Alabama Soybean Variety Tests 1980

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Department of Agronomy and Soils
Departmental Series No. 62
Agricultural Experiment Station
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Table of Contents

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 their locality and best suited to meet individual requirements.

EXPERIMENTAL PROCEDURES

Tests in 1980 were conducted at Substations and Experiment Fields of the Alabama Agricultural Experiment Station of Auburn University and one location on cyst nematode infested field (Engel Farm, Summerdale, Alabama). A randomized block design with 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 Kinkaid Equipment Manufacturers small plot combine at all locations. Row width varied from 36 to 40 inches depending on location. Seeding rates were 10 viable seed per foot of row based on germination at 75^{0} F. All plot areas were fertilized according to soil test.

The entries in these tests included varieties released prior to 1980, 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 9 through 12.

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 1980 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; a small C.V. indicates more precision in estimating the relative performance of varieties.

SEASONAL CONDITIONS

Early season moisture was quite variable and in general low during the early part of the growing season in 1980. North Alabama had sufficient moisture early for good stands at all three locations. Plant height was shorter in 1980 than 1979 at all locations as moisture was 3.2 inches or less at all Northern locations during the last 6 weeks of vegetative growth just prior to first bloom. This compared to 13.7 and 11.1 inches at Belle Mina and Crossville in 1979, respectively, during the vegetative growth stage.

Because of shorter plants, lodging was not a problem at any location in northern Alabama. The total rainfall during the period August 15 through September 30 is shown in Table 1. Because of the severe drought all early varieties (Maturity Groups IV & V) and full season varieties (Group VI) were mature by September 25 in 1980. Thus, 2.6, 2.4, and 1.7 inches of rainfall resulted in average yields of 42 entries of 17, 17, and 6 bu./a. at Belle Mina, Crossville, and Winfield, respectively. This compared to 42, 39, and 30 bu./a. in 1979 when 8.1, 15.7, and 10.7 inches of rainfall were received for Belle Mina, Crossville, and Winfield, respectively.

Rainfall in central Alabama was adequate for good stands at all early plantings except Camden where very poor stands resulted in no test in 1980. This was also true for the late planted test date at Prattville Field. The rainfall during the last 6 weeks for all plantings in central Alabama was between 6 and 7 inches, which resulted in good plant height for all tests. However, rainfall of 2 and 1.8 inches during pod fill period (Table 1) for Marion Junction and Prattville field resulted in average yields of 14.4 and 8.4 bu./a. respectively for early plantings.

Rainfall in south Alabama was adequate for good stands at all early plantings except Monroeville Field where the test was abandoned. This was also true for the late test at Brewton Field. The rainfall during the last 6 weeks of vegetative growth for full season varieties in southern Alabama was between 7.2 and 9.2 inches. This resulted in good plant height in all tests but not excessive as lodging was not a problem in southern Alabama in 1980. The rainfall during pod fill was lowest at Wiregrass, 3.4 inches, and the average yield of 18.5 bu./a. was obtained In another test that was irrigated when needed the average yield was 43.1 bu./a. for 42 entries. Yields of 30.9 and 31.8 bu./a. were obtained from 42 entries at Brewton Field and the Gulf Coast Substation, respectively.

The full- to late-season varieties have yielded better than earlier varieties in southern Alabama for the past 5 years. This has not held true for Prattville and Marion Junction in central Alabama where the early varieties (Maturity V & VI) have either out-yielded or yielded as well as the full- and late-season varieties (Maturity VII & VIII respectively) when planted in early May.

Table 1. Rainfall by Location During the Period August 15 through September 30 for 1976 through 1980

Location	1976	1977	1978	1979	1980
	In.	In.	In.	In.	In.
Black Belt Substation (Marion Junction)	6.20	6.31	2.75	5.12	1.96
Brewton Experiment Field (Brewton)	5.43	8.97	3.18	9.94	7.04
Gulf Coast Substation (Fairhope)	8.33	9.96	6.49	14.42	6.44
Prattville Experiment Field (Prattville)	9.76	5.88	2.36	6.43*	1.81
Sand Mountain Substation (Crossville)	3.36	11.07	3.05	15.69	10.58**
Upper Coastal Plain Substation (Winfield)	5.15	9.01	1.98	10.68	7.61**
Tennessee Valley Substation (Belle Mina)	5.87	6.20	2.91	8.10	7.46**
Wiregrass Substation (Headland)	7.42	9.59	4.34	8.97	3.37

*Four inches fell after September 27.

**Rainfall between September 25 - 30 was 8.92, 5.24, and 4.86 inches for Crossville, Winfield, and Belle Mina, respectively.

DATA RECORDED

The yield of soybeans is the primary factor of production when profits are to be maximized. Other important characteristics 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 5 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.

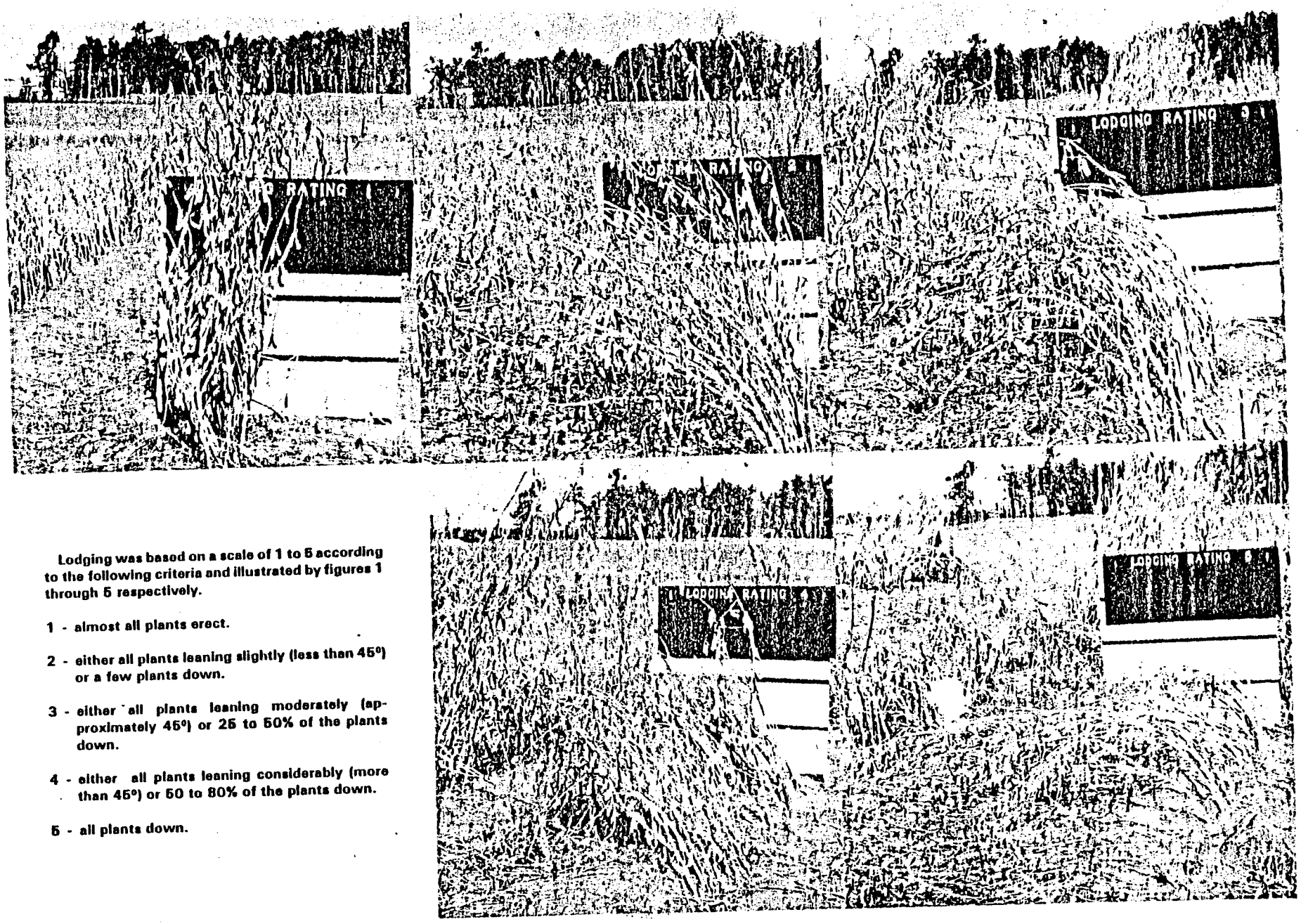
Height of first pod was determined as the average height of the lowest pods from the ground at maturity.

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 grams 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 seed 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

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 incognita	Root-knot arenaria
IV	RA 401	gray	purple	brown	black	[4]	[4]	[4]	S	MR	S	S	S
	RA 481	tan	white	tan	brown	[4]	[4]	[4]	S	[4]	S	S	S
V	Bay	gray	purple	tan	gray-buff	R	[4]	[4]	S	[4]	S	S	S
	Bedford	tawny	white	tan	black	R	R	R	R	R	R[3]	MR	R
	Deltapine 345	tawny	purple	tan	black	[4]	[4]	[4]	VR	R	S	S	S
	Deltapine 403	gray	purple	green	imp bl	[4]	[4]	[4]	R	R	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
	Green Seed 333	gray	purple	tan	imp bl	[4]	[4]	[4]	R	MR	R	[4]	[4]
	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]
	N-K 100	2/3T, 1/3G	2/3P, 1/3G	tan	mixed	[4]	[4]	[4]	2/3S, 1/3VR(3)	[4]	S	2/3S, 1/3MR	S
	McNair 500	tawny	purple	tan	variable	R	R	R	R(1,2)	[4]	S	S	S
	NAPB 505	tawny	purple		br-bl	R	R	[4]	R	[4]	S	[4]	[4]
	M-V 101	tawny	white	tan	black	R	R	R	MR (3)	[4]	R	½R, ½MR	S
	RA 480	tawny	purple	tan	black	R	R	R	MR	MR	MR	S	S
	RAX 17-79	tawny	purple	tan	black	R	R	R	R	MR	R	MR	[4]
	Terra-Vig 505		purple	tan	gray-bl	R	R	R	R	R	S	S	S
	Wilstar 550	tawny	purple	tan	buff-bl	MR	MR	MR	MR	MR	S	MR	MR
	XP 5474	tawny	white	brown	black	R	R	R	VR	[4]	R	S	[4]
	XP 5934	tawny	purple	tan	black	R	R	R	VR	[4]	R	S	[4]

Table 2. Continued.

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 incognita	Root-knot arenaria
VI	Brysoy 9	brown	purple	buff	imp bl	R	R	R	R	MR	R	S	S
	Centennial	tawny	purple	tan	black	R	R	R	R	MR	R	R	S
	Coker 156[2/]	gray	white	tan	buff	R	R	4/	R	R	S	MR	4/
	Davis	gray	white	lt tan	buff	R	R	R	R	MR	S	S	S
	Deltapine 439	tawny	purple	brown	black	4/	4/	4/	VR	R	S	S	S
	Deltapine 506	tawny	purple	brown	black	4/	4/	4/	VR	R	S	S	S
	Gold Kist 49		white	brown	buff	R	4/	4/	4/	MR	S	R	R
	Lancer	gray	purple	brown	imp bl	R	R	4/	S	4/	S	4/	4/
	Lee 74	tawny	purple	tan	black	R	R	R	MR	R	S	R	MR
	McNair 600	tawny	purple	lt tan	black	R	4/	4/	S	R	S	R	S
	N-K X3268	gray	white	4/	lt br	4/	4/	4/	S	4/	S	4/	4/
	N-K X3272	gray	white	4/	lt br	4/	4/	4/	S	4/	S	4/	4/
	RA 603	tawny	white	tan	black	R	R	R	MR	MR	R	MR	S
	RA 604	tawny	purple	tan	black	R	R	R	R	MR	R	MR	S
	Terra Vig 606	4/	white	gray	buff	R	R	R	R	R	S	S	S
	Tracy 2/ 5/	tawny	white	tan	black	R	R	R	R	MR	S	S	S
	Tracy M5/	tawny	white	tan	black	R	R	R	R	MR	S	S	S
VII	Agripro 70	tan	white	4/	black	R	R	4/	S	4/	S	MR	4/
	Agripro 71	gray	white	4/	buff	R	R	4/	R	4/	S	MR	4/
	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
	Brooks	4/	white	brown	brown	R	4/	4/	4/	4/	S	MS	S
	Coker 237	tawny	white	tan	black	R	R	4/	MR	4/	S	S	S
	Coker 76-853 (Coker 317)	gray	purple	tan	imp bl	R	R	4/	4	4/	R	S	4/
	Ga-Soy 17	gray	white	tan	buff	R	R	R	R	MR	S	S	S
	Govan	gray	white	tan	black	R	R	R	R	S	S	R	R
	McNair 700	tawny	purple	tan	black	4/	4/	4/	S	4/	S	4/	4/

Table 2. Continued.

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 incognita	Root-knot arenaria
	McNair 710	gray	purple	brown	imp bl	4/	4/	4/	R	4/	4/	4/	4/
	McNair 770	gray	purple	brown	imp bl	4/	4/	4/	S	4/	R	4/	4/
	McNair 780	gray	purple	brown	imp bl	4/	4/	4/	R	4/	R	4/	4/
	N-K X3282	tawny	purple	4/	black	4/	4/	4/	S	4/	4/	4/	4/
	RA 680	tawny	purple	tan	black	R	R	R	R	MR	R	MR	VS
	RA 700 A	gray	white	tan	brown	R	R	R	R	MR	S	S	S
	RA 701	tawny	white	tan	black	R	R	R	R	MR	R	MR	MR
	Ransom	tawny	purple	tan	black	R	R	R	MS	R	S	S	S
	Terra Vig 708	tan	white	brown	brown	R	R	R	R	R	S	S	S
	Wilstar 790	brown	white	tan	black	MR	MR	MR	MR	MR	S	4/	4/
	Wright	tawny	purple	tan	black	R	R	4/	R	4/	S	MR	MR
VIII	Agripro 80	gray	white		buff	R	4/	4/	4/	4/	S	MR	4/
	Cobb	gray	purple	tan	buff	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
	Dowling	gray	white	tan	buff	R	R	R	R	R	S	S	S
	Foster	gray	purple	tan	buff	R	4/	R	4/	4/	R	R	S
	Hutton	brown	purple	tan	black	R	R	R	S	S	S	R	S
	RA 800	tawny	white	tan	black	R	R	R	R	MR	R	MR	S

1/ VR-very resistant; R-resistant; MR-moderately resistant; S-susceptible; VS-very susceptible. 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 2,4-DB.

Soybean varieties grown in 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 1908 listed by maturity groups. For more information on these varieties see table 2.

Maturity Group IV Varieties

Big D 401	Big D Seed Co., Catlin, IL
Big D 402	Big D Seed Co., Catlin, IL
RA 401	Ring Around Research, Plainview, TX
RA 481	Ring Around Research, Plainview, TX

Maturity Group V Varieties

Bay	USDA Delta Branch Exp., Stoneville, MS
Bedford	USDA, Delta Center, Portageville, MO
Big D 483	Big D Seed Co., Catlin, IL
Big D 501	Big D Seed Co., Catlin, IL
Deltapine 345	Delta & Pine Land Company, Scott, MS
Deltapine 403	Delta & Pine Land Company, Scott, MS
Essex	Alabama Crop Improvement Assoc., Auburn, AL.
Forrest	Alabama Crop Improvement Assoc., Auburn, AL.
Greenseed 333	Green Seed Co., Gallatin, TN
Greenseed 737	Green Seed Co., Gallatin, TN
Greenseed 791	Green Seed Co., Gallatin, TN
N-K 100	Northrup King Co., Bolivar, TN
McNair 500	Northrup King Co., Bolivar, TN
NAPB 101	North American Plant Breeders, W. Memphis, AR
M-V Blend	Northrup King Co., Bolivar, TN
RA 480	Ring Around Research, Plainview, TX
RAX 17-79	Ring Around Research, Plainview, TX
Terra Vig 505	Terral-Norris Seed Co. Inc., Lake Providence, LA

Maturity Group V Varieties (continued)

Wilstar 550	Helena Chemical Co., Selma, AL
XP 5474	Asgrow Seed Co., Marion, AR
XP 5934	Asgrow Seed Co., Marion, AR

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, S.C.
Deltapine 439	Delta & Pine Land Co., Scott, MS
Deltapine 506	Delta & Pine Land Co., Scott, MS
Davis	Alabama Crop Improvement Assoc., Auburn, AL
D74-7741*	USDA, Delta Center, Portageville, MO
Gold Kist 49	Gold Kist Inc., Asburn, GA
Lancer	North American Plant Breeders, W. Memphis, AR
Lee 74	Alabama Crop Improvement Assoc., Auburn, AL
McNair 600	Northrup King Co., Bolivar, TN
N-K X3268	Northrup King Co., Bolivar, TN
N-K X3272	Northrup King Co., Bolivar, TN
RA 603	Ring Around Research, Plainview, TX
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. Station, Stoneville, MS

*Breeding line; selections not yet released by seed agency.

