20	10/20	22	2.7	1.7
Braxton	24.2 b-d	08/21	---	25	3.5	1.0
Hutton	23.9 b-d	08/21	---	25	3.0	1.0
Tracy M	23.2 c-e	08/14	10/20	22	2.0	1.0
Ransom	19.8 d-e	08/17	---	22	2.0	1.0
Forrest	18.8 e	08/14	10/20	23	3.0	1.0
Big-D 501	25.6 a,c	08/12	10/02	23	1.7	1.0

C.V.% = 11.9% L.S.D.<sub>.05</sub> = 4.3

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 13. Two-Year Averages of Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted June 28, 1980-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Coker 237	26.9	08/16	11/01	24	4.9	1.0
Coker 156	26.3	08/13	10/25	24	4.0	1.0
Braxton	23.9	08/18	---	26	4.9	1.0
Hutton	23.7	08/21	---	27	5.8	1.3
Bay	23.7	08/15	---	24	4.1	1.3
Davis	23.6	08/19	---	26	5.5	1.4
Tracy	23.6	08/14	10/25	26	4.5	1.4
Deltapine 105	23.6	08/15	10/21	25	4.2	1.3
Bedford	23.3	08/14	10/19	29	5.5	1.5
Deltapine 506	23.1	08/14	10/27	27	5.0	1.9
Deltapine 345	22.6	08/11	10/18	25	4.3	1.0
Tracy M	22.2	08/13	10/24	24	3.6	1.5
Lee 74	21.7	08/18	11/01	24	5.1	1.6
Ransom	21.4	08/16	---	23	4.4	1.0
Forrest	18.3	08/11	10/17	23	4.4	1.0

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 14. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted June 28, 1979-1981, on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Braxton	29.7	08/19	---	27	5.5	1.3
Coker 156	29.2	08/14	10/25	24	4.1	1.3
Hutton	27.2	08/21	---	28	6.2	2.2
Bedford	27.2	08/15	10/22	31	6.0	2.2
Deltapine 345	27.1	08/13	10/22	26	4.7	1.4
Davis	27.0	08/20	---	27	5.4	1.9
Deltapine 506	26.8	08/14	10/29	27	5.3	2.5
Ransom	26.4	08/16	---	25	5.0	1.7
Tracy	26.0	08/14	10/24	27	4.8	2.3
Tracy M	25.7	08/12	10/24	24	3.9	2.2
Lee 74	25.0	08/18	11/01	24	5.2	2.2
Forrest	24.4	08/11	10/21	25	5.3	1.7

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 15. Four- and Five-Year Averages for Yield, First Bloom Date, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted on Sand Mountain Substation, Crossville

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Four-Year Averages, Planting Date June 26, 1978-1981					
Braxton	28.1	08/18	29	6.2	1.3
Coker 156	27.7	08/14	25	4.7	1.3
Deltapine 506	26.8	08/14	30	6.4	2.3
Davis	26.3	08/19	30	6.4	1.7
Hutton	26.3	08/20	30	7.1	1.9
Ransom	25.7	08/15	27	6.0	1.5
Tracy	25.2	08/13	29	5.9	1.9
Lee 74	24.2	08/16	27	5.9	1.9
Forrest	23.9	08/10	28	5.9	1.5
Five-Year Averages, Planting Date June 25, 1977-1981					
Coker 156	29.5	08/13	27	4.5	1.3
Hutton	28.2	08/19	31	6.8	2.1
Davis	28.1	08/18	30	6.3	2.0
Ransom	28.0	08/14	28	6.2	1.5
Forrest	27.0	08/09	28	5.5	1.6
Lee 74	26.3	08/15	28	5.9	2.3
Tracy	26.2	08/12	30	5.6	2.1

<sup>1</sup> Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup> An explanation of data and ratings is given on page 5 of this report.

Table 16. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 7, 1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Forrest	51.9 a	07/02	10/07	34	2.8	2.3	1.0
Deltapine 105	51.3 a-b	07/09	10/07	34	3.3	3.3	1.0
Deltapine 345	50.0 a-c	07/07	10/07	36	4.5	2.3	1.0
Green Seed 737	50.0 a-c	07/09	10/19	31	3.5	1.8	1.0
Green Seed 791	49.8 a-c	07/10	10/22	28	3.0	1.8	1.0
NAPB 611	49.8 a-c	07/18	10/29	34	4.3	2.8	1.0
Davis	49.6 a-d	07/22	10/25	44	3.8	3.5	1.0
Wilstar 550	49.3 a-d	07/09	10/07	32	3.0	3.0	1.0
Agripro 55	48.7 a-e	07/07	10/07	35	3.0	3.3	1.0
RA 604	48.5 a-e	07/12	10/22	38	4.8	3.0	1.0
Bedford	48.2 a-e	07/07	10/07	37	5.5	2.8	1.0
RA 680	47.6 a-f	07/14	10/22	40	4.5	2.8	1.0
A5474	46.8 a-g	07/03	10/07	32	5.0	2.0	1.3
Terra-Vig 606	46.5 a-g	07/16	10/16	39	4.5	3.3	1.0
Lee 74	46.4 a-g	07/15	10/22	33	3.8	3.3	1.0
Coker 156	46.3 a-g	07/14	10/22	40	4.8	3.3	1.0
McNair 600	46.0 a-g	07/10	10/19	40	4.8	3.5	1.0
N-K 76-1214	46.0 a-g	07/15	10/25	42	4.0	3.8	1.0
Centennial	45.4 a-g	07/13	10/29	41	5.3	2.8	1.0
Ransom	45.0 a-h	07/16	10/24	39	5.8	2.8	1.0
HB-468D1-6	45.0 a-h	07/13	10/25	38	5.3	4.0	1.0
N-K 77-0414	44.8 a-h	07/21	10/25	41	4.8	3.8	1.0
Deltapine 506	44.6 a-h	07/15	10/29	40	5.0	4.3	1.0