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. Station, Stoneville, MS
Brooks	Gold Kist Inc., Asburn, GA
Coker 237	Coker's Pedigreed Seed Co., Hartsville, S.C.
Coker 76-853 (317)[1/]	Coker's Pedigreed Seed Co., Hartsville, S.C.
Ga-Soy 17	Coastal Plains Exp. Sta., Tifton, GA
Govan	USDA Delta Branch Exp. Station, Stoneville, MS
McNair 700	Northrup King Co., Bolivar, TN
McNair 710	Northrup King Co., Bolivar, TN
McNair 770	Northrup King Co., Bolivar, TN
McNair 780	Northrup King Co., Bolivar, TN
N-K X3282	Northrup King Co., Bolivar, TN
RA 700 A	Ring Around Research, Plainview, TX
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 Experiment 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, S.C.

[1/] Coker 76-853 released as Coker 317.

Maturity Group VIII Varieties (continued)

Coker 488	Coker's Pedigreed Seed Co., Hartsville, S.C.
Dowling	Texas A&M, College Station, TX
Foster	Florida Agriculture Exepriment Sta.,Gainesville, FL
Hutton	Alabama Crop Improvement Assoc., Auburn, AL
RA 800	Ring Around Research, Plainview, TX

Northern Alabama

The tests in northern Alabama were located on Decatur clay loam at Belle Mina, Hartsells fine sandy loam at Crossville, and Savannah fine sandy loam at Winfield. Soybeans of Maturity Group VI are full season varieties for these areas. Group VII varieties tend to be taller and later maturing in northern Alabama than at more southern locations and lodging may be expected for Group VII varieties in northern Alabama. Lodging was not a problem in 1980 at Crossville and Winfield for the Group VII and VIII varieties. Lodging has been severe for 3 of the past 5 years at Crossville and 4 of the past 5 years at Belle Mina and the taller full-season. Group VI and later varieties have not yielded well because of lodging. The shorter varieties of Group V maturity have been the highest yielding varieties in early plantings at Crossville and Belle Mina.

Five varieties from Maturity Group IV were in the northern Alabama tests in 1980. These varieties matured in early September. This early maturity at Winfield was a problem in 1979 as there was 3.25 inches of rain during the period when these varieties should have been harvested which resulted in severe shattering and loss of yield.

The highest yielding varieties for the past 5 years was Coker 156 at Crossville and Essex at Belle Mina. Essex out yielded the next two varieties Coker 156 and Forrest at Belle Mina by 4 and 5 bu./a., respectively. For late June planting at Crossville 5 - year average yield of 31 bu./a. was obtained from the leading varieties McNair 500, Hutton, Coker 156, and Ransom.

New lines that have performed well in northern Alabama for the past 2 to 4 years are Bay, Braxton, Deltapine 403, Big D 501, NK 100, and RA 401.

Table 3. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 6, 1980 on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
NK X3272	22.9 a	7/18	10/30	29	6.8	1.0	1.0	2	2
Green S-791	22.0 a-b	7/10	10/30	20	3.0	1.0	1.0	2	2
Hutton	21.8 a-c	7/26	11/15	32	6.8	1.5	1.0	2	2
NK X3282	21.7 a-c	7/10	10/30	23	6.0	1.0	1.0	3	4
Braxton	21.2 a-d	7/22	11/3	32	6.5	1.0	1.0	2	2
Bragg	21.1 a-e	7/22	11/3	35	7.8	1.5	1.0	2	2
RA 680	20.8 a-f	7/15	11/2	29	6.3	1.0	1.0	3	2
RA 603	20.4 a-g	7/10	11/4	32	5.8	1.0	1.0	3	3
Deltapine 403	20.0 a-h	7/8	10/20	26	5.8	1.0	1.0	2	2
Terra Vig 606	19.9 a-h	7/17	10/30	29	5.8	1.0	1.0	2	2
Davis	19.8 a-h	7/21	10/24	29	6.0	1.0	1.8	3	2
Ransom	19.6 a-i	7/10	10/30	25	5.8	1.0	1.0	2	2
Coker 156	19.4 a-i	7/16	10/30	25	5.8	1.0	1.0	2	2
McNair 600	18.8 b-j	7/11	10/29	29	5.0	1.0	1.0	2	3
Green S-737	18.7 b-j	7/6	11/2	21	3.5	1.0	1.8	2	2
D 74-7741	18.2 b-k	7/11	10/26	28	6.0	1.0	1.5	4	4
Tracy M	18.1 b-k	7/10	11/3	28	5.3	1.3	1.3	3	2
Lee 74	18.0 c-k	7/13	11/2	23	4.8	1.0	1.0	2	2
Green S-333	18.0 c-k	7/4	10/8	17	2.5	1.0	1.0	3	2
Deltapine 345	17.6 d-l	7/8	10/11	27	5.3	1.0	1.0	2	3
Forrest	17.4 d-l	7/7	9/26	23	3.8	1.0	1.0	3	2
Centennial	17.3 d-l	7/14	11/7	30	5.8	1.0	1.0	2	2
Deltapine 506	17.2 e-l	7/15	11/2	32	7.8	1.8	1.0	2	2

Table 3. Continued.

Variety	Yield[1] Bu./a.	1st bloom[2] Date	Maturity[2] Date	Plant ht.[2] In.	Ht. 1st pod[2] In.	Lodging[2] Rating	Shattering[2] Rating	Seed quality[2] Rating	Purple stain[2] Rating
NAPB 505	17.0 f-m	7/7	9/27	28	6.0	1.0	1.0	2	2
M-V 101	16.8 f-m	7/6	9/27	31	5.0	1.0	1.0	3	2
RA 604	16.6 g-m	7/10	10/29	29	7.3	1.0	1.5	4	5
N-K 100	16.5 g-n	7/7	9/28	23	3.8	1.0	1.0	2	2
Bedford	16.4 h-n	7/10	9/26	31	5.8	1.0	1.0	3	2
Tracy	16.2 h-n	7/12	11/2	28	6.8	1.3	1.3	3	2
Deltapine 439	16.2 h-n	7/10	11/4	22	4.0	1.0	1.0	2	2
Essex	15.7 i-n	7/2	9/26	18	4.0	1.0	1.0	3	2
McNair 500	15.4 j-o	7/10	10/3	28	6.0	1.3	1.0	2	2
Bay	15.3 j-o	7/6	10/20	26	4.8	1.0	1.3	4	2
Lancer	14.8 j-o	7/15	11/3	25	5.0	1.0	1.5	5	4
Gail	14.6 k-o	7/6	10/20	20	3.5	1.0	1.5	3	2
Big D 483	14.5 k-o	6/13	9/2	22	3.3	1.0	2.3	3	2
XP 5934	13.7 l-o	7/7	9/26	21	5.0	1.0	1.0	3	2
RA 480	13.1 m-o	7/4	9/25	27	6.0	1.0	1.0	3	2
XP 5474	12.7 n-o	7/6	10/20	27	5.3	1.0	1.0	3	3
Big D 501	11.8 o	6/13	9/11	24	3.5	1.0	1.3	4	2
RA 401	5.6 p	6/12	9/6	20	3.0	1.0	2.0	2	2
C.V.% = 13.5	L.S.D..05 = 3.2								

[1] Yield 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 4 of this report.

Table 4. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 30, 1980 on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Coker 237	21.8 a	8/3	11/15	27	7.3	1.0	1.0	2	1
Braxton	21.7 a-b	8/5	11/13	32	8.0	1.0	1.0	2	2
Ransom	21.6 a-b	8/1	11/13	28	8.5	1.0	1.0	2	2
Deltapine 506	21.0 a-c	8/3	11/15	32	9.0	2.8	1.0	2	2
RA 680	19.5 a-d	7/31	11/2	29	8.8	1.3	1.0	2	1
RA 604	19.4 a-d	7/28	10/27	32	9.0	1.0	1.0	2	3
Davis	19.3 a-d	8/3	10/15	29	7.8	1.5	1.0	2	2
McNair 600	19.1 a-d	7/31	10/27	30	7.8	1.0	1.0	2	2
Hutton	18.5 a-d	8/6	11/14	30	5.8	1.3	1.0	2	1
McNair 500	18.3 a-d	7/26	10/19	26	7.8	1.3	1.0	3	3
Lee 74	18.2 a-d	8/3	11/12	29	9.5	2.3	1.0	2	2
Centennial	18.1 a-d	8/1	11/6	27	9.0	1.5	1.0	2	1
Coker 156	18.1 a-d	8/2	10/29	26	7.5	1.0	1.0	2	2
Forrest	17.8 b-d	7/21	10/22	30	6.3	1.0	1.0	4	5
Deltapine 345	17.4 c-d	7/26	10/21	28	8.3	1.0	1.0	2	3
Deltapine 403	17.4 c-d	7/25	10/25	31	7.3	1.0	1.3	4	2
Bedford	17.0 d	7/29	10/19	32	7.5	1.0	1.3	3	4
Essex	16.4 d-e	7/17	9/30	21	5.5	1.0	1.8	3	2
N-K 100	16.3 d-e	7/20	10/17	27	7.5	1.0	1.0	5	4
Bay	16.3 d-e	7/24	10/23	29	6.8	1.0	1.0	5	4
Tracy M	16.3 d-e	7/30	11/4	30	8.5	1.8	1.0	2	2
Tracy	15.6 d-e	7/30	11/13	30	9.3	2.3	1.0	2	2
RA 401	12.8 e	7/7	10/16	24	6.3	1.0	2.0	4	3
Big D 501	12.7 e	7/7	9/30	24	5.0	1.0	1.5	4	3

C.V.% = 13.0 L.S.D.$_{.05}$ = 3.3

[1] Yield 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 4 of this report.

Table 5. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted June 25, 1980 on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Coker 237	24.3 a	8/15	11/13	24	7.0	1.0	1.0	2	1
Braxton	23.6 a-b	8/15	11/11	27	6.3	1.0	1.0	2	1
Hutton	23.4 a-c	8/20	11/15	28	8.5	1.5	1.0	2	1
Ransom	23.1 a-d	8/15	11/12	24	6.8	1.0	1.0	2	1
Coker 156	22.5 a-e	8/12	10/30	23	5.0	1.0	1.0	2	1
RA 680	21.7 a-f	8/13	11/4	25	6.8	1.0	1.0	2	2
Deltapine 506	21.6 a-f	8/14	11/3	27	8.0	2.3	1.0	2	1
Tracy M	21.2 a-f	8/11	10/28	26	5.3	2.0	1.0	2	1
McNair 600	21.1 a-f	8/14	10/29	26	5.8	1.5	1.0	2	2
RA 604	20.8 a-f	8/11	10/29	26	7.0	1.0	1.0	2	3
Bay	20.7 a-f	8/8	10/30	25	7.3	1.5	1.0	3	2
Davis	20.4 a-f	8/16	10/29	25	7.0	1.5	1.0	2	1
McNair 500	20.3 a-f	8/10	10/15	23	5.5	1.8	1.0	2	1
Tracy	20.1 b-f	8/12	10/29	28	6.8	1.8	1.0	2	1
Centennial	20.1 b-f	8/13	11/6	27	7.5	1.5	1.0	2	2
Bedford	19.9 b-f	8/12	10/17	28	6.8	2.0	1.0	2	2
Deltapine 403	19.3 c-f	8/10	10/21	26	6.0	1.5	1.0	2	2
Lee 74	19.2 d-f	8/16	11/13	25	7.5	1.5	1.0	2	2
Essex	18.9 e-f	8/5	10/20	17	4.3	1.0	1.0	2	3
Deltapine 345	18.4 e-f	8/9	10/15	24	6.3	1.0	1.0	2	2
N-K 100	18.0 f	8/6	10/21	21	5.5	1.0	1.0	3	2
Forrest	17.8 f	8/8	10/14	23	5.8	1.0	1.0	3	2
RA 401	11.6 g	7/31	10/15	20	3.3	1.0	1.5	4	3

C.V.% = 11.9 L.S.D..05 = 3.4

[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 4 of this report.

Table 6. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Early (May 4, 1979-1980) on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
Deltapine 403	34.2	7/12	10/16	32	6.6	2.0
Braxton	33.3	7/25	10/30	35	7.5	1.9
Coker 156	32.7	7/17	10/24	30	6.1	1.9
Forrest	31.9	7/10	10/2	30	5.0	1.9
Essex	31.9	7/7	10/1	24	5.4	1.6
Tracy M	31.8	7/12	10/26	31	4.5	2.0
RA 680	31.8	7/16	10/26	33	7.0	1.5
RA 604	31.6	7/15	10/22	34	7.4	1.9
Davis	31.5	7/25	10/23	34	6.1	2.3
Terra Vig 606	31.5	7/18	10/26	34	6.3	2.0
Tracy	31.4	7/13	10/25	32	6.0	1.9
Ransom	31.0	7/12	10/28	29	6.5	1.8
Bay	31.0	7/10	10/15	31	5.3	1.5
Hutton	30.8	7/26	11/9	35	7.3	2.4
Bragg	30.7	7/24	10/30	38	8.6	2.1
Centennial	30.7	7/16	10/30	35	6.5	1.9
RA 603	30.7	7/12	10/28	35	6.1	1.8
McNair 600	30.6	7/16	10/25	32	6.4	1.6
D 74-7741	30.2	7/14	10/21	33	6.1	1.9
Deltapine 345	30.1	7/13	10/10	33	6.1	1.6
Bedford	29.9	7/15	10/5	38	6.6	2.1
N-K 100	29.2	7/9	10/3	28	4.0	1.8
Lee 74	29.0	7/15	10/29	26	5.4	1.9
Deltapine 506	28.0	7/15	10/29	34	8.1	2.0
McNair 500	27.7	7/14	10/7	31	5.6	1.8
Lancer	26.8	7/18	10/22	31	5.5	1.6
Big D 501	18.4	6/22	9/14	28	3.5	1.6
RA 401	17.5	6/22	9/10	23	3.6	1.5
Big D 483	17.2	6/21	9/9	24	3.3	1.4

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.
[2]An planation of data and ratings is given on page of this report.

Table 7. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Mid - Season (May 26, 1979-1980) on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
Deltapine 506	31.8	8/2	11/5	35	9.0	2.9
Braxton	31.7	8/6	11/6	36	8.9	2.1
McNair 600	31.3	8/2	10/26	33	7.3	1.6
RA 604	31.1	7/30	10/23	36	9.1	1.9
Coker 156	30.8	8/1	10/26	31	7.1	1.6
Forrest	30.6	7/24	10/17	33	6.6	1.9
McNair 500	30.5	7/28	10/17	32	7.1	1.6
Lee 74	30.4	8/2	11/4	32	8.9	2.8
Ransom	30.0	8/1	11/5	33	8.8	1.9
RA 680	30.0	7/31	10/26	34	8.4	1.6
N-K 100	29.1	7/22	10/10	32	7.1	1.9
Essex	29.0	7/19	10/1	26	6.4	1.9
Davis	28.9	8/5	10/18	34	7.0	2.3
Centennial	28.9	8/1	10/29	33	9.0	1.9
Deltapine 345	28.8	7/28	10/18	33	8.1	1.8
Tracy	28.5	7/30	10/30	33	7.1	2.6
Bedford	28.4	7/30	10/17	37	7.9	2.0
Tracy M	28.4	7/28	10/25	32	7.4	2.4
Hutton	26.3	8/7	11/9	33	6.9	2.6
RA 401	25.8	7/13	10/3	29	6.4	1.0

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 8. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Late Season June 26, 1979-1980 on Sand Mountain Substation, Crossville

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu./a.	Date	Date	In.	In.	Rating
Braxton	32.4	8/18	11/6	28	6.5	1.5
RA 604	30.9	8/16	10/30	28	6.7	2.2
Ransom	29.8	8/16	11/7	27	6.5	2.0
McNair 500	29.5	8/14	10/22	25	5.6	2.0
Hutton	28.8	8/21	11/11	30	7.8	2.8
Coker 156	28.8	8/15	10/28	23	4.7	1.5
RA 680	28.2	8/15	10/30	27	6.7	1.3
McNair 600	28.0	8/16	10/30	29	6.5	2.6
Centennial	28.0	8/16	11/2	30	7.3	2.3
Deltapine 506	28.0	8/14	11/2	27	7.0	3.0
Bedford	27.4	8/15	10/24	31	6.9	2.8
Forrest	27.2	8/10	10/21	26	6.4	2.0
Deltapine 345	27.2	8/13	10/22	26	6.0	1.7
Davis	27.1	8/19	10/31	27	6.2	2.3
Tracy M	26.9	8/12	10/26	26	4.8	2.8
Lee 74	25.5	8/16	11/8	25	6.4	2.4
Essex	25.5	8/8	10/20	18	4.3	1.3
Tracy	25.4	8/13	10/27	28	6.0	2.9
N-K 100	24.5	8/10	10/22	23	5.6	2.0

[1/] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2/] An explanation of data and ratings is given on page 4 of this report.

Table 9. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Early on Sand Mountain Substation, Crossville (May 7, 1978-1980)

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
Coker 156	34.6	7/18	10/19	32	6.4	1.8
Essex	33.4	7/9	9/27	25	5.8	1.4
Bay	32.5	7/11	10/6	34	5.0	1.7
Forrest	31.2	7/11	9/28	33	5.9	2.0
RA 680	31.1	7/16	10/22	35	7.5	1.7
Centennial	31.0	7/17	10/25	36	7.0	1.9
Tracy	30.6	7/14	10/22	34	7.0	2.0
Braxton	30.5	7/25	10/30[3]	39	8.3	2.1
RA 603	30.1	7/12	10/24	39	6.4	2.1
RA 604	29.7	7/15	10/17	36	8.2	1.9
N-K 100	29.6	7/10	9/29	30	4.6	2.2
Bragg	29.5	7/23	10/30[3]	40	9.3	2.4
Ransom	29.5	7/14	10/25	32	7.7	2.0
D 74-7741	29.5	7/14	10/19	34	7.3	1.9
Hutton	29.4	7/26	11/9 [3]	37	8.5	2.4
Bedford	29.4	7/15	10/1	40	6.6	2.2
McNair 600	29.3	7/16	10/20	35	7.3	1.9
Lee 74	29.3	7/17	10/26	29	6.2	2.1
Davis	29.2	7/25	10/20	36	6.8	2.3
Deltapine 345	28.9	7/14	10/4	35	6.3	1.8
Deltapine 506	28.2	7/16	10/29[3]	36	8.4	2.3
McNair 500	27.6	7/14	10/2	33	5.6	2.0
Lancer	27.3	7/18	10/17	33	6.6	1.8
RA 401	19.6	6/28	9/12	26	3.7	1.3

[1] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 4 of this report.
[3] Average data for 1979-1980.

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

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
Three-Year Average Planting Date May 27, 1978 and 1980						
Deltapine 506	29.2	8/1	10/31	35	8.5	2.8
Coker 156	28.3	8/1	10/20	32	7.3	1.5
Lee 74	27.6	8/1	10/30	33	9.1	2.5
Forrest	26.9	7/23	10/14[3]	34	7.1	1.8
Ransom	26.5	7/31	11/5 [3]	34	8.8	1.8
Centennial	26.5	7/30	10/26[3]	35	9.2	1.9
Braxton	26.5	8/5	11/6 [3]	37	8.3	2.1
McNair 600	26.4	7/31	10/21	34	7.8	1.7
McNair 500	25.9	7/27	10/14	33	7.1	1.8
Tracy	25.3	7/28	10/25	34	7.3	2.5
Essex	25.3	7/19	10/1	24	6.3	1.6
Davis	25.1	8/5	10/16	36	7.6	2.2
N-K 100	25.0	7/20	10/9	31	6.8	1.9
Hutton	23.7	8/6	11/9 [3]	35	8.6	2.4
Three-Year Average Planting Date June 24, 1978-1980						
McNair 500	30.7	8/13	10/22[3]	27	6.1	1.8
Braxton	29.4	8/17	11/6 [3]	31	7.1	1.3
Ransom	27.7	8/15	11/7 [3]	29	7.3	1.7
Deltapine 506	27.6	8/13	11/2 [3]	31	7.9	2.6
Hutton	27.0	8/19	11/11[3]	32	8.5	2.3
Coker 156	26.9	8/13	10/22	25	5.3	1.3
McNair 600	26.8	8/16	10/30[3]	29	6.4	2.1
Davis	26.1	8/18	10/31[3]	30	7.2	1.8
Forrest	25.6	8/9	10/21[3]	29	6.8	1.7
Centennial	25.3	8/15	10/25	32	8.1	1.8
Tracy	24.5	8/12	10/27[3]	31	7.0	2.3
Lee 74	24.2	8/15	11/8 [3]	28	6.9	2.0
Essex	23.8	8/8	10/20[3]	20	5.3	1.2

[1] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page of this report.
[3] Maturity dates for 1979-1980.

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 Early on Sand Mountain Substation, Crossville

Variety	Yield[1] Bu./a.	1st bloom[2] Date	Maturity[2] Date	Plant ht.[2] In.	Ht. 1st pod[2] In.	Lodging[2] Rating
Four-Year Average Planting Date May 6, 1977-1980						
Coker 156	34.8	7/16	10/21	32	5.6	1.9
Centennial	31.5	7/16	10/25	36	6.3	2.1
Tracy	31.3	7/13	10/22	35	6.1	2.2
Hutton	31.2	7/24	11/9 [3]	37	7.1	2.6
Essex	31.1	7/7	9/23	25	[5]	1.4
McNair 600	30.8	7/15	10/21	35	6.4	2.1
Bragg	30.7	7/22	10/30 [3]	40	8.0	2.4
Lee 74	30.3	7/17	10/26	30	5.5	2.3
Deltapine 506	30.2	7/16	10/29 [3]	36	7.1	2.4
Forrest	29.4	7/9	9/25	33	4.9	1.9
N-K 100	28.4	7/8	9/25	30	[5]	1.9
Davis	27.6	7/23	10/19	36	5.8	2.4
Lancer	26.9	7/17	10/16	33	5.8	1.7
McNair 500	25.0	7/13	9/29	33	[5]	2.0
Five-Year Average Planting Date May 5, 1976-1980						
Coker 156	34.8	7/18	10/18	32	5.9	1.8
Essex	32.9	7/8	9/22	25	[5]	1.3
Hutton	31.9	7/25	10/30 [4]	37	7.7	3.0
Centennial	31.5	7/17	10/22	38	7.0	2.3
Tracy	31.1	7/14	10/18	35	6.4	2.3
McNair 600	31.1	7/16	10/17	36	6.8	2.3
Lee 74	31.1	7/18	10/22	31	6.2	2.3
Bragg	31.1	7/22	10/25 [4]	41	8.5	2.5
Forrest	30.9	7/11	9/25	34	5.4	1.9
Davis	29.4	7/24	10/16	37	6.3	2.4
Lancer	28.6	7/19	10/14	35	6.3	1.6
McNair 500	27.0	7/14	9/30	33	[5]	2.0

[1] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 4 of this report.
[3] 1977 and 1979-1980 average maturity dates.
[4] 1976-1977 and 1977-1980 average maturity dates.
[5] No data in 1977.

Table 12. Four- and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Mid - Season on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	Date	In.	In.	Rating
----------Four-Year Average Planting Date May 26, 1977-1980----------						
Coker 156	31.1	7/30	10/21	32	6.2	1.6
Centennial	29.7	7/30	10/26	35	8.4	2.0
Lee	29.4	8/1	10/28	33	7.9	2.9
Forrest	29.4	7/23	10/13	33	6.3	1.9
Ransom	29.2	7/31	10/4[3]	33	7.6	1.9
McNair 600	29.1	7/31	10/21	34	6.6	2.0
McNair 500	27.8	7/26	10/14	31	6.3	1.9
Tracy	27.7	7/28	10/24	34	6.1	2.8
Hutton	26.0	8/6	11/5[3]	35	7.4	2.9
Davis	25.8	8/4	10/19	34	6.5	2.5
Essex	25.3	7/20	10/1	23	5.4	1.4
----------Five-Year Average Planting Date May 28, 1976-1980----------						
Coker 156	32.3	7/31	10/19	33	6.8	1.6
Lee 74	30.4	8/1	10/25	33	7.9	2.9
Forrest	30.4	7/23	10/11	34	6.6	2.0
Centennial	30.2	7/30	10/23	36	9.0	2.1
Ransom	29.8	7/31	10/28[4]	34	8.1	1.9
McNair 600	29.5	7/30	10/18	35	6.9	2.1
McNair 500	29.5	7/27	10/12	32	6.6	2.0
Tracy	28.7	7/28	10/20	35	6.3	2.7
Essex	27.7	7/21	9/30[4]	24	5.6	1.4
Hutton	27.5	8/6	10/31	36	8.4	3.2
Davis	27.2	8/5	10/18	35	7.1	2.5

[1] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 4 of this report.
[3] Average maturity for 1977, 1979-1980.
[4] Average maturity for 1976-1977 and 1979-1980.

Table 13. Four- and Five-Year Averages for Yield, First Bloom Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Late Season on Sand Mountain Substation, Crossville

Variety	Yield[1]	1st bloom[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]
	Bu./a.	Date	In.	In.	Rating
----------Four-Year Average Planting Date June 23, 1977-1980----------					
McNair 500	31.4	8/11	27	5.7	1.9
Ransom	30.0	8/14	30	7.2	1.7
McNair 600	29.7	8/15	30	6.0	2.4
Hutton	29.3	8/18	32	7.8	2.4
Coker 156	29.3	8/13	27	4.9	1.4
Forrest	29.1	8/8	30	6.1	1.8
Davis	28.4	8/17	31	6.8	2.3
Centennial	27.3	8/13	32	7.4	2.0
Lee 74	26.8	8/14	30	6.7	2.5
Essex	26.8	8/6	20	5.0	1.2
Tracy	25.9	8/11	31	6.4	2.4
----------Five-Year Average Planting Date June 22, 1976-1980----------					
McNair 500	32.2	8/12	27	5.5	1.9
Hutton	31.1	8/18	31	7.4	2.3
Coker 156	30.9	8/14	26	4.7	1.3
Ransom	30.7	8/14	29	6.8	1.6
McNair 600	30.2	8/15	29	5.6	2.2
Forrest	29.9	8/10	29	5.9	1.8
Davis	28.4	8/18	30	6.6	2.2
Centennial	28.4	8/14	31	7.0	2.0
Tracy	28.1	8/12	30	5.9	2.4
Lee 74	27.9	8/15	28	6.3	2.5
Essex	27.7	8/8	20	4.8	1.2

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 14. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 1, 1980 on Tennessee Valley Substation, Belle Mina

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
D 74-7741	26.0 a	7/2	10/5	28	4.3	1.8	1.0	2	1
Forrest	22.9 a-b	6/26	9/22	24	2.8	1.0	1.0	3	1
Big D 501	22.2 a-b	6/19	9/11	27	3.3	1.3	2.5	2	1
M-V 101	22.1 a-b	6/28	9/22	29	4.3	1.0	1.0	2	1
Bedford	21.2 b	6/30	9/22	27	4.5	1.0	1.0	2	1
Deltapine 403	20.5 b-c	7/2	10/3	26	3.8	1.3	1.0	1	1
XP 5934	20.5 b-d	6/29	9/22	25	3.8	1.0	1.0	2	1
RA 480	20.0 b-e	6/21	9/11	30	4.5	1.5	1.0	2	1
Lancer	19.6 b-f	7/9	10/17	25	4.3	1.0	1.5	2	3
RA 401	19.4 b-f	6/19	9/11	23	3.3	1.0	1.8	2	1
RA 604	19.4 b-f	6/30	10/14	29	5.3	1.5	1.0	2	2
RAX 17-79	19.3 b-f	6/28	10/1	26	4.5	1.8	1.0	2	1
Big D 483	19.1 b-g	6/19	9/11	24	3.5	1.0	2.5	3	1
RA 680	18.9 b-h	7/10	10/23	29	4.5	2.8	1.0	1	1
Essex	18.7 b-h	6/24	9/11	18	3.0	1.0	1.0	2	1
Deltapine 345	18.6 b-h	6/30	10/3	25	4.0	1.5	1.0	2	1
NAPB 505	18.3 b-h	7/1	9/19	27	3.5	1.3	1.0	2	1
NK X3268	18.3 b-h	7/11	10/3	35	4.8	1.3	1.0	2	1
Terra Vig 505	16.4 c-i	7/2	10/3	26	4.8	1.5	1.0	2	1
Bay	16.2 c-i	6/28	9/22	23	2.8	1.0	1.0	2	1
Davis	15.9 c-i	7/15	10/7	35	6.0	1.3	1.3	2	1
Centennial	15.7 d-i	7/9	10/23	32	4.5	3.3	1.0	1	1
Coker 156	15.7 e-i	7/11	10/22	29	4.8	2.3	1.0	1	1

Table 14. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
N-K 100	15.6 e-i	6/26	9/22	20	1.5	1.0	1.0	2	1
Green S-791	15.6 e-i	7/2	10/22	21	3.0	1.3	1.0	2	1
McNair 500	15.5 e-i	7/1	9/29	25	3.8	1.3	1.0	2	1
Braxton	15.5 e-i	7/20	11/4	40	6.0	2.0	1.0	2	1
Tracy	15.2 e-i	7/8	10/22	32	4.3	3.3	1.0	2	1
Terra Vig 606	15.1 e-i	7/11	10/23	35	5.5	2.8	1.0	1	1
Tracy M	14.9 f-i	7/3	10/20	29	5.8	2.0	1.0	2	1
Green S-737	14.8 f-i	7/2	10/17	21	3.5	1.0	1.8	2	1
Bragg	14.4 g-i	7/15	10/31	39	6.8	2.3	1.0	2	1
Deltapine 506	14.3 g-i	7/9	10/23	32	6.5	2.8	1.0	2	1
Lee 74	14.2 g-i	7/9	10/23	25	4.8	2.0	1.0	2	2
RA 603	14.2 g-i	7/1	10/23	32	5.5	2.3	1.0	2	1
NK X3272	14.2 g-i	7/14	10/22	30	5.8	2.3	1.0	2	1
Deltapine 439	14.0 h-i	7/5	10/19	24	3.8	2.3	1.3	2	1
McNair 600	13.4 i	7/7	10/17	29	5.0	1.8	1.3	3	2
Ransom	13.1 i	7/12	10/24	26	6.3	1.8	1.0	2	2
Hutton	13.0 i	7/20	11/4	37	5.5	2.3	1.0	2	1
Gold Kist 49	12.8 i	7/12	10/23	40	7.3	3.0	1.0	2	1
C.V.% = 16.5	L.S.D. .05 = 3.9								

[1] Yield 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 4 of this report.

Table 15. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering[3/] of Soybean Varieties Planted May 5, 1979-1980 on Tennessee Valley Substation, Belle Mina

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu./a.	Date	Date	In.	In.	Rating
Deltapine 403	36.2	7/9	10/6	36	5.1	3.0
Big D 501	35.8	6/30	9/14	33	3.9	1.9
Essex	35.4	7/1	9/22	26	4.0	2.0
RA 401	32.5	6/30	9/13	33	4.8	1.5
Forrest	32.4	7/3	9/27	32	4.1	2.8
Braxton	32.1	7/21	10/29	40	6.9	2.5
D 74-7741	32.1	7/8	10/6	36	5.6	2.8
Bay	31.9	7/5	9/29	33	4.4	1.9
RA 604	31.7	7/9	10/12	37	6.8	2.4
Deltapine 506	30.9	7/13	10/16	38	6.6	3.0
N-K 100	30.6	7/2	9/28	28	3.5	2.3
Deltapine 345	30.6	7/8	10/5	36	5.8	2.0
Tracy M	30.3	7/7	10/16	35	6.3	2.5
Big D 483	30.0	7/1	9/8	30	3.8	1.8
Bedford	29.8	7/8	9/28	35	6.0	3.0
RA 603	29.4	7/6	10/19	39	6.6	3.1
Bragg	29.3	7/19	10/27	40	8.1	3.0
Ransom	28.9	7/14	10/23	35	7.9	2.4
Lee 74	28.8	7/13	10/19	32	6.0	2.5
McNair 600	28.7	7/13	10/17	34	6.1	2.4
Tracy	28.4	7/10	10/16	38	5.1	3.1
Coker 156	28.4	7/15	10/18	35	6.1	2.6
McNair 500	28.3	7/9	10/3	34	5.4	2.3
RA 680	28.3	7/13	10/15	35	6.3	2.9
Lancer	27.7	7/14	10/13	33	5.5	2.0
Terra Vig 606	27.6	7/16	10/16	39	6.1	3.6
Davis	27.4	7/21	10/10	37	6.5	3.0
Hutton	26.6	7/22	10/30	39	6.8	3.6
Centennial	26.1	7/14	10/15	38	6.4	3.4

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page [illegible] of this report.
3/Two to 3% shattering for Big D 501 and RA 401 and 5-[illegible]% shattering for Big D 483 and N-K 100.