Table 16. Continued

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
A5618	43.9 b-h	07/07	10/07	32	4.3	2.3	1.0
Gold Kist 49	43.8 b-h	07/20	10/19	39	4.5	4.8	1.0
Deltapine 416	43.3 c-i	07/11	10/29	47	5.5	3.5	1.0
Braxton	42.5 c-j	07/23	10/29	45	5.0	2.8	1.0
RA 401	41.8 d-k	06/25	09/22	39	5.0	2.5	1.0
Tracy	41.2 e-l	07/10	10/25	40	3.3	3.8	1.0
RA 480	40.4 f-l	07/01	10/07	38	5.0	3.0	1.0
Matija 1	39.1 g-l	08/07	10/29	40	5.0	4.0	1.0
Tracy M	37.4 h-m	07/09	10/22	38	4.3	3.8	1.0
Rax-25	36.1 i-n	06/25	09/14	39	6.0	3.0	1.0
Hutton	35.3 j-o	07/22	10/28	42	5.0	5.0	1.0
Bay	34.6 k-o	07/08	10/07	23	1.5	3.0	1.0
K 1041	34.0 l-o	06/25	09/11	35	3.3	2.3	2.0
Big-D 502	31.3 m-o	06/26	09/22	38	4.5	3.0	1.0
Big-D 501	30.7 m-o	06/25	09/22	37	4.0	2.5	1.0
Big-D 483	29.5 n-o	06/25	09/11	39	3.5	2.5	1.0
Essex	29.4 n-o	07/01	10/07	17	1.8	1.8	1.0
Douglas	28.4 o	06/25	09/11	33	3.8	2.5	1.0

C.V.% = 10.6% L.S.D.<sub>.05</sub> = 6.3

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 17. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 4, 1980-1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup>	First bloom <sup>2</sup>	Maturity <sup>2</sup>	Plant ht. <sup>2</sup>	Ht. first pod <sup>2</sup>	Lodging <sup>2</sup>	Shattering <sup>2</sup>
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Forrest	37.4	06/29	09/30	29	2.8	1.6	1.0
Deltapine 105	35.9	07/06	10/05	30	3.5	2.3	1.0
Bedford	34.7	07/04	09/30	32	5.0	1.9	1.0
Deltapine 345	34.3	07/04	10/05	30	4.3	1.9	1.0
RA 604	33.9	07/06	10/18	34	5.0	2.3	1.0
RA 680	33.2	07/12	10/22	34	4.5	2.8	1.0
Davis	32.7	07/18	10/16	40	4.9	2.4	1.1
Coker 156	31.0	07/13	10/22	34	4.8	2.8	1.0
Terra-Vig 606	30.8	07/14	10/20	37	5.0	3.0	1.0
Centennial	30.6	07/11	10/26	36	4.9	3.0	1.0
RA 401	30.6	06/22	09/17	31	4.1	1.8	1.4
Lee 74	30.3	07/12	10/22	29	4.3	2.6	1.0
RA 480	30.2	06/26	09/24	34	4.8	2.3	1.0
McNair 600	29.7	07/09	10/18	34	4.9	2.6	1.1
Deltapine 506	29.5	07/12	10/26	36	5.8	3.5	1.0
Ransom	29.1	07/14	10/24	33	6.0	2.3	1.0
Braxton	29.0	07/22	11/01	42	5.5	2.4	1.0
Gold Kist 49	28.3	07/16	10/21	39	5.9	3.9	1.0
Tracy	28.2	07/09	10/24	36	3.8	3.5	1.0
Big-D 501	26.5	06/22	09/17	32	3.6	1.9	1.8
Tracy M	26.1	07/06	10/21	34	5.0	2.9	1.0
Bay	25.4	07/03	09/30	23	2.1	2.0	1.0
Big-D 483	24.3	06/22	09/11	31	3.5	1.8	1.8
Hutton	24.2	07/21	11/00	39	5.3	3.6	1.0
Essex	24.1	06/28	09/24	18	2.4	1.4	1.0

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 18. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering<sup>3</sup> of Soybean Varieties Planted May 6, 1979-1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Deltapine 105	41.2	07/09	10/06	35	4.5	3.1
Forrest	38.9	07/02	09/30	33	3.7	2.6
RA 604	37.3	07/10	10/15	37	6.1	2.6
Deltapine 345	37.1	07/07	10/05	36	5.3	2.1
Bedford	36.0	07/08	10/01	36	5.8	2.9
Braxton	35.6	07/22	10/29	42	6.3	2.6
RA 401	35.6	06/28	09/16	35	4.8	1.8
Deltapine 506	35.5	07/14	10/20	39	6.1	3.4
Davis	34.8	07/21	10/15	39	5.6	3.2
Lee 74	34.7	07/14	10/20	32	5.3	2.8
RA 680	34.7	07/14	10/17	37	5.7	2.8
McNair 600	34.5	07/12	10/17	36	5.7	2.8
Coker 156	34.4	07/15	10/19	37	5.7	2.8
Ransom	34.3	07/15	10/23	36	7.2	2.5
Big-D 501	34.1	06/28	09/17	35	3.9	2.1
Terra-Vig 606	33.9	07/16	10/16	39	5.6	3.5
Essex	33.4	07/01	09/27	23	3.3	1.9
Bay	32.8	07/06	10/02	30	3.4	2.3
Tracy	32.7	07/10	10/19	38	4.5	3.3
Tracy M	32.6	07/07	10/18	36	5.6	2.9
Centennial	32.5	07/13	10/19	39	6.0	3.2
Big-D 483	29.8	06/29	09/09	33	3.7	2.0
Hutton	29.5	07/22	10/29	40	6.2	4.1

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

<sup>3</sup>Shattering was a problem on early varieties Big-D 483, Big-D 501 and RA 401 with 1-4% shattered.