Table 16. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering[3/] of Soybean Varieties Planted May 7, 1978-1980 on Tennessee Valley Substation, Belle Mina

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu./a.	Date	Date	In.	In.	Rating
Essex	34.3	7/2	9/29	29	4.4	2.0
RA 401	32.2	7/1	9/25	36	5.5	1.5
D 74-7741	30.0	7/8	10/3	38	5.7	3.0
Forrest	29.6	7/3	10/2	35	4.3	2.8
Bay	29.1	7/5	10/6	36	4.9	2.2
N-K 100	28.3	7/3	10/3	32	4.3	2.5
RA 604	27.2	7/10	10/11	39	6.7	2.4
Bedford	27.1	7/9	10/1	39	6.3	3.3
Braxton	26.8	7/21	10/30	42	7.6	2.3
Deltapine 345	26.7	7/8	10/12	38	5.9	2.3
Lancer	26.2	7/14	10/7	34	6.5	2.0
Coker 156	25.8	7/16	10/17	38	6.1	2.3
Deltapine 506	25.7	7/15	10/18	40	6.9	2.8
RA 603	25.7	7/6	10/19	41	6.8	3.2
Tracy	24.8	7/9	10/14	39	5.3	2.8
Lee 74	24.8	7/14	10/18	34	6.8	2.3
Bragg	24.8	7/20	10/27	41	9.3	3.1
Ransom	24.8	7/17	10/23	37	8.3	2.1
RA 680	24.3	7/14	10/18	38	7.2	2.4
McNair 600	23.8	7/12	10/11	37	6.8	2.7
McNair 500	23.8	7/8	10/9	36	5.4	2.7
Davis	23.4	7/21	10/4	38	6.4	2.8
Hutton	23.4	7/23	10/31	40	7.8	3.5
Centennial	23.1	7/13	10/18	39	6.6	2.9

[1/] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2/] An explanation of data and ratings is given on page 4 of this report.
[3/] Three to four % shattering for RA 401 and NK 100.

Table 17. Four- and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging and Shattering[3/] of Soybean Varieties planted on Tennessee Valley Substation Belle Mina

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu./a.	Date	Date	In.	In.	Rating
Four-Year Average Planting Date May 6, 1977-1980						
Essex	30.6	7/2	9/26	28	4.9	1.9
Forrest	26.4	7/4	9/28	34	4.9	2.5
N-K 100	26.3	7/3	9/29	32	4.6	2.3
Coker 156	25.4	7/14	10/17	37	5.6	2.1
Deltapine 506	24.2	7/13	10/18	39	6.1	2.6
Lee 74	24.0	7/13	10/17	34	5.8	2.2
Lancer	24.0	7/12	10/9	35	5.8	1.8
Bragg	23.2	7/18	10/25	41	8.2	2.8
Tracy	23.1	7/8	10/14	39	4.8	2.6
McNair 600	23.1	7/10	10/12	38	6.1	2.4
Centennial	22.6	7/11	10/18	39	6.1	2.6
Hutton	21.9	7/21	10/29	41	6.5	3.1
McNair 500	21.6	7/7	10/5	36	5.5	2.7
Davis	21.0	7/18	10/6	39	6.1	2.4
Five-Year Average Planting Date May 7, 1976-1980						
Essex	32.9	7/4	9/27	29	1.8	1.8
Forrest	28.8	7/6	9/29	35	2.4	2.4
Coker 156	28.1	7/15	10/16	39	2.2	2.2
Lee 74	27.3	7/15	10/16	35	2.3	2.3
Lancer	27.2	7/15	10/9	36	1.9	1.9
Bragg	26.5	7/19	10/22	43	3.0	3.0
McNair 600	26.4	7/12	10/12	39	2.6	2.6
Centennial	25.7	7/13	10/17	40	2.8	2.8
McNair 500	25.6	7/9	10/4	37	2.8	2.8
Tracy	25.5	7/10	10/13	40	2.8	2.8
Hutton	24.8	7/22	10/26	41	3.3	3.3
Davis	23.7	7/20	10/7	39	2.6	2.6

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.
3/Shattering of 3-5% for N-K 100.

Table 18. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging[3/], Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 12, 1980 on Upper Coastal Plain Substation, Winfield.

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Shattering[2/]	Seed Quality[2/]	Purple Stain[2/]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
Deltapine 506	8.9 a	7/28	11/8	33	10.3	1.0	3	2
Braxton	8.1 a-b	7/28	11/10	29	10.3	1.0	2	2
RA 480	8.0 a-c	7/6	9/17	26	7.3	1.0	3	2
Deltapine 403	7.7 a-d	7/11	9/23	27	8.3	1.0	5	2
Centennial	7.5 a-e	7/20	11/3	29	9.8	1.0	2	2
RA 680	7.5 a-e	7/18	10/27	27	9.5	1.0	2	2
Bragg	7.3 a-f	7/29	11/3	33	11.0	1.0	2	2
Coker 156	7.3 a-g	7/18	10/31	26	8.8	1.0	2	2
NK X3282	7.0 a-h	7/18	11/3	23	8.5	1.0	4	2
Essex	6.7 a-i	7/6	9/13	20	7.3	1.3	4	2
Tracy M	6.5 a-j	7/16	11/3	30	9.3	1.0	4	2
Terra Vig 606	6.5 a-j	7/20	10/31	28	11.0	1.0	2	2
Tracy	6.1 b-k	7/18	11/5	27	9.0	1.0	4	2
Ransom	6.1 b-k	7/18	11/8	26	10.5	1.0	3	2
NAPB 505	6.1 b-k	7/8	9/19	24	8.8	1.0	3	2
N-K 100	5.7 b-l	7/7	9/24	21	5.5	1.0	3	2
Big D 501	5.7 b-l	7/2	9/8	23	4.5	2.8	3	2
XP 5474	5.7 b-l	7/7	9/19	26	8.5	1.0	5	2
NK X3268	5.4 b-l	7/18	9/23	29	8.5	1.0	4	2
RA 401	5.3 c-l	7/2	9/8	19	3.8	2.8	2	2
Deltapine 345	5.3 c-l	7/10	9/19	28	9.5	1.0	4	2
Green S-333	5.2 d-l	7/9	9/25	18	5.0	1.0	2	2
Lee 74	5.1 d-l	7/24	11/3	29	9.8	1.0	4	2

Table 18. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Shattering[2]	Seed Quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
Forrest	5.1 d-l	7/11	9/16	23	6.5	1.0	5	2
M-V 101	5.0 d-l	7/10	9/26	27	8.0	1.0	5+	2
McNair 600	4.9 e-l	7/20	10/23	29	10.5	1.0	3	2
Hutton	4.9 e-l	7/29	11/10	30	10.0	1.0	3	2
Lancer	4.7 f-l	7/19	10/21	23	7.3	1.0	4	3
RA 603	4.6 f-l	7/15	10/31	33	8.8	1.0	4	2
RA 604	4.5 f-l	7/18	10/3	30	9.5	1.0	4	2
Bay	4.5 g-l	7/8	9/23	25	7.3	1.0	5+	3
Big D 483	4.4 h-l	7/2	9/8	21	5.0	2.8	3	2
RAX 17-79	4.3 h-l	7/9	9/24	26	8.5	1.0	5	2
Davis	4.2 i-l	7/21	10/3	29	9.3	1.0	4	2
Green S-737	4.2 i-l	7/13	10/19	23	8.8	1.0	4	2
Deltapine 439	3.9 j-l	7/18	10/31	23	8.5	1.0	3	2
Gold Kist 49	3.9 j-l	7/23	11/3	33	11.5	1.0	2	2
Gail	3.5 k-l	7/8	9/20	22	6.3	1.0	5	2
D 74-7741	3.5 k-l	7/17	10/1	28	8.0	1.0	5+	2
McNair 500	3.3 l	7/12	9/18	24	8.0	1.0	5	2
Bedford	3.3 l	7/16	9/17	29	9.3	1.0	4	2
C.V.% = 28.6%	L.S.D.$_{.05}$ = 2.2							

1/Yield 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 4 of this report.
3/Lodging not a problem in 1980.

Table 19. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging[3], Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted July 12, 1980 on Upper Coastal Plain Substation, Winfield

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
Ransom	14.8 a	8/15	10/29	25	6.8	1.0	2	2
Braxton	14.3 a-b	8/16	10/29	27	7.3	1.0	2	1
Deltapine 403	14.3 a-b	8/12	10/13	26	6.3	1.0	2	2
Deltapine 345	13.6 a-c	8/12	10/15	27	7.0	1.0	2	2
N-K 100	13.5 a-c	8/12	10/4	24	5.5	1.0	2	2
Bedford	13.4 a-c	8/14	10/15	30	7.5	1.0	2	2
McNair 600	13.2 a-c	8/14	10/26	28	7.3	1.0	2	2
Tracy	12.8 a-c	8/12	10/29	26	6.3	1.0	2	2
RA 604	12.8 a-c	8/14	10/15	29	5.8	1.0	2	2
Tracy M	12.8 a-c	8/12	10/15	26	5.3	1.0	2	1
Forrest	12.7 a-c	8/12	10/13	27	6.0	1.0	3	2
Coker 237	12.5 a-c	8/16	10/29	25	6.8	1.0	2	1
Deltapine 506	12.3 a-d	8/15	10/29	29	7.3	1.0	2	2
Hutton	12.2 a-d	8/19	11/10	30	6.8	1.0	2	2
Centennial	12.1 a-d	8/15	10/29	29	8.8	1.0	2	2
Lee 74	11.9 a-d	8/15	10/29	25	6.3	1.0	2	1
Bay	11.9 a-d	8/12	10/15	24	5.0	1.0	4	2
McNair 500	11.7 a-d	8/12	10/15	27	5.3	1.0	2	2
Davis	11.3 a-d	8/19	10/22	26	6.8	1.0	2	1
Coker 156	11.1 a-d	8/15	10/29	23	6.3	1.0	2	2
RA 680	10.8 b-d	8/14	10/29	27	8.3	1.0	2	2
Essex	9.9 c-d	8/12	9/29	16	4.0	1.3	2	2
RA 480	8.8 d	8/12	10/13	26	4.5	1.0	3	2
RA 401	5.6 e	8/12	9/25	19	3.3	3.0	3	3
C.V.% = 17.6	L.S.D.$_{.05}$ = 3.0							

[1] Yields adjusted to 13% moisture and 60 pounds per bushel. Yiels with a common letter are not different (P = .05).
[2] An explanation of data and ratings is given on page 4 of this report.
[3] Lodging not a problem in 1980.

Table 20. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, and Shattering of Soybean Varieties Planted May 14, 1979 and 1980 on Upper Coastal Plain Substation, Winfield

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging	Shattering
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	23.8	7/28	11/2	33	10.0	1.9	1.0
Coker 156	22.8	7/21	10/25	32	8.6	1.1	1.0
Ransom	22.7	7/19	11/1	30	8.9	2.1	1.0
Deltapine 506	22.4	7/26	10/28	36	9.0	1.4	1.0
Bragg	21.9	7/28	10/28	35	9.1	2.4	1.0
RA 680	21.7	7/20	10/22	31	7.9	1.1	1.0
D 74-7741	21.6	7/18	10/10	33	7.9	1.5	1.0
Hutton	21.5	7/30	11/6	34	8.9	2.9	1.0
Lee 74	21.2	7/23	10/25	32	9.0	1.9	1.0
Deltapine 403	21.0	7/16	9/29	33	8.0	1.5	1.0
Centennial	20.5	7/21	10/26	34	8.8	1.3	1.0
Tracy	20.3	7/18	10/26	33	7.9	1.6	1.0
RA 603	19.9	7/16	10/25	38	9.0	1.4	1.0
Terra Vig 606	19.8	7/22	10/25	34	9.8	1.5	1.0
Tracy M	19.4	7/17	10/23	33	8.5	1.6	1.0
RA 604	19.3	7/21	10/7	36	8.9	1.5	1.0
Deltapine 345	18.8	7/14	9/26	34	8.3	1.8	1.0
Davis	18.3	7/26	10/10	33	9.3	1.4	1.0
McNair 600	18.0	7/22	10/21	33	10.3	1.4	1.0
Lancer	18.0	7/22	10/18	32	7.5	1.0	1.3
N-K 100	17.5	7/12	9/28	28	6.5	1.5	1.4
Essex	17.0	7/11	9/20	24	7.1	1.1	1.4
Forrest	16.4	7/14	9/24	31	7.3	1.4	1.0
Bay	16.0	7/13	9/26	32	7.4	1.1	1.0
McNair 500	15.0	7/15	9/30	29	8.3	1.3	1.0
Bedford	14.2	7/19	9/25	35	8.6	1.9	1.0
RA 401	14.0	7/2	9/6	28	6.1	1.0	2.9
Big D 501	11.7	7/4	9/10	31	6.5	1.0	2.5
Big D 483	6.8	7/1	8/31	27	5.4	1.5	3.9

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 21. Two-Year Averages for Yield, First Bloom and Maturity Date, Plant and First Pod Height, Lodging, and Shattering[4] of Soybean Varieties Planted[3] on Upper Coastal Plain Substation, Winfield

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Ransom	21.1	8/21	10/31	24	6.3	1.4	1.0
RA 604	20.7	8/21	10/24	28	5.5	1.5	1.0
Forrest	20.6	8/19	10/23	27	6.1	1.6	1.0
McNair 600	19.7	8/20	10/29	27	6.8	1.8	1.0
McNair 500	19.7	8/21	10/24	25	5.0	1.4	1.0
Braxton	19.5	8/25	10/31	25	5.9	1.3	1.0
Deltapine 506	19.3	8/20	10/29	27	6.3	1.8	1.0
Bedford	18.7	8/21	10/24	30	7.9	2.1	1.0
N-K 100	18.6	8/18	10/15	23	5.4	1.4	1.0
Hutton	18.6	8/26	11/7	28	6.6	1.6	1.0
RA 680	18.0	8/21	10/25	26	6.6	1.4	1.0
Davis	17.7	8/27	10/28	26	5.4	1.8	1.0
Coker 156	17.3	8/21	10/29	23	5.4	1.3	1.0
Deltapine 345	17.2	8/20	10/20	27	6.1	1.8	1.0
Centennial	17.1	8/21	10/28	26	7.4	1.6	1.0
Lee 74	16.6	8/20	10/30	22	5.8	1.6	1.0
Tracy	15.1	8/18	10/26	25	5.3	2.4	1.0
Essex	14.3	8/18	10/13	17	4.1	1.0	1.1
Tracy M	13.5	8/18	10/22	24	4.9	2.1	1.0

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

[2] An explanation of data and ratings is given on page 4 of this report.

[3] Planted July 16, 1979 and June 26, 1980.

[4] Shattering of 1-2% for Essex.

Table 22. Three-Year Average for Yield, First Bloom and Maturity Dates, Plant Height, Lodging, and Shattering of Soybean Varieties Planted on Upper Coastal Plain Substation, Winfield

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	Rating	Rating
----------Three-Year Average Early Planting May 25, 1978-1980----------					
Braxton	20.8	11/1	35	1.6	1.0
Coker 156	19.9	10/26	32	1.1	1.1
Deltapine 506	19.9	10/28	37	1.6	1.0
Ransom	19.6	10/28	31	1.8	1.0
RA 680	19.4	10/24	33	1.1	1.1
Lee 74	18.5	10/25	32	1.7	1.0
Bragg	18.4	10/29	38	2.3	1.0
Centennial	18.1	10/27	35	1.2	1.1
D 74-7741	17.8	10/10	34	1.3	1.0
Hutton	17.5	11/1	35	2.3	1.0
Tracy	17.3	10/27	34	1.6	1.0
RA 603	16.5	10/26	38	1.4	1.1
RA 604	16.3	10/10	35	1.3	1.0
McNair 600	16.2	10/20	34	1.4	1.0
Essex	16.0	9/18	24	1.1	1.7
Lancer	15.9	10/16	31	1.0	1.3
Davis	15.2	10/11	34	1.3	1.3
Deltapine 345	15.1	9/25	35	1.5	1.1
N-K 100	15.0	9/23	30	1.4	1.4
Forrest	14.1	9/21	33	1.3	1.0
Bay	13.6	9/23	32	1.2	1.2
RA 401	12.8	9/6	29	1.0	2.8
Bedford	12.1	9/21	36	1.8	1.0
McNair 500	12.0	9/25	30	1.2	1.0
----------Three-Year Average Late Planting Date[3] 1978-1980----------					
Ransom	19.8	10/27	27	1.3	1.0
Braxton	19.2	10/29	30	1.2	1.0
McNair 600	19.0	10/26	30	1.6	1.0
Deltapine 506	19.0	10/26	31	1.8	1.0
Forrest	18.7	10/16	29	1.6	1.2
Coker 156	18.0	10/28	25	1.2	1.0
Hutton	17.8	11/4	31	1.4	1.0
McNair 500	17.6	10/17	28	1.3	1.2
Davis	17.2	10/23	30	1.5	1.0
Lee 74	17.1	10/26	26	1.5	1.0
Centennial	17.1	10/27	29	1.7	1.0
Tracy	15.7	10/23	29	2.1	1.1
Essex	13.8	10/9	20	1.0	1.9

[1] Yields adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 4 of this report.
[3] Planted June 17, 1978, July 16, 1979, and June 26, 1980.