Table 19. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering<sup>3</sup> of Soybean Varieties Planted May 7, 1978-1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup>	First bloom <sup>2</sup>	Maturity <sup>2</sup>	Plant ht. <sup>2</sup>	Ht. first pod <sup>2</sup>	Lodging <sup>2</sup>
	Bu./a.	Date	Date	In.	In.	Rating
Forrest	35.2	07/03	10/04	35	3.9	2.7
RA 401	34.6	06/30	09/24	37	5.4	1.8
Essex	33.1	07/02	10/01	26	3.8	2.0
Deltapine 345	32.6	07/08	10/11	38	5.6	2.3
RA 604	32.5	07/11	10/14	39	6.2	2.6
Bedford	32.4	07/08	10/03	39	6.1	3.2
Coker 156	30.9	07/16	10/18	38	5.8	2.5
Braxton	30.7	07/22	10/30	42	6.9	2.4
Deltapine 506	30.5	07/15	10/21	40	6.4	3.2
Bay	30.5	07/06	10/06	32	4.1	2.4
Lee 74	30.2	07/14	10/19	34	6.0	2.5
RA 680	30.1	07/14	10/19	38	6.5	2.5
Davis	30.0	07/21	10/09	40	5.8	2.9
Ransom	29.9	07/17	10/23	38	7.6	2.3
McNair 600	29.3	07/12	10/13	38	6.3	2.9
Tracy	28.9	07/10	10/17	40	4.8	3.0
Centennial	28.7	07/13	10/21	39	6.3	2.8
Hutton	26.4	07/23	10/30	41	7.1	3.8

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

<sup>3</sup>Four-year average shattering of 2% for RA 401.

Table 20. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 6, 1977-1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Forrest	31.5	07/03	09/30	34	4.4	2.5
Essex	30.4	07/02	09/28	26	4.3	1.9
Coker 156	29.6	07/14	10/18	38	5.4	2.3
Lee 74	28.5	07/13	10/18	34	5.3	2.4
Deltapine 506	28.3	07/13	10/20	39	5.8	2.9
McNair 600	27.6	07/10	10/14	38	5.8	2.6
Centennial	27.1	07/12	10/20	40	5.9	2.6
Davis	26.7	07/19	10/10	40	5.6	2.6
Tracy	26.7	07/09	10/17	39	4.5	2.8
Hutton	24.6	07/21	10/28	41	6.2	3.5

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 21. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering<sup>3</sup> of Soybean Varieties Planted May 25, 1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Coker 156	24.6 a	07/20	10/09	33	9.3	1.0
Deltapine 105	24.6 a	07/16	09/17	33	8.8	2.0
Essex	24.4 a-b	07/11	09/13	20	5.5	1.0
A5939	24.4 a-b	07/13	09/17	34	8.8	1.8
HB-466D1-5	23.7 a-c	07/12	09/15	33	6.5	2.3
Tracy	23.5 a-c	07/17	10/09	36	8.3	3.0
H-76-558	23.5 a-c	07/11	09/17	30	7.8	1.5
RA 480	23.3 a-c	07/11	09/13	31	8.0	1.0
RA 604	23.1 a-c	07/16	09/26	35	8.8	2.0
A5474	22.9 a-d	07/14	09/13	29	7.8	1.5
Deltapine 506	22.5 a-e	07/22	10/14	37	9.0	2.8
Forrest	22.4 a-e	07/12	09/17	30	6.3	1.3
Green Seed 737	22.3 a-e	07/17	09/28	28	8.8	1.5
RA 680	22.2 a-f	07/22	10/09	34	9.0	1.5
Green Seed 791	21.9 a-f	07/17	10/02	27	8.3	1.0
Rax-9	21.6 a-f	07/11	09/17	31	7.3	1.5
Agripro 55	21.3 a-f	07/15	09/17	33	8.3	1.8
Terra-Vig 606	21.2 a-f	07/22	10/14	34	9.0	1.5
Wilstar 550	21.1 a-f	07/18	09/20	30	5.8	1.8
Terra-Vig 505	21.1 a-f	07/15	09/27	32	8.0	2.0
Bedford	21.0 a-g	07/17	09/17	40	8.5	2.3
Rax-13	20.6 a-h	07/23	10/02	41	10.0	2.5
Ransom	20.5 a-h	07/22	10/14	36	10.5	1.0
Lee 74	20.3 a-h	07/22	10/14	31	8.0	1.8
RA 401	20.2 a-h	07/06	09/09	30	6.8	1.0
Deltapine 345	20.1 a-h	07/15	09/15	31	9.3	1.3
Big-D 502	20.1 a-h	07/06	09/11	29	5.5	1.3
Tracy M	19.6 a-h	07/17	10/07	35	7.5	3.0

Table 21. Continued

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Davis	19.5 a-h	07/24	09/24	37	8.3	1.8
H-76-587	19.5 a-h	07/22	10/11	35	9.5	2.0
N-K 76-1214	19.5 a-h	07/21	10/14	38	10.0	2.3
Hutton	19.3 b-h	07/27	10/16	41	10.8	2.0
Centennial	19.3 b-h	07/21	10/14	36	10.0	1.5
Bay	19.3 b-h	07/12	09/15	23	5.0	1.0
Gold Kist 49	19.3 b-h	07/23	10/14	41	10.5	3.0
Brysoy 9	19.2 b-h	07/17	10/06	35	9.8	2.3
HB-468D1-6	19.2 b-h	07/23	10/14	34	9.0	2.0
Rax-25	19.2 b-h	07/06	09/09	26	4.3	1.0
Deltapine 416	18.6 c-h	07/23	10/09	41	10.5	2.0
Big-D 501	18.5 c-h	07/06	09/13	30	5.8	1.3
Bragg	17.8 d-h	07/26	10/14	41	11.0	2.8
K 1041	17.5 e-h	07/06	09/13	33	4.3	1.0
Douglas	17.4 e-h	07/06	09/13	26	4.0	1.0
Braxton	17.1 f-h	07/27	10/14	38	10.5	1.8
Wilstar 430	17.0 f-h	07/07	09/15	29	5.5	1.0
Big-D 483	15.8 g-h	07/06	09/13	30	5.0	1.5
Stevens	15.7 h	07/06	09/11	31	5.3	1.0

C.V.% = 14.6% L.S.D.<sub>.05</sub> = 4.2

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

<sup>3</sup>No shattering observed on any cultivars.

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 19, 1980-1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Deltapine 105	16.1	07/14	09/20	30	8.5	1.5	1.0
Coker 156	15.9	07/19	10/20	30	9.0	1.0	1.0
Deltapine 506	15.7	07/25	10/27	35	9.6	1.9	1.0
Essex	15.6	07/08	09/13	20	6.4	1.0	1.1
RA 480	15.6	07/08	09/15	28	7.6	1.0	1.0
Tracy	14.8	07/18	10/23	32	8.6	2.0	1.0
RA 680	14.8	07/20	10/18	31	9.3	1.3	1.0
Terra-Vig 606	13.9	07/21	10/23	31	10.0	1.3	1.0
RA 604	13.8	07/17	09/30	32	9.1	1.5	1.0
Forrest	13.7	07/11	09/17	26	6.4	1.1	1.0
Centennial	13.4	07/20	10/24	32	9.9	1.3	1.0
Ransom	13.3	07/20	10/27	31	10.5	1.0	1.0
Tracy M	13.0	07/17	10/20	32	8.4	2.0	1.0
RA 401	12.8	07/04	09/09	24	5.3	1.0	1.9
Lee 74	12.7	07/23	10/24	30	8.9	1.4	1.0
Deltapine 345	12.7	07/13	09/17	29	9.4	1.1	1.0
Bragg	12.6	07/27	10/24	37	11.0	1.9	1.0
Braxton	12.6	07/27	10/28	33	10.4	1.4	1.0
Hutton	12.1	07/28	10/29	35	10.4	1.5	1.0
Bedford	12.1	07/17	09/17	34	8.9	1.6	1.0
Big-D 501	12.1	07/04	09/11	26	5.1	1.1	1.9
Bay	11.9	07/10	09/19	24	6.1	1.0	1.0
Davis	11.8	07/23	09/29	33	8.8	1.4	1.0
Gold Kist 49	11.6	07/23	10/24	37	11.0	2.0	1.0
Big-D 483	10.1	07/04	09/11	25	5.0	1.3	1.9

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 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 18, 1979-1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Coker 156	23.4	07/21	10/20	32	8.8	1.1	1.0
Deltapine 506	22.5	07/25	10/23	37	9.0	1.8	1.0
Deltapine 105	22.2	07/16	09/25	33	8.3	1.7	1.1
Ransom	22.0	07/20	10/26	32	9.4	1.8	1.0
RA 680	21.9	07/21	10/18	32	8.3	1.3	1.1
Braxton	21.6	07/27	10/26	34	10.2	1.8	1.0
Tracy	21.4	07/18	10/20	34	8.0	2.1	1.0
Lee 74	20.9	07/23	10/22	31	8.7	1.8	1.0
Hutton	20.7	07/29	10/30	36	9.5	2.6	1.0
RA 604	20.6	07/19	10/03	35	8.8	1.7	1.0
Bragg	20.5	07/27	10/23	37	9.8	2.5	1.0
Terra-Vig 606	20.3	07/22	10/21	34	9.5	1.5	1.0
Centennial	20.1	07/21	10/22	34	9.2	1.3	1.1
Essex	19.5	07/11	09/17	23	6.6	1.1	1.3
Tracy M	19.5	07/17	10/18	33	8.2	2.1	1.1
Deltapine 345	19.2	07/14	09/22	33	8.6	1.6	1.0
Davis	18.7	07/25	10/05	34	8.9	1.5	1.0
Forrest	18.4	07/13	09/22	30	6.9	1.3	1.0
Bay	17.1	07/13	09/22	29	6.6	1.1	1.0
Bedford	16.5	07/18	09/22	37	8.6	2.0	1.0
RA 401	16.1	07/03	09/07	29	6.3	1.0	2.3
Big-D 501	13.9	07/05	09/11	30	6.3	1.1	2.0
Big-D 483	9.8	07/02	09/04	28	5.3	1.5	2.9

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 24. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 15, 1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Deltapine 105	28.2 a	08/06	09/26	29	6.8	1.0	1.0
Wright	28.0 a-b	08/08	10/14	37	9.0	2.5	1.0
Ransom	27.4 a-b	08/06	10/14	32	7.3	1.0	1.0
Tracy	27.0 a-c	08/06	10/04	34	7.5	2.5	1.0
Bragg	26.9 a-c	08/10	10/14	35	9.8	1.3	1.0
Coker 237	26.9 a-c	08/08	10/12	31	8.3	1.3	1.0
Coker 156	26.7 a-c	08/06	10/09	29	5.5	1.3	1.0
Deltapine 506	26.7 a-c	08/06	10/10	35	7.0	1.8	1.0
Foster	26.6 a-c	08/12	10/14	35	9.8	1.5	1.0
Davis	25.9 a-c	08/10	10/05	34	8.0	1.3	1.0
Tracy M	25.9 a-c	08/06	10/06	31	6.5	2.5	1.0
Bedford	25.8 a-c	08/06	09/27	31	6.8	1.0	1.0
Braxton	25.6 a-c	08/09	10/14	34	7.8	1.0	1.0
Deltapine 416	25.6 a-c	08/08	10/14	36	8.5	1.0	1.0
Centennial	25.0 a-c	08/06	10/14	32	9.0	1.5	1.0
Coker 338	23.8 a-c	08/10	10/19	36	9.5	1.3	1.0
Lee 74	23.1 a-c	08/06	10/04	26	7.0	1.5	1.0
Big-D 501	22.5 a-c	08/06	09/25	24	3.0	1.3	1.8
Agripro 80	21.1 a-c	08/14	10/17	37	9.3	2.0	1.0
Forrest	20.7 a-c	08/06	09/26	28	5.5	1.0	1.0
Hutton	20.3 a-c	08/09	10/14	34	8.5	1.5	1.0
Essex	20.2 b-c	08/06	09/25	17	3.8	1.0	1.0
Bay	19.4 c	08/06	09/25	21	2.8	1.0	1.0