Table 23. Four-Year Averages for Yield, Maturity Date, Plant Height, Lodging, and Shattering of Soybean Varieties Planted on Upper Coastal Plains Experiment Station, Winfield

Variety	Yield[1] Bu./a.	Maturity[2] Date	Plant ht.[2] In.	Lodging[2] Rating	Shattering[2] Rating
----------Four-Year Average Early Planting Date May 14, 1977-1980----------					
Coker 156	22.9	10/23	32	1.1	1.1
Deltapine 506	22.6	10/26	37	1.8	1.0
Bragg	21.0	10/27	38	2.4	1.0
Lee 74	20.9	10/22	32	1.9	1.0
Hutton	20.3	10/30	36	2.3	1.0
Centennial	20.1	10/24	35	1.2	1.1
McNair 600	19.8	10/17	34	1.4	1.0
Tracy	18.8	10/23	34	1.7	1.0
Davis	18.4	10/10	35	1.3	1.3
Lancer	18.2	10/13	32	1.1	1.3
N-K 100	17.2	9/21	30	1.3	1.4
Essex	16.3	9/17	24	1.1	1.7
Forrest	15.5	9/20	32	1.2	1.0
McNair 500	13.3	9/25	30	1.2	1.0
----------Four-Year Average Late Planting Date[3] 1977-1980----------					
Ransom	20.9	10/28	29	1.6	1.0
Coker 156	19.9	10/27	27	1.4	1.0
McNair 600	19.0	10/23	31	1.9	1.0
Hutton	19.0	11/3	32	1.9	1.0
Forrest	18.9	10/12	29	1.6	1.2
Centennial	18.4	10/26	31	1.9	1.0
McNair 500	18.3	10/13	28	1.3	1.2
Davis	18.2	10/22	32	2.0	1.0
Lee 74	18.0	10/25	27	1.9	1.0
Tracy	15.9	10/21	30	2.4	1.1
Essex	15.8	10/6	20	1.1	1.9

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

[2] An explanation of data and ratings is given on page 4 of this report.

[3] Planted June 17, 1977-78, July 16, 1979, and June 26, 1980.

Table 24. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant Height, Lodging, and Shattering of Soybean Varieties Planted on Upper Coastal Plain Substation, Winfield

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	Rating	Rating
----------Five-Year Average Early Planting Date May 15, 1976-1980---------					
Coker 156	26.1	10/20	33	1.1	1.1
Bragg	25.0	10/24	40	2.6	1.0
McNair 600	24.7	10/15	35	1.5	1.0
Lee 74	24.7	10/20	33	2.2	1.0
Hutton	23.9	10/27	36	2.8	1.0
Centennial	22.8	10/21	36	1.3	1.1
Tracy	22.7	10/22	35	2.0	1.0
Davis	22.5	10/9	35	1.4	1.3
Lancer	21.5	10/12	34	1.1	1.3
Forrest	21.0	9/22	33	1.5	1.0
Essex	21.0	9/20	25	1.2	1.7
McNair 500	17.6	9/26	32	1.4	1.0
----------Five-Year Average Late Planting Date[3] 1976-1980----------					
Coker 156	21.2	10/24	28	1.3	1.0
Ransom	21.1	10/25	30	1.6	1.0
Forrest	20.8	10/11	29	1.5	1.2
McNair 600	20.1	10/21	31	1.8	1.0
McNair 500	19.7	10/11	28	1.3	1.2
Lee 74	19.5	10/22	28	2.0	1.0
Hutton	19.2	10/31	33	2.1	1.0
Centennial	19.0	10/23	32	1.8	1.0
Essex	18.6	10/6	21	1.1	1.9
Davis	17.6	10/21	32	1.9	1.0
Tracy	16.7	10/18	31	2.3	1.1

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

[2] An explanation of data and ratings is given on page 4 of this report.

[3] Planted June 17, 1976-78, July 16, 1979, and June 26, 1980.

Central Alabama

The tests in central Alabama were located on Houston clay at Marion Junction, Lucedale sandy loam at Prattville, and Forkland sandy loam at Camden. Soybeans of Maturity Group VII are full season varieties in this area. Varieties of Maturity Group V and VI are very early and early, respectively. Maturity Group V varieties were approximately 10 inches shorter in central than northern Alabama locations in 1979. However, in 1980 the plant height was a result of a lack of moisture rather than location. The planting at Camden and the second planting at Prattville were abandoned because of very poor stands.

Bedford, Deltapine 345, and RA 604 are the tallest Group V varieties planted in the central Alabama tests. Yields of Group V varieties have been similar to full season varieties, and mature between September 6 and October 10. Deterioration of seed in the field of these varieties may be a problem. At Prattville, Essex has produced slightly better yields than other varieties over the past 5 years, but its leaf drop and maturity tend to be erratic in central and southern locations.

Rainfall of 2.5 inches during the period from August 15 to September 26 resulted in very low yields (8.4 bu./a. average) for all entries in the first planting at Prattville. This was the third year in a row that rainfall at Prattville during this period has been very low. The full- and late-season varieties (Group VII & VIII) have consistently had higher yields than earlier varieties when planted in June at Prattville and Marion Junction.

When planted mid-May at central Alabama locations, the maximum yielding varieties for a particular maturity group over the past 4 to 5 years are: Group V varieties Essex and Forrest, Group VI variety Coker 156 at Prattville and Coker 156, McNair 600, Centennial and Tracy at Marion Junction. Davis and Coker 156 performed better than other

Group VI varieties at late June plantings at Marion Junction; Coker 237 and Ransom (Group VII varieties) were superior at the late May and early June plantings; Group VIII varieties Coker 338, Hutton and Cobb were the leading varieties at later plantings at Marion Junction.

New lines that performed well 2-4 years at Marion Junction were Agripro 70, Braxton, Coker 488, RA 700 A, McNair 500, McNair 710, and Tracy M for early plantings; Agripro 70, Braxton, and Terra Vig 708 when planted at later dates.

Table 25. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 12, 1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Braxton	20.9 a	7/23	10/20	28	2.5	1.3	1.0	2	2
Agripro 70	20.2 a-b	7/29	10/15	33	4.5	1.0	1.0	2	1
McNair 710	20.1 a-c	7/23	10/16	23	2.3	1.0	1.3	2	2
Agripro 71	19.7 a-d	7/19	10/13	25	2.5	1.3	1.3	2	2
Wright	19.2 a-e	7/22	10/19	25	2.8	1.5	1.3	2	2
GA-Soy 17	18.5 a-f	7/24	10/15	30	3.3	1.5	1.0	2	2
Tracy M	18.5 a-f	7/15	10/8	23	3.3	1.0	1.8	3	1
Cobb	18.2 a-g	7/25	10/20	30	4.0	1.8	2.3	2	1
Dowling	18.1 a-g	7/26	10/25	26	2.8	1.3	1.8	2	2
Ransom	17.5 a-h	7/21	10/12	20	2.3	1.0	1.3	2	2
Coker 76-853	17.4 a-h	7/26	10/16	25	3.5	1.3	1.8	2	1
Terra Vig 606	17.2 a-h	7/16	10/9	23	3.3	1.0	2.3	2	2
Deltapine 403	16.9 a-i	7/7	9/11	16	2.0	1.0	2.0	2	1
Coker 488	16.8 a-j	7/25	10/21	26	2.0	1.0	1.0	2	2
Coker 156	16.4 a-k	7/14	10/8	21	2.3	1.0	1.0	2	2
Tracy	16.2 a-k	7/14	10/14	23	2.8	1.0	2.3	3	1
Coker 237	16.0 a-l	7/18	10/11	25	2.5	1.0	1.5	3	1
Centennial	15.9 a-l	7/13	10/13	23	1.8	1.0	1.3	2	2
Davis	15.8 a-l	7/17	9/30	20	2.0	1.0	3.5	2	1
RA 680	15.7 a-l	7/14	10/11	21	1.3	1.0	1.5	3	2
RA 700A	15.4 a-l	7/27	10/16	27	3.8	1.8	2.3	2	2
Deltapine 506	15.3 a-l	7/16	10/10	21	1.3	1.5	1.5	3	2
McNair 500	15.0 a-m	7/9	9/13	16	2.0	1.0	2.3	2	1
RA 603	14.7 a-m	7/9	10/13	21	1.5	1.3	1.3	3	2
Bay	14.6 a-m	7/7	9/8	16	1.3	1.0	2.8	2	1
McNair 700	14.5 a-m	7/18	10/10	20	2.5	1.0	1.0	3	2
Bragg	14.3 b-m	7/20	10/15	28	2.3	2.0	1.3	3	2
Big D 501	13.9 b-n	6/24	9/7	22	2.3	1.0	3.5	3	1
RA 701	13.7 b-n	7/17	10/17	23	2.3	1.3	1.5	3	1

Table 25. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
McNair 780	13.7 b-n	7/16	10/11	19	2.3	1.3	1.5	3	2
Terra Vig 708	13.6 c-n	7/16	10/9	23	3.0	1.0	1.3	2	2
Agripro 80	13.5 d-n	7/26	10/19	27	2.8	1.3	1.3	2	2
McNair 600	13.4 d-n	7/17	10/11	21	2.8	1.0	2.0	2	2
N-K 100	13.1 e-n	6/30	9/9	15	1.5	1.0	3.5	2	1
Bedford	12.5 f-n	7/6	9/18	17	2.3	1.0	2.0	2	1
RA 604	12.4 f-n	7/10	9/28	20	2.5	1.0	2.5	3	2
Lee 74	12.1 f-n	7/17	10/9	15	1.3	1.0	1.8	3	1
Coker 338	11.5 g-n	7/24	10/17	22	1.8	1.3	1.0	3	2
RA 800	11.3 g-n	7/24	10/20	23	1.8	1.3	1.5	2	2
McNair 770	11.1 g-n	7/17	10/12	19	1.8	1.0	1.8	3	2
RA 401	10.5 h-n	6/24	9/7	18	1.8	1.0	4.3	2	1
Brooks	10.3 i-n	7/23	10/15	32	4.8	1.5	1.0	2	1
Forrest	9.9 j-n	7/3	9/13	15	1.8	1.0	2.0	3	1
Essex	9.5 k-n	6/29	9/2	11	2.0	1.3	3.5	2	1
Hutton	9.5 k-n	7/24	10/20	27	2.5	1.5	2.0	2	1
Big D 483	9.4 k-n	6/23	8/28	18	2.3	1.0	4.5	3	1
Brysoy 9	8.6 l-n	7/10	10/8	21	2.8	1.3	1.3	3	1
Wilstar 790	7.7 m-n	7/16	10/20	27	2.5	1.0	1.3	3	1
D 74-7741	6.2 n	7/8	9/29	11	0.8	2.8	3.0	4	1
C.V.% = 25.9	L.S.D.$_{.05}$ = 5.2								

[1] 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 4 of this report.

Table 26 Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted June 12, 1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Coker 156	26.2 a	8/7	10/16	24	3.5	1.0	1.0	2	1
Agripro 70	22.2 a-b	8/12	10/23	31	4.0	1.3	1.0	2	1
Bragg	21.2 a-c	8/9	10/23	29	2.8	1.8	1.0	2	2
Braxton	20.7 b-d	8/11	10/22	28	3.3	1.0	1.0	2	2
McNair 700	20.3 b-e	8/7	10/17	24	3.8	1.0	1.0	2	1
Ransom	19.0 b-f	8/8	10/21	23	2.5	1.0	1.0	2	2
Terra Vig 708	18.8 b-f	8/9	10/19	28	3.8	1.3	1.3	2	1
RA 680	18.8 b-f	8/6	10/16	27	2.3	1.0	1.0	2	2
Ga-Soy 17	18.5 b-f	8/10	10/25	29	2.3	1.0	1.0	2	1
Coker 237	18.1 b-f	8/9	10/18	26	5.0	1.0	1.0	2	2
McNair 600	17.2 b-g	8/5	10/14	27	2.8	1.5	1.0	2	2
Deltapine 403	16.8 b-g	8/1	10/1	21	1.5	1.3	1.5	2	2
Tracy M	16.7 b-g	8/4	10/17	26	3.5	2.3	2.0	3	1
Davis	16.5 b-g	8/8	10/12	21	2.0	1.3	2.8	2	1
Coker 488	16.5 b-g	8/12	10/31	32	4.0	1.3	1.0	3	2
Centennial	16.2 c-g	8/5	10/20	25	2.0	1.0	1.3	2	2
RA 604	15.7 c-g	8/4	10/11	25	3.5	1.0	1.8	2	2
Cobb	15.0 d-g	8/9	10/29	30	4.5	1.5	3.3	2	2
Coker 338	14.7 e-g	8/11	10/29	28	4.5	2.0	1.0	2	2
Essex	14.5 e-g	7/22	9/23	17	1.8	1.0	1.8	2	2
Dowling	14.4 f-g	8/10	10/29	26	2.5	1.3	1.3	3	2
Forrest	14.1 f-g	7/28	10/2	21	2.0	1.0	1.3	3	2
RA 701	13.7 f-g	8/10	10/22	27	2.5	1.0	1.0	3	1
Hutton	12.1 g	8/10	10/22	27	3.0	1.8	1.0	2	2

C.V.% = 19.6 L.S.D.$_{.05}$ = 4.8

[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 4 of this report.

Table 27. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted June 26, 1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Ga-Soy 17	20.3 a	8/17	10/25	26	2.0	1.0	1.0	2	2
Coker 156	19.4 a-b	8/13	10/17	22	2.0	1.0	1.0	2	1
Agripro 70	19.4 a-b	8/18	10/24	29	4.5	1.0	1.3	2	1
Ransom	18.7 a-b	8/15	10/21	22	3.8	1.0	1.3	2	1
Davis	17.4 a-b	8/16	10/15	23	3.0	1.0	1.5	2	1
Bragg	17.2 a-b	8/15	10/24	27	4.3	1.3	1.3	2	2
Tracy M	17.2 a-b	8/13	10/28	23	3.0	1.0	2.3	3	1
Terra Vig 708	17.1 a-b	8/15	10/28	25	4.3	1.0	1.8	2	2
McNair 700	17.1 a-b	8/14	10/19	21	3.5	1.0	1.0	2	1
Braxton	17.1 a-b	8/16	10/27	27	3.8	1.0	1.0	3	2
McNair 600	15.9 a-b	8/14	10/17	22	2.3	1.0	1.0	2	2
RA 604	15.5 a-b	8/14	10/17	22	3.0	1.0	1.8	2	2
Centennial	15.4 a-b	8/13	10/27	22	1.5	1.0	1.3	2	2
Coker 488	15.1 a-b	8/19	11/4	24	3.0	1.0	1.3	3	2
Coker 237	13.6 a-b	8/15	10/21	22	3.0	1.0	1.5	2	2
Dowling	13.6 a-b	8/17	11/1	21	3.5	1.0	2.0	2	2
Hutton	13.4 a-b	8/17	10/28	25	4.0	1.0	1.3	3	1
Coker 338	13.3 a-b	8/19	11/11	26	6.0	1.0	1.0	3	2
Cobb	13.0 a-b	8/18	10/31	24	3.3	1.0	3.8	3	2
RA 701	12.6 a-b	8/16	11/2	22	3.8	1.0	1.8	3	1
RA 680	12.2 a-b	8/14	10/31	22	1.3	1.0	1.5	2	2
Forrest	10.1 b	8/9	10/20	19	2.0	1.0	1.5	2	2
C.V.% = 35.3	L.S.D.$_{.05}$ = NS								

[1] 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 4 of this report.