C.V.% = 18.6% L.S.D.<sub>.05</sub> = 6.5

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

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 25. Two-Year Averages for Yield, First Bloom and Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 29, 1980-1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Deltapine 105	21.2	08/09	10/04	27	6.5	1.0	1.0
Ransom	21.1	08/11	10/22	28	7.0	1.0	1.0
Tracy	19.9	08/09	10/17	30	6.9	1.8	1.0
Braxton	19.9	08/13	10/22	30	7.5	1.0	1.0
Coker 237	19.7	08/12	10/20	28	7.5	1.1	1.0
Bedford	19.6	08/10	10/06	30	7.1	1.0	1.0
Deltapine 506	19.5	08/11	10/19	32	7.1	1.4	1.0
Tracy M	19.3	08/09	10/11	29	5.9	1.8	1.0
Coker 156	18.9	08/11	10/19	26	5.9	1.1	1.0
Davis	18.6	08/15	10/14	30	7.4	1.1	1.0
Centennial	18.6	08/11	10/22	30	8.9	1.3	1.0
Lee 74	17.5	08/11	10/17	25	6.6	1.3	1.0
Forrest	16.7	08/09	10/05	27	5.8	1.0	1.0
Hutton	16.3	08/14	10/28	32	7.6	1.3	1.0
Big-D 501	15.7	08/09	10/04	25	3.8	1.1	1.4
Bay	15.6	08/09	10/05	23	3.9	1.0	1.0
Essex	15.0	08/09	09/27	17	3.9	1.0	1.1

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 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 June 26, 1979-1981, on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Ransom	23.2	08/16	10/25	27	6.6	1.3	1.0
Deltapine 506	21.8	08/15	10/23	29	6.5	1.8	1.0
Braxton	21.5	08/19	10/25	28	6.5	1.2	1.0
Bedford	21.0	08/16	10/15	30	7.5	1.8	1.0
Forrest	20.6	08/15	10/14	27	5.9	1.4	1.0
Davis	20.4	08/21	10/20	28	6.3	1.6	1.0
Coker 156	20.4	08/16	10/22	25	5.4	1.3	1.0
Centennial	19.8	08/16	10/23	28	7.9	1.6	1.0
Hutton	19.2	08/20	10/30	30	7.3	1.6	1.0
Tracy	19.1	08/14	10/18	28	6.0	2.4	1.0
Lee 74	18.8	08/15	10/21	23	6.2	1.6	1.0
Tracy M	17.7	08/14	10/16	26	5.4	2.3	1.0
Essex	16.2	08/14	10/07	17	4.0	1.0	1.1

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

Table 27. Four-Year Averages for Yield, Maturity Date, Plant Height, Lodging and Shattering of Soybean Varieties Planted on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./a.	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Four-Year Averages, Early Planting Date May 25, 1978-1981					
Coker 156	21.1	10/22	33	1.1	1.0
Deltapine 506	20.6	10/25	37	1.9	1.0
RA 680	20.1	10/20	33	1.2	1.1
Ransom	19.9	10/25	32	1.6	1.0
Braxton	19.9	10/28	35	1.6	1.0
Lee 74	18.9	10/23	32	1.7	1.0
Tracy	18.8	10/23	35	1.9	1.0
Centennial	18.4	10/24	35	1.3	1.1
Bragg	18.3	10/25	39	2.4	1.0
Essex	18.1	09/17	23	1.1	1.3
RA 604	18.0	10/06	35	1.5	1.0
Hutton	17.9	10/28	36	2.2	1.0
Deltapine 345	16.4	09/23	34	1.4	1.0
Davis	16.3	10/07	35	1.4	1.0
Forrest	16.2	09/20	32	1.3	1.0
Bay	15.0	09/21	30	1.1	1.0
RA 401	14.7	09/07	29	1.0	2.3
Bedford	14.3	09/20	37	1.9	1.0
Five-Year Averages, Late Planting Date June 24, 1978-1981					
Ransom	21.7	10/24	28	1.2	1.0
Deltapine 506	20.9	10/22	32	1.8	1.0
Braxton	20.8	10/26	31	1.1	1.0
Coker 156	20.2	10/23	26	1.2	1.0
Davis	19.3	10/19	31	1.4	1.0
Forrest	19.2	10/11	29	1.4	1.0
Centennial	19.1	10/24	30	1.6	1.0
Lee 74	18.6	10/21	26	1.5	1.0
Tracy	18.5	10/19	30	2.2	1.0
Hutton	18.4	10/30	32	1.4	1.0
Essex	15.4	10/05	19	1.0	1.1

<sup>1</sup> Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup> An explanation of data and ratings is given on page 5 of this report.

Table 28. Five-Year Averages for Yield, Maturity Date, Plant Height, Lodging and Shattering of Soybean Varieties Planted on Upper Coastal Plain Substation, Winfield

Variety	Yield <sup>1</sup> Bu./á.	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Lodging <sup>2</sup> Rating	Shattering <sup>2</sup> Rating
Five-Year Averages, Early Planting Date May 9, 1977-1981					
Coker 156	23.2	10/20	32	1.1	1.0
Deltapine 506	22.6	10/23	37	1.9	1.0
Lee 74	20.8	10/21	32	1.8	1.0
Bragg	20.4	10/24	39	2.4	1.0
Hutton	20.1	10/27	37	2.3	1.0
Centennial	20.0	10/22	35	1.3	1.1
Tracy	19.8	10/20	34	1.9	1.0
Davis	18.6	10/06	35	1.4	1.0
Essex	17.9	09/16	23	1.1	1.3
Forrest	16.9	09/19	32	1.2	1.0
Five-Year Averages, Late Planting Date June 22, 1977-1981					
Ransom	22.2	10/25	30	1.5	1.0
Coker 156	21.2	10/24	27	1.4	1.0
Davis	19.8	10/18	32	1.8	1.0
Centennial	19.7	10/23	31	1.8	1.0
Forrest	19.2	10/09	29	1.5	1.0
Hutton	19.2	10/30	33	1.8	1.0
Lee 74	19.0	10/21	27	1.8	1.0
Tracy	18.1	10/17	31	2.4	1.0
Essex	16.6	10/04	19	1.1	1.1

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

From USDA Uniform V

Table 29. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties or Strains Planted May 7, 1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Maturity <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Forrest	54.2	07/05	10/07	29	3.3	2.3
D78-3238	52.6	07/05	10/07	25	1.7	2.3
D75-5090	52.1	07/07	10/07	28	2.7	3.7
V75-345	50.7	07/07	10/07	34	4.0	4.3
D77-5169	49.4	07/07	10/07	31	3.7	3.0
R75-579	49.0	07/07	10/07	22	3.0	2.0
S77-7865	48.5	07/06	10/07	27	2.7	3.0
N77-179	47.2	07/03	10/07	22	2.7	1.7
V76-600	46.5	07/04	10/07	25	3.0	2.0
R74-511	45.8	07/07	10/07	22	1.7	1.0
Nathan	43.2	07/07	10/07	31	3.7	4.0
Essex	35.7	07/02	10/07	20	1.7	1.7

C.V.% = 16.2% L.S.D.<sub>.05</sub> = N.S.

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

From USDA Preliminary VI

Table 30. Yield, First Bloom Date, Plant and First Pod Heights, and Lodging of Soybean Varieties or Strains Planted May 7, 1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
Bedford	53.5	07/09	35	4.0	2.0
N73-1102	52.7	07/12	42	3.5	2.0
R79-167S	52.0	07/14	41	4.5	3.5
N79-606	51.7	07/10	30	4.5	1.0
D79-6057	50.3	07/17	47	5.0	4.5
R79-413S	49.6	07/18	43	5.0	3.5
Centennial	49.5	07/16	42	4.5	3.5
DM9-10158	49.5	07/14	36	4.0	2.5
GA78-324	49.4	07/20	45	5.0	3.0
N79-280	49.2	07/10	32	3.5	1.5
D78-5412	49.0	07/19	48	3.0	4.0
LA79-923	48.7	07/20	45	3.0	3.5
GA77-8	48.4	07/12	39	4.0	3.5
R79-248	48.1	07/18	41	4.5	3.0
D79-10515	48.0	07/23	41	4.0	3.5
N79-461	47.8	07/10	35	4.0	2.5
R76-730J	47.7	07/14	30	4.5	3.0
R79-179S	47.5	07/12	36	5.0	4.0
D78-6029	47.0	07/14	36	4.5	4.0
N79-645	46.9	07/12	34	3.0	1.5
S77-281	46.2	07/11	34	4.0	3.0
D79-5951	46.2	07/14	44	2.5	5.0



Table 30. Continued

Variety	Yield <sup>1</sup> Bu./a.	First bloom <sup>2</sup> Date	Plant ht. <sup>2</sup> In.	Ht. first pod <sup>2</sup> In.	Lodging <sup>2</sup> Rating
R77-238S	44.6	07/19	40	3.5	5.0
N79-491	44.4	07/09	31	3.0	1.0
R79-772	43.5	07/19	42	5.5	4.0
GA77-607	42.9	07/21	44	4.0	3.5
GA78-618	42.9	07/17	28	3.5	2.0
D77-5813	41.9	07/20	40	5.0	3.0
D78-6299	41.5	07/14	42	5.0	4.5
N79-2272	41.3	07/16	44	4.5	5.0
D79-6105	40.9	07/12	43	4.5	3.0
D78-5813	40.7	07/14	37	4.0	4.5
D78-5520	40.4	07/09	42	5.5	4.0
GA77-171	36.7	07/23	37	2.5	1.5
GA77-653	36.5	07/12	43	3.5	3.5
D79-6174	36.2	07/12	36	4.5	3.5

C.V.% = 11.1% L.S.D.<sub>.05</sub> = N.S.

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.

From USDA Uniform VI

Table 31. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties or Strains Planted May 7, 1981, on Tennessee Valley Substation, Belle Mina

Variety	Yield <sup>1</sup>	First bloom <sup>2</sup>	Maturity <sup>2</sup>	Plant ht. <sup>2</sup>	Ht. first pod <sup>2</sup>	Lodging <sup>2</sup>
	Bu./a.	Date	Date	In.	In.	Rating
N75-2213	46.4	07/22	10/14	42	4.7	3.0
D77-6166	46.4	07/17	10/14	39	3.7	3.0
D77-12	46.1	07/14	10/14	41	4.0	4.7
D78-5502	45.1	07/10	10/14	30	4.3	3.3
D76-9665	44.9	07/20	10/14	44	3.0	3.7
D78-5576	44.2	07/10	10/14	33	3.7	2.0
R74-39K	43.8	07/21	10/14	41	5.0	3.0
Centennial	42.6	07/19	10/14	39	4.3	3.0
D77-6057	41.5	07/10	10/14	28	3.7	2.3
Tracy-M	39.6	07/11	10/14	39	3.3	3.7
Jeff	39.3	07/17	10/14	38	4.7	4.7
N77-114	37.4	07/09	10/14	28	3.7	1.0

C.V.% = 12.8% L.S.D.<sub>.05</sub> = N.S.