Table 28. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 16, 1979-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Tracy M	23.8	7/16	10/3	28	3.0	1.5	1.4
Braxton	23.0	7/24	10/15	34	4.5	1.5	1.0
McNair 710	22.5	7/21	10/12	29	3.8	1.3	1.1
Ransom	21.9	7/21	10/9	28	4.1	1.3	1.1
Agripro 70	21.6	7/31	10/12	38	5.0	1.4	1.0
Centennial	21.4	7/17	10/8	28	2.0	1.3	1.1
Coker 76-853	21.4	7/28	10/12	31	4.4	1.6	1.4
Coker 488	21.0	7/28	10/18	34	4.0	1.4	1.0
McNair 780	20.9	7/21	10/10	28	3.8	1.6	1.3
McNair 600	20.7	7/20	10/8	27	3.4	1.2	1.5
Davis	20.3	7/20	9/26	26	2.5	1.3	2.4
Tracy	20.0	7/16	10/6	28	2.6	1.3	1.6
RA 700A	20.0	7/29	10/13	36	5.5	2.0	1.8
Dowling	20.0	7/28	10/22	32	4.3	1.7	1.4
RA 680	19.8	7/17	10/7	26	2.1	1.0	1.3
McNair 500	19.6	7/11	9/16	23	1.9	1.0	1.6
Ga-Soy 17	19.6	7/24	10/12	33	4.1	1.6	1.0
McNair 700	19.5	7/18	10/6	24	3.3	1.1	1.0
Coker 237	18.8	7/20	10/7	29	3.1	1.1	1.3
Cobb	18.5	7/27	10/19	36	5.6	1.9	1.6
Terra Vig 708	18.4	7/19	10/7	30	4.1	1.4	1.1
Coker 156	18.3	7/17	10/6	25	2.8	1.0	1.0

Table 28. (Continued)

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Deltapine 506	16.9	7/18	10/7	27	1.8	1.5	1.3
Bragg	16.7	7/22	10/12	34	4.3	1.9	1.1
Bay	16.6	7/10	9/13	22	1.6	1.0	1.9
Essex	16.4	7/4	9/4	16	1.9	1.1	2.8
McNair 770	16.2	7/18	10/6	26	2.6	1.2	1.4
RA 701	16.2	7/20	10/13	26	2.9	1.4	1.3
N-K 100	15.7	7/5	9/12	22	2.1	1.0	2.3
Lee 74	15.6	7/18	10/6	20	1.6	1.1	1.4
RA 604	15.2	7/14	9/26	26	2.9	1.0	1.8
Coker 338	14.5	7/25	10/14	30	3.9	1.6	1.0
Brooks	13.6	7/25	10/12	38	5.5	2.0	1.1
Wilstar 790	13.0	7/18	10/14	32	4.5	1.3	1.1
D74-7741	12.9	7/12	9/26	19	1.4	2.1	2.0
Bedford	12.6	7/11	9/18	24	2.8	1.5	1.5
Forrest	12.3	7/7	9/14	20	2.0	1.0	1.5
Hutton	11.7	7/26	10/14	32	3.9	2.1	1.5

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 29. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 10, 1979-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 156	23.2	8/4	10/11	26	3.8	1.1	1.0
Braxton	22.7	8/7	10/18	29	4.5	1.1	1.0
Agripro 70	21.0	8/8	10/18	32	4.9	1.1	1.0
Bragg	20.9	8/6	10/17	31	4.5	2.0	1.0
McNair 700	20.9	8/3	10/12	26	4.8	1.1	1.0
Centennial	20.6	8/3	10/14	28	3.5	1.4	1.1
Terra Vig 708	20.6	8/6	10/16	31	4.3	1.6	1.1
Davis	20.2	8/5	10/8	26	2.9	1.8	2.1
RA 680	20.2	8/3	10/12	30	3.5	1.4	1.0
Tracy M	20.1	8/2	10/10	28	3.1	2.3	1.5
McNair 600	20.0	8/4	10/11	29	3.6	1.4	1.0
Ransom	19.8	8/6	10/17	26	4.3	1.3	1.0
Coker 488	19.7	8/9	10/26	34	4.9	1.8	1.0
Dowling	19.1	8/9	10/27	30	4.6	1.5	1.2
Coker 338	18.9	8/9	10/26	31	4.8	2.3	1.0
Ga-Soy 17	18.8	8/8	10/19	29	4.0	1.3	1.0
Coker 237	18.2	8/5	10/12	27	5.4	1.3	1.0
Cobb	16.1	8/9	10/26	33	6.1	1.8	2.1
Forrest	15.9	7/27	9/28	24	2.5	1.2	1.1
Hutton	14.0	8/8	10/20	29	4.3	2.6	1.0

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 30. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 26, 1979-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Davis	17.3	8/16	10/16	21	2.5	1.4	1.3
McNair 700	17.1	8/14	10/18	20	3.1	1.1	1.0
Coker 156	16.9	8/13	10/17	19	2.4	1.1	1.0
Ransom	16.8	8/16	10/22	23	3.6	1.8	1.1
Agripro 70	16.6	8/17	10/22	26	3.8	1.4	1.1
Braxton	16.4	8/16	10/24	25	3.6	1.2	1.0
Coker 488	16.1	8/20	10/30	25	3.5	1.6	1.1
Centennial	15.9	8/13	10/23	23	3.1	1.6	1.1
Ga-Soy 17	15.8	8/17	10/23	24	2.8	1.6	1.0
Coker 237	14.9	8/14	10/19	22	3.5	1.0	1.3
Bragg	14.8	8/16	10/22	25	4.3	1.7	1.1
Terra Vig 708	14.7	8/15	10/25	23	3.6	1.5	1.4
Coker 338	14.0	8/19	11/3	24	4.9	1.8	1.0
Dowling	13.6	8/19	10/29	22	3.6	1.8	1.5
Cobb	13.5	8/20	10/29	25	4.3	1.5	2.4
Hutton	13.1	8/19	10/25	24	3.8	2.2	1.1
Forrest	10.4	8/9	10/16	18	2.5	1.4	1.3

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 31. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties, Planted May 16, 1978-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	28.2	-[3]	10/15	36	3.8	1.5	1.0
Coker 488	26.7	-[3]	10/20	36	4.2	1.3	1.0
McNair 500	26.6	7/8	9/16	26	1.9	1.2	1.5
McNair 710	26.5	-[3]	10/13	31	3.6	1.2	1.1
Agripro 70	26.0	-[3]	10/14	40	4.6	1.3	1.0
Coker 237	25.9	-[3]	10/4	31	3.3	1.1	1.3
Davis	25.8	-[3]	9/25	29	2.4	1.3	2.0
Ransom	25.6	-[3]	10/12	29	4.2	1.3	1.1
RA 700A	25.5	-[3]	10/15	38	4.8	2.0	1.7
McNair 600	25.4	-[3]	10/4	29	2.9	1.2	1.3
Tracy	25.2	-[3]	10/3	31	2.8	1.6	1.4
Coker 156	24.2	-[3]	10/3	28	2.8	1.0	1.0
Centennial	24.1	-[3]	10/8	31	2.3	1.4	1.1
N-K 100	23.6	7/5	9/13	24	2.3	1.0	1.9
Ga-Soy 17	23.6	-[3]	10/12	36	4.4	1.8	1.0
Dowling	23.3	-[3]	10/23	34	4.5	1.7	1.5
Terra Vig 708	22.9	-[3]	10/10	31	3.8	1.3	1.1
Cobb	22.8	-[3]	10/22	38	5.3	2.0	1.7
Essex	22.6	7/2	9/7	16	1.8	1.1	2.2
McNair 770	22.0	-[3]	10/5	29	2.9	1.1	1.3
Deltapine 506	21.7	-[3]	10/7	29	1.8	1.4	1.2
Bragg	21.6	-[3]	10/11	36	4.0	1.9	1.1
Coker 338	21.5	-[3]	10/19	33	4.1	1.5	1.0
Forrest	21.2	7/4	9/14	22	1.9	1.1	1.3
Lee 74	20.2	-[3]	10/6	22	1.9	1.0	1.3
Hutton	18.4	7/25	10/16	34	3.9	2.3	1.4

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.
[2]An explanation of data and ratings is given on page 4 of this report.
[3]No bloom data in 1978.

Table 32. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties, Planted June 8, 1978-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	27.8	8/4	10/22	32	4.8	1.1	1.0
Agripro 70	26.3	8/6	10/20	34	4.3	1.3	1.0
Coker 156	26.1	8/2	10/11	27	3.8	1.1	1.0
Terra Vig 708	25.6	8/3	10/19	30	3.9	1.5	1.1
Bragg	24.8	8/4	10/19	33	4.5	2.1	1.0
Ransom	24.4	8/3	10/19	28	4.3	1.3	1.0
Davis	24.2	8/3	10/6	29	2.9	1.5	2.0
Coker 338	24.2	8/7	10/31	34	4.8	2.0	1.0
Centennial	24.0	8/1	10/15	31	3.6	1.4	1.1
Ga-Soy 17	23.5	8/5	10/19	31	4.2	1.6	1.0
Coker 488	23.1	8/8	10/27	35	5.6	1.6	1.0
Coker 237	23.0	8/3	10/12	29	5.0	1.3	1.0
Dowling	22.0	8/7	10/28	33	5.2	1.8	1.1
Forrest	21.3	7/25	9/26	24	2.7	1.1	1.1
Cobb	19.4	8/8	10/30	36	6.6	1.9	1.8
Hutton	18.7	8/6	10/22	31	4.8	2.6	1.0

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 33. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties, Planted June 27, 1978-1980 on Black Belt Substation, Marion Junction.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 156	19.3	8/13	10/19	20	2.5	1.0	1.0
Braxton	19.1	8/16	10/29	26	4.1	1.1	1.0
Agripro 70	18.6	8/16	10/26	26	4.1	1.3	1.1
Coker 338	18.4	8/18	11/11	25	5.5	1.5	1.0
Terra Vig 708	18.3	8/15	11/1	25	3.8	1.3	1.3
Ga-Soy 17	17.6	8/16	10/26	25	3.0	1.4	1.0
Cobb	17.5	8/20	11/1	28	4.8	1.4	2.0
Bragg	17.3	8/15	10/25	27	4.6	1.6	1.1
Davis	16.7	8/15	10/18	21	2.7	1.3	1.3
Coker 488	16.3	8/19	11/4	25	3.6	1.4	1.1
Coker 237	15.8	8/14	10/22	21	3.4	1.0	1.2
Hutton	15.7	8/17	10/31	25	4.2	1.8	1.1
Centennial	15.5	8/13	10/24	23	3.3	1.4	1.1
Dowling	14.5	8/18	11/1	23	4.3	1.5	1.4
Ransom	13.6	8/15	10/26	21	3.0	1.5	1.1
Forrest	12.0	8/9	10/15	19	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 4 of this report.

Table 34. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 17, 1977-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 237	27.8	7/20[3]	10/7	31	3.1	1.1	1.3
Ransom	27.4	7/21[3]	10/15	29	3.8	1.2	1.1
Coker 488	27.2	7/27[3]	10/22	35	4.0	1.3	1.0
Agripro 70	27.2	7/30[3]	10/15	38	4.4	1.3	1.0
Coker 156	26.8	7/18[3]	10/6	27	2.9	1.0	1.0
RA 700A	26.7	7/28[3]	10/17	37	4.3	2.0	1.7
Davis	26.5	7/22[3]	9/28	28	2.7	1.2	2.0
Tracy	26.4	7/17[3]	10/4	30	2.9	1.7	1.4
McNair 600	26.3	7/20[3]	10/5	30	3.0	1.2	1.3
Ga-Soy 17	26.1	7/27[3]	10/14	36	4.4	1.7	1.0
Centennial	25.7	7/17[3]	10/9	30	2.4	1.3	1.1
Cobb	24.4	7/27[3]	10/25	37	4.7	1.8	1.7
Coker 338	24.2	7/28[3]	10/22	32	3.7	1.4	1.0
Deltapine 506	24.2	7/18[3]	10/9	29	2.0	1.4	1.2
Terra Vig 708	23.5	7/21[3]	10/12	29	3.7	1.2	1.1
Bragg	23.2	7/23[3]	10/14	36	3.9	1.8	1.1
Lee 74	22.0	7/18[3]	10/8	21	1.8	1.0	1.3
Hutton	21.1	7/25	10/18	33	3.9	1.9	1.4
Essex	20.6	7/4	9/9	16	1.7	1.1	2.2
Forrest	19.6	7/8	9/17	20	1.8	1.1	1.3

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

[2] An explanation of data and ratings is given on page 4 of this report.

[3] 1977, 1979 and 1980 bloom dates only.

Table 35. Four-Year Average 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]	1st bloom[2]	Maturity	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Four-Year Average Planting Date June 10, 1977-1980							
Coker 156	27.9	8/1	10/12	27	3.8	1.1	1.0
Ransom	27.0	8/3	10/21	28	4.1	1.2	1.0
Bragg	25.7	8/3	10/20	33	4.2	1.9	1.0
Centennial	25.4	7/31	10/14	30	3.6	1.4	1.1
Davis	24.5	8/2	10/8	27	2.9	1.4	2.0
Coker 338	24.4	8/7	10/31	33	4.2	1.9	1.0
Hutton	21.3	8/6	10/23	30	4.2	2.2	1.0
Forrest	20.5	7/25	9/28	22	2.4	1.1	1.1
Cobb	20.3	8/7	10/31	35	5.6	1.7	1.8
Four-Year Average Planting Date June 25, 1977-1980							
Bragg	19.0	8/15	10/25	26	4.1	1.5	1.1
Coker 338	18.8	8/18	11/10	25	4.8	1.4	1.0
Coker 156	17.6	8/13	10/21	20	2.3	1.0	1.0
Cobb	17.1	8/19	11/2	27	4.3	1.3	2.0
Davis	17.0	8/16	10/20	21	2.4	1.2	1.3
Centennial	15.6	8/14	10/25	22	2.8	1.3	1.1
Hutton	14.9	8/17	10/31	23	3.6	1.7	1.1
Ransom	13.8	8/15	10/30	20	2.7	1.4	1.1
Forrest	12.2	8/10	10/17	19	2.0	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 4 of this report.

Table 36. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 16, 1976-1980 on Black Belt Substation, Marion Junction

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 156	30.3	7/16[3]	10/7	28	3.0	1.0	1.0
McNair 600	29.2	7/18[3]	10/6	30	3.0	1.2	1.3
Centennial	28.5	7/16[3]	10/9	30	2.4	1.4	1.1
Tracy	28.3	7/16[3]	10/5	30	3.3	1.8	1.4
Ransom	28.3	7/20[3]	10/15	29	3.9	1.2	1.1
Davis	27.5	7/21[3]	9/28	28	2.5	1.2	2.0
Coker 338	26.5	7/26[3]	10/21	33	3.7	1.5	1.0
Cobb	25.5	7/27[3]	10/24	38	4.6	1.7	1.7
Lee 74	25.3	7/21[3]	10/8	23	2.3	1.2	1.3
Bragg	24.6	7/20[3]	10/13	35	4.0	1.8	1.1
Essex	24.3	7/5	9/10	17	1.8	1.1	2.2
Hutton	23.2	7/24	10/18	33	3.8	2.0	1.4
Forrest	22.6	7/9	9/18	22	2.0	1.1	1.3

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

[2] An explanation of data and ratings is given on page 4 of this report.

[3] Average of 1976, 1977, 1979 and 1980 bloom dates.