<sup>1</sup>Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2</sup>An explanation of data and ratings is given on page 5 of this report.



Table 32. Seed Size of Soybean Varieties and Lines as Affected by Planting Date and Location When Grown in North Alabama in 1981

Variety	Maturity Group	Seed Size (g/100 seed)					
		Belle Mina		Crossville		Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
RA 401	IV	13.0	15.4	--	--	14.9	--
RA 480	IV	16.9	19.2	--	--	15.1	--
RAX 25	IV	9.8	--	--	--	13.0	--
K 1041	IV	12.3	--	--	--	17.0	--
Douglas	IV	12.1	--	--	--	17.9	--
Stevens	IV	--	17.7	--	--	14.2	--
Wilstar 430	IV	--	21.3	--	--	18.7	--
Big D 483	IV	13.1	19.4	--	--	16.0	--
RAX 9	V	--	14.2	--	--	12.5	--
RAX 13	V	--	13.9	--	--	11.5	--
A 5474	V	16.9	--	--	--	16.3	--
A 5618	V	16.1	19.7	--	--	--	--
A 5939	V	--	16.5	--	--	15.2	--
Deltapine 105	V	16.4	16.9	17.0	13.5	13.4	11.2
H-76-558	V	--	16.2	--	--	12.4	--
Bedford	V	13.5	15.5	14.0	10.8	12.3	10.2
Bay	V	20.2	19.5	18.4	13.0	17.1	13.2
Essex	V	15.2	15.7	16.0	--	13.9	11.0
Forrest	V	15.6	15.2	13.8	12.2	12.6	9.8
Wilstar 550	V	13.9	14.8	14.1	11.2	11.7	--
HB-466D1-5	V	--	16.6	--	--	14.1	--
Terra-Vig-505	V	--	14.7	15.1	--	12.4	--
Big D 501	V	12.3	17.6	19.2	--	14.3	12.9
Big D 502	V	13.8	--	--	--	16.1	--
Deltapine 345	V	16.1	15.9	15.4	11.7	13.4	--
Agripro 55	V	14.4	--	--	--	12.3	--
N-K77-0414	V	13.0	12.9	--	--	--	--
N-K 76-1214	V	12.7	--	--	--	11.7	--

Table 32. Continued

Variety	Maturity Group	Seed Size (g/100 seed)					
		Belle Mina	Crossville			Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
Lee 74	VI	13.1	13.9	12.8	12.4	12.7	12.2
Tracy	VI	16.4	17.4	17.0	14.4	15.4	14.3
Tracy M	VI	17.2	18.2	18.0	15.1	16.1	14.9
Centennial	VI	13.3	13.4	12.9	--	12.3	11.1
Davis	VI	16.4	14.7	10.4	12.7	13.2	12.7
RA 604	VI	17.0	16.5	--	--	13.6	--
RA 680	VI	14.4	14.1	--	--	12.4	--
Deltapine 506	VI	12.9	13.9	13.8	12.7	12.8	12.6
Deltapine 416	VI	15.1	--	--	--	13.2	10.9
Brysoy-9	VI	--	17.4	--	--	15.0	--
HB-468D1-6	VI	15.6	--	--	--	14.9	--
Terra-Vig 606	VI	13.9	15.4	--	--	12.8	--
H-76-587	VI	--	9.9	--	--	9.9	--
Gold Kist 49	VI	14.0	--	--	--	12.9	--
Coker 156	VI	11.9	13.4	12.2	11.9	11.7	10.4
McNair 600	VI	13.2	13.2	--	--	--	--
Green Seed 737	VI	15.7	16.9	--	--	13.2	--
Green Seed 791	VI	15.9	15.8	--	--	13.2	--
NAPB 611	VI	13.6	13.2	--	--	--	--
Bragg	VII	--	--	--	--	13.6	11.4
Braxton	VII	12.2	17.2	9.2	16.7	13.5	13.2
Ransom	VII	14.7	16.2	13.7	13.9	14.2	12.9
Coker 237	VII	--	--	13.9	12.9	--	11.2
Hutton	VIII	15.0	15.4	15.0	14.9	14.0	12.8

Table 33. Seed Quality Ratings<sup>1</sup> on Soybean Varieties and Lines Grown in North Alabama in 1981

Variety	Maturity Group	Seed quality rating by location and planting date					
		Belle Mina		Crossville		Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
RA 401	IV	1	2	-	-	1	-
RA 480	IV	2	2	-	-	1	-
RAX 25	IV	1	-	-	-	2	-
K 1041	IV	2	-	-	-	4	-
Douglas	IV	2	-	-	-	3	-
Stevens	IV	-	2	-	-	2	-
Wilstar 430	IV	-	3	-	-	2	-
Big D 483	IV	2	3	-	-	2	-
RAX 9	V	-	1	-	-	1	-
RAX 13	V	-	1	-	-	1	-
A 5474	V	1	-	-	-	2	-
A 5618	V	1	1	-	-	-	-
A 5939	V	-	1	-	-	2	-
Deltapine 105	V	1	1	1	1	1	1
H-76-558	V	-	1	-	-	1	-
Bedford	V	1	1	1	1	1	1
Bay	V	1	1	1	1	2	1
Essex	V	2	1	1	-	1	1
Forrest	V	1	1	1	1	1	1
Wilstar 550	V	1	1	1	1	1	-
HB-466DI-5	V	-	2	-	-	1	-
Terra-Vig-505	V	-	1	1	-	1	-
Big D 501	V	2	3	3	-	2	1
Big D 502	V	2	-	-	-	2	-
Deltapine 345	V	1	1	1	1	1	-
Agripro 55	V	1	-	-	-	1	-
N-K 77-0414	V	1	1	-	-	-	-
N-K 76-1214	V	1	-	-	-	1	-