Table 37. 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]	1st bloom[2]	Maturity	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Five-year Average Planting Date June 6, 1976-1980							
Coker 156	30.5	7/30	10/13	29	3.8	1.2	1.0
Ransom	29.7	8/1	10/20	30	4.1	1.3	1.0
Bragg	27.2	8/2	10/19	35	4.0	2.0	1.0
Centennial	27.0	7/29	10/14	31	3.4	1.4	1.1
Davis	26.5	8/1	10/8	29	3.0	1.4	2.0
Coker 338	26.2	8/6	10/29	35	4.1	2.1	1.0
Hutton	24.0	8/4	10/21	32	4.2	2.4	1.0
Forrest	23.8	7/24	9/28	25	2.6	1.3	1.1
Cobb	22.7	8/6	10/30	36	5.4	1.8	1.8
Five-year Average Planting Date June 24, 1976-1980							
Coker 338	21.9	8/18	11/7	27	4.5	1.4	1.0
Bragg	21.8	8/14	10/25	27	3.9	1.5	1.1
Davis	20.9	8/15	10/21	23	2.2	1.2	1.3
Coker 156	20.8	8/11	10/21	22	2.3	1.0	1.0
Hutton	19.4	8/17	10/29	25	3.6	1.6	1.1
Cobb	19.2	8/18	11/2	29	4.5	1.2	2.0
Centennial	18.8	8/12	10/24	24	2.6	1.3	1.1
Forrest	17.3	8/9	10/15	21	2.1	1.2	1.2
Ransom	16.3	8/13	10/29	22	2.6	1.3	1.1

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 38. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 25, 1980 on Prattville Experiment Field, Prattville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Big D 483	16.4 a	7/10	9/14	35	4.5	1.1	4.0	2	1
Essex	13.9 b	7/13	9/26	24	4.0	1.0	2.0	2	1
RA 401	13.9 b	7/9	9/17	34	4.8	1.0	2.8	2	2
Ga-Soy 17	11.1 c	7/28	10/28	39	5.8	1.0	1.0	2	2
Coker 488	11.0 c-d	7/30	11/13	42	7.0	1.0	1.0	2	2
Coker 156	10.7 c-e	7/22	11/14	38	5.8	1.0	1.1	2	3
Braxton	10.6 c-e	7/27	11/10	38	6.0	1.0	1.0	2	4
Agripro 80	10.3 c-f	7/29	11/13	41	6.0	1.1	1.0	2	2
McNair 710	10.3 c-f	7/26	11/7	37	5.3	1.0	1.0	2	2
RA 800	10.1 c-g	7/22	10/28	35	6.3	1.3	1.0	2	2
RA 680	10.0 c-h	7/21	11/7	36	4.8	1.0	1.0	2	3
Dowling	9.8 c-i	7/30	11/8	38	6.3	1.0	1.0	2	2
Tracy	9.7 c-i	7/21	11/7	37	5.3	1.0	1.0	2	2
RA 701	9.7 c-i	7/24	11/7	38	5.5	1.0	1.0	2	2
Bragg	9.4 c-k	7/24	11/6	41	6.0	1.8	1.0	2	3
Hutton	9.4 c-k	7/28	11/12	39	5.8	1.1	1.0	2	2
Cobb	9.3 c-k	7/30	11/9	39	6.3	1.3	1.0	2	2
Coker 338	9.2 c-k	7/28	11/13	40	6.0	1.5	1.0	2	2
Centennial	9.2 c-k	7/22	10/31	36	5.8	1.1	1.0	2	3
Wright	8.9 c-l	7/26	11/9	36	5.5	1.4	1.0	2	2
RA 603	8.7 c-m	7/16	11/7	38	5.5	1.1	1.0	2	4
Terra Vig 600	8.7 c-m	7/23	11/6	35	6.0	1.0	1.0	2	2
Ransom	8.5 d-m	7/25	11/2	35	5.5	1.0	1.0	2	2
Deltapine 506	8.5 d-m	7/24	11/6	38	6.0	1.4	1.0	2	3
Coker 76-853	8.4 e-m	7/31	11/8	38	6.3	1.1	1.0	2	2
Tracy M	8.4 e-m	7/17	11/11	37	6.0	1.0	1.0	2	3
McNair 780	8.3 e-n	7/24	11/5	34	6.0	1.0	1.0	2	3
Agripro 71	8.3 e-n	7/24	11/9	37	5.5	1.5	1.0	2	2
Wilstar 790	8.2 e-n	7/24	11/9	39	6.0	1.1	1.0	2	3

Table 38 . Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
McNair 600	7.8 f-o	7/23	11/2	34	6.3	1.1	1.0	2	3
RA 700 A	7.7 g-o	8/1	11/9	42	6.3	1.0	1.0	2	2
Terra Vig 708	7.6 g-o	7/24	11/13	37	4.5	1.4	1.0	2	2
McNair 770	7.5 h-p	7/24	11/5	35	6.0	1.0	1.0	2	3
McNair 700	7.3 i-p	7/24	10/31	34	6.8	1.0	1.0	2	3
Agripro 70	7.1 j-p	8/1	11/9	42	6.5	1.0	1.0	2	2
Brysoy 9	7.1 k-p	7/22	10/24	34	5.8	1.6	1.0	2	3
Coker 237	6.9 k-p	7/23	11/1	35	5.3	1.0	1.0	2	2
Brooks	6.9 k-p	7/29	11/5	38	6.3	1.0	1.0	2	3
Lee 74	6.5 l-p	7/24	11/9	31	5.3	1.3	1.0	2	3
RA 604	6.4 l-q	7/18	10/13	32	6.3	1.0	1.0	2	3
Forrest	6.2 m-q	7/16	10/1	29	4.0	1.0	1.0	2	1
Bedford	5.9 n-q	7/17	10/1	32	6.5	1.3	1.0	2	1
N-K 100	5.7 o-q	7/15	9/29	29	3.8	1.0	1.0	2	1
Deltapine 403	5.6 o-q	7/17	10/5	31	4.8	1.1	1.0	2	1
Bay	5.5 o-q	7/15	10/3	28	3.5	1.0	1.0	2	1
D74-7741	5.0 p-r	7/15	9/27	29	5.0	1.5	1.0	2	2
Davis	4.3 q-r	7/25	10/7	35	7.0	1.0	1.0	2	1
McNair 500	3.0 r	7/19	10/5	33	3.8	1.1	1.0	2	1
Wilstar 550	2.8 r	7/20	10/3	31	4.0	1.3	1.0	2	1

C.V.% = 17.6 L.S.D.$_{.05}$ = 2.0

[1] Yield 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 4 of this report.

Table 39. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 20, 1979-1980 on Prattville Experiment Field, Prattville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
RA 401	21.4	7/2	9/9	31	3.8	1.0	2.4
Essex	17.7	7/8	9/17	22	3.9	1.0	2.5
Ga-Soy 17	14.8	7/24	10/24	38	6.8	1.1	1.0
Dowling	14.3	7/27	11/1	39	6.0	1.0	1.0
Braxton	13.7	7/22	11/1	39	6.4	1.0	1.0
Coker 488	13.1	7/26	11/3	41	7.0	1.0	1.0
Bay	12.8	7/10	9/23	28	3.5	1.0	1.1
RA 701	12.7	7/19	10/29	39	5.4	1.0	1.0
Cobb	12.6	7/27	11/2	40	6.1	1.3	1.0
Wright	12.6	7/22	10/28	38	5.8	1.3	1.0
Hutton	12.4	7/25	11/3	39	5.6	1.1	1.0
Bragg	12.3	7/20	10/27	40	6.8	1.4	1.0
Coker 338	12.2	7/23	11/3	39	6.3	1.4	1.0
Forrest	12.0	7/10	9/22	28	4.4	1.0	1.0
McNair 710	11.7	7/17	10/24	37	5.6	1.0	1.0
N-K 100	11.5	7/10	9/24	28	3.8	1.0	1.4
Centennial	11.5	7/16	10/21	36	5.3	1.1	1.0
Coker 76-853	11.5	7/25	10/29	37	6.6	1.1	1.0
RA 603	11.4	7/11	10/23	37	5.1	1.1	1.3
Coker 156	11.3	7/16	10/25	36	5.3	1.0	1.1
Agripro 70	11.3	7/28	10/29	44	6.8	1.1	1.0
Tracy M	11.3	7/13	10/21	35	4.8	1.1	1.0
RA 680	11.3	7/15	10/24	36	4.9	1.0	1.0

Table 39. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
McNair 780	11.1	7/21	10/25	36	6.0	1.0	1.0
Bedford	11.1	7/12	9/23	33	6.4	1.2	1.0
Tracy	10.9	7/15	10/22	35	4.9	1.1	1.0
D74-7741	10.9	7/12	9/22	31	5.0	1.3	1.0
Deltapine 506	10.7	7/17	10/25	37	4.9	1.3	1.0
RA 700A	10.4	7/28	10/30	43	7.0	1.1	1.0
Ransom	10.3	7/19	10/23	35	5.8	1.0	1.0
Terra Vig 600	10.3	7/19	10/19	36	5.8	1.0	1.0
Terra Vig 708	10.2	7/17	10/27	36	4.8	1.2	1.0
Brooks	9.9	7/25	10/27	40	7.0	1.1	1.0
RA 604	9.3	7/14	10/4	33	5.8	1.0	1.0
McNair 600	8.7	7/19	10/21	33	6.3	1.1	1.0
Coker 237	8.5	7/16	10/22	34	5.3	1.0	1.1
McNair 770	8.5	7/17	10/9	35	5.1	1.0	1.0
Lee 74	8.4	7/17	10/25	29	4.4	1.1	1.0
Davis	8.0	7/20	10/1	35	6.0	1.1	1.0
McNair 500	7.9	7/14	9/25	31	3.5	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 4 of this report.

Table 40. Three-Year Average for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 18, 1977-1980 on Prattville Experiment Field

Variety	Yield[1]	1st bloom[2]	Maturity	Plant ht.[2]	Ht. 1st pod[2]	Lodging	Shattering
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Essex	21.7	7/5	9/14	20	4.0	1.0	2.3
Forrest	17.0	7/8	9/19	28	4.6	1.0	1.3
N-K 100	15.4	7/7	9/19	28	4.1	1.1	1.6
D74-7741	15.3	7/10	9/22	30	5.4	1.4	1.2
Dowling	13.8	7/25	10/30	39	6.8	1.0	1.0
Braxton	13.7	7/20	10/27	38	6.3	1.0	1.0
Ga-Soy 17	13.6	7/22	10/22	39	6.8	1.1	1.0
Coker 156	13.1	7/13	10/17	33	4.4	1.0	1.0
McNair 710	13.1	7/17	10/20	36	5.3	1.1	1.0
Coker 488	13.0	7/24	10/30	40	7.3	1.0	1.0
McNair 500	12.7	7/11	9/20	31	4.4	1.5	1.3
Tracy	12.6	7/12	10/16	35	4.5	1.2	1.2
Coker 338	12.5	7/22	10/31	38	6.5	1.3	1.0
RA 680	12.4	7/12	10/15	35	4.2	1.0	1.0
Davis	12.1	7/18	9/28	35	6.2	1.5	1.3
Hutton	11.7	7/22	10/29	38	5.8	1.3	1.0
Cobb	11.6	7/25	10/30	41	6.8	1.3	1.0
Centennial	11.6	7/14	10/17	35	5.3	1.0	1.0
McNair 700	11.2	7/14	10/13	31	6.1	1.0	1.0
Bragg	11.1	7/18	10/22	40	6.4	1.3	1.0
Ransom	10.8	7/17	10/18	34	6.0	1.0	1.0
Terra Vig 708	10.7	7/15	10/21	35	5.1	1.1	1.0
Agripro 70	10.7	7/25	10/24	43	6.6	1.1	1.0
McNair 600	10.4	7/15	10/14	32	5.5	1.1	1.0
Lee 74	10.3	7/16	10/20	27	3.8	1.1	1.0
RA 700A	10.1	7/25	10/26	43	6.9	1.1	1.0
Deltapine 506	9.8	7/15	10/19	35	4.5	1.2	1.0
Coker 237	9.6	7/15	10/16	33	5.3	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 4 of this report.

Table 41. Four-Year Average for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 21, 1977-1980 on Prattville Experiment Field, Prattville

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Essex	22.6	7/7	9/11	20	3.5	1.0	2.3
Ga-Soy 17	18.9	7/25	10/22	41	6.9	1.3	1.0
Forrest	18.5	7/10	9/16	27	4.4	1.0	1.3
Coker 156	18.3	7/15	10/15	33	4.4	1.0	1.0
Tracy	17.0	7/13	10/12	36	4.5	1.5	1.2
Coker 488	17.0	7/25	10/29	42	7.2	1.1	1.0
Cobb	16.7	7/25	10/29	42	6.9	1.3	1.0
Bragg	16.7	7/20	10/21	41	6.6	1.4	1.0
Terra Vig 708	16.5	7/17	10/19	36	5.1	1.2	1.0
Hutton	16.2	7/23	10/28	39	5.9	1.4	1.0
Coker 338	16.2	7/23	10/30	40	6.4	1.5	1.0
Centennial	16.1	7/14	10/16	34	5.1	1.2	1.0
Lee 74	15.9	7/17	10/19	27	3.9	1.2	1.0
Ransom	15.9	7/18	10/18	36	6.0	1.2	1.0
Deltapine 506	15.9	7/17	10/18	36	4.6	1.4	1.0
Coker 237	15.8	7/17	10/16	34	5.3	1.0	1.1
Agripro 70	15.6	7/24	10/22	45	7.1	1.3	1.0
Davis	15.5	7/19	9/28	36	6.1	1.5	1.3
RA 700A	15.2	7/26	10/25	43	6.9	1.4	1.0
McNair 600	15.1	7/16	10/12	34	5.3	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 4 of this report.

Table 42. Five-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 26, 1976-1980 on Prattville Experiment Field, Prattville

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Essex	25.5	9/14	20	3.6	1.0	2.3
Coker 156	23.2	10/15	33	4.0	1.1	1.0
Cobb	22.1	10/26	41	6.4	1.6	1.0
Forrest	22.1	9/20	27	4.4	1.2	1.3
Ransom	21.9	10/18	35	5.8	1.4	1.0
Coker 338	21.9	10/27	39	5.9	1.7	1.0
Bragg	21.8	10/20	41	6.2	1.8	1.0
Davis	20.9	9/30	35	5.3	1.6	1.3
Lee 74	20.9	10/18	28	3.5	1.3	1.0
Hutton	20.9	10/25	39	5.3	1.9	1.0
McNair 600	20.7	10/12	34	4.7	1.6	1.0
Centennial	20.6	10/15	34	4.8	1.3	1.0
Tracy	20.2	10/12	35	3.9	1.5	1.2

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

[2] An explanation of data and ratings is given on page 4 of this report.

Southern Alabama

The tests in southern Alabama were on Benndale sandy loam at Brewton, Malbis fine sandy loam at Fairhope, Lucedale sandy loam at Monroeville, and Dothan sandy loam at Headland. Soybeans of Maturity Group VIII are full season varieties at the southern Alabama locations. For a full season variety to yield well it must have good rainfall during pod fill period (usually during September and early October). As can be seen from table 1, there was generally good rainfall at all southern locations; 4 of the 5 years at Brewton, 3 of the past 5 years at Headland, and all of the past 5 years at Fairhope. Because of excellent rainfall during pod fill over the past 5 years the leading 4 to 5 varieties at each location are Maturity Group VII or VIII varieties.

Full season Group VIII varieties Hutton, Coker 338, and Cobb have been consistent high yielders at both Brewton and Fairhope. Group VII varieties Ransom and Bragg were frequently among the five or six top yielding varieties in the southern locations for the past 5 years. Coker 156 has been the leading Group VI variety followed by Tracy, Centennial, and Davis, in southern locations. Varieties in earlier maturity groups such as Group V have consistently been the lower yielding entries over the past 4 of 5 years.

Recent entries that have performed well for the past 4 years were Agripro 70, Ga-Soy 17, and Coker 237 and Coker 448 at Brewton, Agripro 70, Coker 237, Ga-Soy 17, and Terra-Vig 708 at Fairhope. The entries that were the top 8 varieties for the past 3 years at Headland were Ga-Soy 17, Dowling, Coker 237, Coker 488, Cobb, McNair 710, Centennial and Bragg.

Table 43. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted June 2, 1980 on Brewton Experiment Field, Brewton

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Agripro 80	38.7 a	8/2	10/17	40	6.8	1.8	1.0	2	2
Coker 488	38.6 a	8/2	10/16	40	5.3	1.0	1.0	2	2
Hutton	38.4 a-b	7/31	10/16	36	5.3	1.5	1.0	2	1
Ga-Soy 17	37.7 a-c	7/29	10/12	38	6.3	1.0	1.0	2	1
Cobb	36.5 a-d	8/2	10/18	40	5.0	1.0	1.0	2	2
Braxton	36.4 a-d	7/29	10/14	35	5.3	1.0	1.0	2	2
Dowling	36.4 a-d	8/2	10/18	36	4.8	1.0	1.0	2	2
RA 800	36.4 a-d	7/29	10/16	34	5.0	1.3	1.0	2	2
Coker 338	35.9 a-e	7/31	10/18	38	5.5	1.0	1.0	2	3
Brooks	35.2 a-e	7/31	10/13	41	5.8	1.0	1.0	2	1
RA 680	33.5 a-f	7/26	10/7	33	4.3	1.0	1.0	2	1
Coker 156	33.3 a-f	7/25	10/7	28	4.3	1.0	1.5	2	2
Agripro 70	33.0 a-f	7/29	10/16	40	4.8	1.0	1.0	2	2
Deltapine 403	32.6 a-g	7/21	9/12	26	2.8	1.5	1.3	2	2
Bragg	32.4 a-g	7/29	10/14	36	5.0	1.0	1.0	2	2
McNair 700	32.3 a-g	7/28	10/10	30	5.8	1.0	1.0	3	2
Ransom	32.0 a-g	7/28	10/12	28	4.8	1.0	1.0	2	2
McNair 710	32.0 a-g	7/29	10/12	34	5.0	1.3	1.0	2	2
Terra Vig 708	32.0 a-g	7/29	10/14	33	4.8	1.0	1.0	3	2
McNair 600	31.9 a-g	7/23	10/4	31	4.8	1.0	1.3	3	2
Wright	31.9 a-g	7/29	10/13	37	6.3	1.3	1.0	2	2
Centennial	31.8 a-g	7/27	10/8	32	4.8	1.0	1.0	2	1
McNair 770	31.8 a-g	7/29	10/8	30	6.0	1.0	1.0	2	2

Table 43. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	Rating
Coker 76-853	30.8 a-g	7/31	10/12	32	4.8	1.0	1.0	2	1
Lee 74	30.2 a-g	7/26	10/10	26	4.3	1.0	1.0	2	2
Agripro 71	30.0 a-g	7/29	10/11	32	5.8	1.0	1.0	2	2
Coker 237	29.9 a-g	7/29	10/10	30	5.0	1.3	1.0	2	2
Forrest	29.5 a-g	7/15	9/12	25	2.5	1.3	1.0	4	3
N-K 100	29.5 a-g	7/15	9/12	23	3.0	1.3	2.0	2	2
Bay	29.2 a-g	7/15	9/12	26	2.3	1.0	2.0	3	2
RA 701	29.0 b-g	7/29	10/14	37	4.3	1.0	1.0	2	2
Essex	28.8 b-g	7/15	9/12	20	2.8	1.0	3.5	2	2
RA 700A	28.7 c-g	8/6	10/15	42	5.0	1.3	1.0	2	2
Davis	28.2 d-g	7/26	9/17	32	3.8	1.0	2.0	2	1
McNair 780	28.1 d-g	7/29	10/10	26	6.0	1.0	1.0	2	2
Tracy	27.7 d-g	7/22	10/6	32	4.5	1.5	2.5	2	2
Tracy M	26.9 e-g	7/23	10/5	26	4.3	1.0	2.8	3	2
RA 604	26.7 e-g	7/23	9/19	30	4.8	1.0	1.8	2	2
Bedford	25.4 f-g	7/21	9/12	26	3.3	1.0	2.5	4	2
RA 401	23.3 g	7/2	9/4	25	2.8	1.0	5.0	4	3
Big D 483	15.4 h	7/2	9/4	25	2.8	1.0	4.8	5	3
C.V.% = 17.3	L.S.D. .05 = 7.5								

[1] Yield 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 4 of this report.