Table 33. Continued

Variety	Maturity Group	Seed quality rating by location and planting date					
		Belle Mina		Crossville		Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
Lee 74	VI	1	1	1	1	1	1
Tracy	VI	1	1	1	1	2	1
Tracy M	VI	1	1	1	1	1	1
Centennial	VI	1	1	1	-	1	1
Davis	VI	1	1	1	1	1	1
RA 604	VI	1	1	-	-	1	-
RA 680	VI	1	1	-	-	1	-
Deltapine 506	VI	1	1	1	1	1	1
Deltapine 416	VI	1	-	-	-	2	1
Brysoy 9	VI	-	1	-	-	1	-
HB-468D1-6	VI	1	-	-	-	1	-
Terra-Vig 606	VI	1	1	-	-	1	-
H-76-587	VI	-	1	-	-	1	-
Gold Kist 49	VI	1	-	-	-	2	-
Coker 156	VI	1	1	1	1	1	1
McNair 600	VI	1	1	-	-	-	-
Green Seed 737	VI	1	2	-	-	1	-
Green Seed 791	VI	1	1	-	-	1	-
NAPB 611	VI	1	1	-	-	-	-
Bragg	VII	-	-	-	-	1	1
Braxton	VII	1	1	1	2	2	1
Wright	VII	-	-	-	-	-	1
Ransom	VII	1	2	1	1	2	1
Coker 237	VII	-	-	1	1	-	1
Hutton	VIII	1	1	1	1	2	1
Coker 338	VIII	-	-	-	-	-	2
Agripro 80	VIII	-	-	-	-	-	2
Matijal	VIII	1	1	-	-	-	-
Foster	VIII	-	-	-	-	-	1

<sup>1</sup>Seed quality rating based on rating of 1 to 5 where 1 is very good and 5 is very poor quality. See page 6.

Table 34. Seed Purple Stain Ratings<sup>1</sup> on Soybean Varieties and Lines Grown in North Alabama in 1981

Variety	Maturity Group	Purple seed stain rating by location and planting date					
		Belle Mina		Crossville		Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
RA 401	IV	2	3	-	-	2	-
RA 480	IV	2	3	-	-	2	-
RAX 25	IV	2	-	-	-	2	-
K 1041	IV	2	-	-	-	3	-
Douglas	IV	2	-	-	-	2	-
Stevens	IV	-	5	-	-	2	-
Wilstar 430	IV	-	3	-	-	2	-
Big D 483	IV	2	3	-	-	2	-
RAX 9	V	-	1	-	-	2	-
RAX 13	V	-	1	-	-	2	-
A 5474	V	2	-	-	-	2	-
A 5618	V	2	2	-	-	-	-
A 5939	V	-	1	-	-	2	-
Deltapine 105	V	1	1	1	1	1	1
H-76-558	V	-	1	-	-	2	-
Bedford	V	2	1	1	1	2	1
Bay	V	2	1	1	1	2	1
Essex	V	2	2	2	-	2	1
Forrest	V	2	2	2	1	1	1
Wilstar 550	V	1	2	1	1	1	-
HB-466DI-5	V	-	1	-	-	1	-
Terra-Vig 505	V	-	1	1	-	1	-
Big D 501	V	2	3	3	-	2	2
Big D 502	V	2	-	-	-	2	-
Deltapine 345	V	1	1	1	1	2	-
Agripro 55	V	1	-	-	-	1	-
N-K 77-0414	V	1	1	-	-	-	-
N-K 76-1214	V	1	-	-	-	1	-



Table 34. Continued

		Purple seed stain rating by location and planting date					
Variety	Maturity Group	Belle Mina	Crossville			Winfield	
		May 7	May 13	May 27	July 1	May 25	June 15
Lee 74	VI	1	1	1	1	2	1
Tracy	VI	2	2	2	1	2	1
Tracy M	VI	2	1	1	1	1	1
Centennial	VI	1	1	1	-	1	1
Davis	VI	1	1	1	1	2	1
RA 604	VI	1	1	-	-	2	-
RA 680	VI	1	1	-	-	2	-
Deltapine 506	VI	1	1	1	1	2	1
Deltapine 416	VI	1	-	-	-	2	1
Brysoy 9	VI	-	1	-	-	2	-
HB-468D1-6	VI	1	-	-	-	2	-
Terra-Vig 606	VI	1	1	-	-	1	-
H-76-587	VI	-	1	-	-	1	-
Gold Kist 49	VI	1	-	-	-	1	-
Coker 156	VI	1	1	1	1	2	1
McNair 600	VI	1	1	-	-	-	-
Green Seed 737	VI	1	1	-	-	1	-
Green Seed 791	VI	1	1	-	-	1	-
NAPB 611	VI	1	1	-	-	-	-
Bragg	VII	-	-	-	-	2	1
Braxton	VII	1	1	1	1	2	1
Wright	VII	-	-	-	-	-	1
Ransom	VII	2	1	1	2	2	1
Coker 237	VII	-	-	1	1	-	1
Hutton	VIII	1	1	1	1	2	1
Coker 338	VIII	-	-	-	-	-	3
Agripro 80	VIII	-	-	-	-	-	2
Matijal	VIII	1	1	-	-	-	-
Foster	VIII	-	-	-	-	-	1

<sup>1</sup>Purple seed stain rating is based on scale of 1 to 5 with 1 having no purple stain to 5 having greater than 20% with staining. See page 6.

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