Table 44. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 31, 1979 and 1980 on Brewton Experiment Field, Brewton

Variety	Yield[1]	1st bloom[2]	Maturity	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	41.1	7/27	10/13	34	5.0	1.4	1.0
Coker 237	40.4	7/27	10/11	30	4.8	1.6	1.0
Hutton	39.8	7/30	10/19	35	5.1	2.6	1.0
Dowling	39.4	8/2	10/23	37	4.6	2.4	1.0
Wright	39.4	7/27	10/12	35	5.3	1.9	1.0
Coker 488	38.9	8/1	10/16	40	5.3	1.8	1.0
Bragg	38.8	7/27	10/13	36	4.4	1.6	1.5
Ga-Soy 17	37.7	7/29	10/11	36	5.0	1.7	1.0
McNair 710	36.9	7/27	10/10	32	4.1	1.5	1.0
Cobb	36.8	8/3	10/23	40	4.5	1.9	1.0
Agripro 70	36.8	7/28	10/14	40	4.5	1.6	1.0
RA 680	36.7	7/24	10/6	34	5.5	1.5	1.0
McNair 770	36.2	7/27	10/7	31	5.4	1.6	1.0
Coker 76-853	36.2	7/30	10/13	32	5.3	1.4	1.0
Coker 156	35.8	7/24	10/7	30	5.1	1.4	1.3
McNair 700	35.8	7/26	10/10	28	4.9	1.3	1.0
RA 701	35.5	7/27	10/14	36	4.5	1.6	1.0
McNair 600	35.3	7/24	10/7	31	4.4	1.6	1.1
Centennial	34.8	7/24	10/7	33	6.4	1.5	1.5
Lee 74	33.6	7/24	10/9	26	3.8	1.9	1.0
Ransom	33.4	7/27	10/13	30	4.4	1.7	1.5
Coker 338	33.4	7/30	10/20	38	5.0	1.8	1.0
Tracy	32.5	7/22	10/5	32	4.9	1.9	2.3
Terra Vig 708	30.8	7/29	10/12	31	4.3	1.3	1.0
Davis	30.5	7/24	9/26	34	4.8	1.5	2.0
Forrest	30.2	7/15	9/17	26	3.4	1.5	2.0
Bedford	28.0	7/20	9/18	28	4.4	1.6	2.8

[1]Yields adjusted to 13% moisture and 60 pounds per bushel.
[2]An explanation of data and ratings is given on page 4 of this report.

Table 45. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 31, 1978-1980 on Brewton Experiment Field, Brewton

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Braxton	38.4	7/27	10/14	32	4.1	1.4	1.0
Dowling	38.4	8/1	10/23	38	4.1	2.0	1.0
Coker 488	37.5	8/1	10/17	36	4.3	1.5	1.0
Coker 237	36.9	7/26	10/10	26	3.8	1.4	1.1
Hutton	36.6	7/30	10/19	33	4.5	2.2	1.0
Cobb	35.5	8/3	10/23	39	4.1	1.7	1.0
Bragg	34.9	7/27	10/12	34	3.8	1.6	1.3
Ga-Soy 17	34.6	7/29	10/11	33	4.4	1.5	1.0
Agripro 70	34.4	7/29	10/13	37	3.8	1.4	1.0
McNair 770	34.4	7/26	10/7	27	4.3	1.4	1.0
Coker 156	34.2	7/23	10/5	27	4.2	1.3	1.2
McNair 710	34.1	7/27	10/10	29	3.8	1.3	1.0
Coker 338	33.1	7/30	10/19	34	4.3	1.6	1.0
Centennial	32.0	7/24	10/7	30	5.1	1.3	1.3
Ransom	31.7	7/27	10/12	27	4.0	1.5	1.3
Tracy	30.7	7/21	10/5	30	4.0	1.6	2.1
Lee 74	30.5	7/24	10/8	23	3.2	1.6	1.2
Davis	30.1	7/24	9/30	30	3.9	1.3	1.7
Terra Vig 708	29.9	7/28	10/11	28	3.7	1.2	1.1
Forrest	29.5	7/15	9/18	24	2.9	1.3	1.7

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 46. Four- and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Brewton Experiment Field, Brewton

Variety	Yield[1]	1st bloom[2]	Maturity	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Four-Year Average Early Planting Date May 31, 1977-1980							
Coker 237	43.3	7/25	10/12	28	3.5	1.0	1.1
Hutton	41.6	7/29	10/17	33	4.2	1.6	1.0
Coker 488	41.4	7/30	10/18	36	3.8	1.1	1.0
Cobb	41.2	8/2	10/24	38	3.8	1.3	1.0
Ga-Soy 17	40.2	7/28	10/11	33	4.1	1.1	1.0
Agripro 70	39.6	7/28	10/14	36	3.6	1.0	1.0
Bragg	39.4	7/26	10/13	34	3.6	1.2	1.3
Coker 156	39.3	7/22	10/6	27	3.8	1.0	1.2
Coker 338	37.5	7/29	10/20	34	3.9	1.3	1.0
Ransom	36.8	7/26	10/13	28	3.6	1.1	1.3
Centennial	36.0	7/22	10/7	31	4.6	1.0	1.3
Terra Vig 708	35.8	7/26	10/11	29	3.3	0.9	1.1
Davis	35.4	7/23	10/1	30	3.9	1.0	1.7
Tracy	35.0	7/20	10/5	30	3.8	1.3	2.1
Lee 74	34.5	7/23	10/8	24	3.0	1.2	1.2
Forrest	32.6	7/14	9/17	24	3.1	1.0	1.7
Five-Year Average Late Planting Date June 1, 1976-1980							
Hutton	43.1	7/30	10/18	34	4.0	1.5	1.0
Cobb	42.8	8/3	10/26	38	3.5	1.3	1.0
Bragg	40.8	7/27	10/14	35	3.6	1.2	1.3
Coker 156	39.9	7/23	10/7	27	3.3	1.0	1.2
Coker 338	39.4	7/30	10/20	34	3.7	1.2	1.0
Ransom	38.8	7/27	10/14	29	3.4	1.1	1.3
Centennial	36.0	7/24	10/8	31	4.0	1.0	1.3
Davis	35.6	7/25	10/3	30	3.7	1.0	1.7
Tracy	35.4	7/21	10/7	31	3.3	1.3	2.1
Lee 74	35.2	7/25	10/9	24	2.8	1.1	1.2
Forrest	33.3	7/17	9/18	25	3.0	1.0	1.7

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 47. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging[3/], Shattering, Seed Quality and Purple Stain of Soybean Varieties Planted June 10, 1980 on Gulf Coast Substation, Fairhope

Variety	Yield[1/]	1st bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Shattering[2/]	Seed quality[2/]	Purple Stain[2/]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
Coker 237	42.0 a	7/26	10/12	42	8.0	1.0	2	2
Braxton	41.2 a-b	7/28	10/18	39	7.5	1.0	2	2
Lee 74	37.2 a-c	7/26	10/11	33	7.8	1.0	2	2
Ransom	36.9 a-c	7/29	10/15	35	8.8	1.0	2	1
RA 701	36.9 a-c	7/27	10/16	37	9.0	1.0	2	2
Ga-Soy 17	36.5 a-c	7/30	10/15	43	8.5	1.0	2	1
McNair 710	36.3 a-c	7/30	10/15	40	7.5	1.0	3	2
Tracy	34.0 b-d	7/24	10/5	40	6.8	1.0	3	2
Coker 488	33.8 b-d	8/1	10/19	45	6.3	1.0	2	2
Agripro 71	33.8 b-d	7/27	10/10	39	6.5	1.0	2	2
Terra Vig 708	33.7 b-d	7/28	10/19	41	7.0	1.0	3	2
McNair 780	33.5 b-d	7/28	10/9	32	7.3	1.0	2	2
Hutton	33.1 b-d	8/1	10/19	42	7.8	1.0	2	2
Coker 156	33.1 b-d	7/25	10/5	38	7.3	1.0	2	2
Coker 76-853	33.1 b-d	8/1	10/14	40	8.3	1.0	2	2
McNair 700	32.7 c-d	7/27	10/9	36	9.8	1.0	2	2
Coker 338	32.3 c-d	8/1	10/21	41	8.5	1.0	2	4
Agripro 70	32.3 c-d	7/30	10/13	46	8.3	1.0	3	2
Deltapine 403	32.1 c-d	7/21	9/20	34	7.3	1.8	2	2
Cobb	32.0 c-d	8/1	10/20	46	8.3	1.0	2	2
Bragg	31.8 c-d	7/29	10/14	43	8.8	1.0	2	2
McNair 770	31.8 c-d	7/27	10/11	36	7.3	1.0	2	2
RA 800	31.8 c-d	7/31	10/19	40	8.3	1.0	2	2

Table 47. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Shattering[2]	Seed quality[2]	Purple Stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
McNair 600	31.6 c-d	7/26	10/5	39	7.0	1.0	2	2
Forrest	31.6 c-d	7/18	9/23	34	6.0	1.3	3	2
Essex	31.6 c-d	7/15	9/29	25	4.8	1.8	2	3
Centennial	31.6 c-d	7/26	10/10	36	7.0	1.0	2	2
Dowling	31.6 c-d	8/1	10/20	42	5.8	1.0	2	1
Wright	31.6 c-d	7/30	10/12	40	8.5	1.0	2	2
Bay	31.4 c-d	7/19	9/25	34	4.5	1.3	3	3
Davis	31.0 c-d	7/27	10/2	38	7.5	1.8	3	2
RA 604	31.0 c-d	7/24	10/3	38	8.0	1.0	2	3
Brooks	30.6 c-d	7/31	10/14	42	8.5	1.0	2	2
Agripro 80	30.3 c-e	8/4	10/17	46	8.8	1.0	2	3
N-K 100	30.1 c-e	7/16	9/22	34	5.3	2.0	2	2
Bedford	30.1 c-e	7/21	9/24	36	7.8	2.0	3	2
RA 700A	29.3 c-e	8/5	10/15	49	9.5	1.0	2	2
Tracy M	29.1 c-e	7/24	10/2	38	6.0	1.0	2	2
RA 680	26.5 d-e	7/27	10/3	36	7.5	1.0	2	2
RA 401	22.7 e-f	7/11	9/27	39	5.3	1.5	4	3
Big D 483	15.9 f	7/7	9/26	43	4.8	1.0	5+	4
C.V.% = 15.1	L.S.D.,05 = 6.7							

[1] Yield 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 4 of this report.
[3] Lodging not a problem in 1980.

Table 48 Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and shattering of Soybean Varieties Planted June 8, 1979-1980 on Gulf Coast Substation, Fairhope

Varitey	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 237	37.7	7/26	10/8	39	8.3	2.0	1.1
Braxton	36.0	7/28	10/14	39	8.1	2.1	1.0
Coker 156	35.0	7/25	10/2	36	5.8	2.0	1.0
Ransom	34.7	7/28	10/10	34	7.8	2.0	1.1
Lee 74	33.8	7/26	10/7	30	6.0	2.0	1.0
Terra Vig 708	33.5	7/27	10/13	40	6.3	2.0	1.1
Ga-Soy 17	33.3	7/29	10/12	43	7.9	2.3	1.0
RA 701	33.3	7/28	10/13	37	7.5	2.0	1.0
McNair 700	33.0	7/28	10/6	33	8.4	2.0	1.0
Tracy	32.7	7/23	10/2	38	4.8	2.0	1.1
McNair 710	32.6	7/28	10/10	37	6.4	2.0	1.0
McNair 600	31.5	7/26	10/4	36	6.0	2.3	1.3
McNair 780	31.4	7/29	10/9	35	5.6	2.0	1.0
Wright	31.4	7/30	10/11	38	7.1	2.0	1.0
Davis	31.3	7/27	10/1	37	6.6	2.0	1.4
Tracy M	31.3	7/24	9/29	37	5.4	2.1	1.1
McNair 770	31.2	6/26	10/6	35	6.6	2.0	1.0
Agripro 70	31.0	8/1	10/12	46	8.5	2.1	1.0

Table 48. Continued.

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Raging
Bedford	30.3	7/21	9/24	37	6.9	2.0	1.5
Coker 338	30.0	8/1	10/19	40	8.0	2.0	1.0
Coker 488	30.0	8/2	10/16	44	6.0	2.0	1.1
Coker 76-853	30.0	8/1	10/12	40	8.8	2.1	1.0
Forrest	29.9	7/18	9/23	34	5.1	2.1	1.1
Centennial	29.6	7/27	10/6	37	5.5	2.0	1.0
Bragg	29.5	7/29	10/11	40	8.9	2.0	1.1
RA 700A	29.5	8/3	10/13	45	8.9	2.0	1.1
Hutton	29.3	8/1	10/17	42	8.8	2.1	1.0
Dowling	28.1	8/1	10/19	42	6.0	2.1	1.0
RA 680	27.7	7/26	10/1	37	6.9	2.0	1.3
Brooks	26.8	8/1	10/12	43	8.5	2.1	1.3
Cobb	25.6	8/1	10/20	44	8.0	2.0	1.1

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

2/ An explanation of data and ratings is given on page 4 of this report.

Table 49. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted June 7, 1978-1980 on Gulf Coast Substation, Fairhope

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Coker 237	41.8	7/28	10/12	37	7.6	1.7	1.1
Coker 156	39.5	7/27	10/7	36	6.1	1.7	1.0
Ransom	39.4	7/30	10/16	35	7.7	1.7	1.1
McNair 700	37.6	7/29	10/14	33	7.8	1.7	1.1
Braxton	37.6	7/31	10/20	38	7.4	1.8	1.3
Ga-Soy 17	37.2	7/31	10/15	42	7.3	1.8	1.0
Terra Vig 708	36.8	7/28	10/19	38	6.4	1.7	1.3
Coker 488	35.8	8/4	10/20	43	6.4	1.7	1.2
Lee 74	35.6	7/28	10/11	31	5.7	1.7	1.1
McNair 710	35.6	7/30	10/15	37	6.3	1.7	1.2
McNair 770	35.6	7/28	10/11	35	6.7	1.7	1.1
Davis	35.4	7/30	10/6	37	6.5	1.7	1.3
Tracy	35.2	7/24	10/6	38	5.0	1.7	1.1
Coker 338	34.6	8/2	10/23	39	7.7	1.7	1.1
Hutton	34.4	8/2	10/22	41	8.0	1.8	1.2
Agripro 70	34.4	8/1	10/17	44	8.1	1.8	1.2
Dowling	34.0	8/4	10/25	41	6.3	1.8	1.0
Bragg	33.5	7/30	10/16	39	8.1	1.7	1.2
RA 700A	33.3	8/5	10/19	43	8.0	1.7	1.2
Cobb	33.2	8/4	10/25	42	7.3	1.7	1.1
Centennial	33.0	7/28	10/9	37	6.4	1.7	1.0
Forrest	31.3	7/20	9/29	33	5.3	1.8	1.2

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 50. Four- and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Gulf Coast Substation, Fairhope

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating
			Four-year Average Planting Date June 6, 1977-1980				
Coker 237	43.9	7/27	10/13	35	6.8	1.5	1.1
Ransom	41.6	7/29	10/16	33	6.9	1.5	1.1
Coker 156	41.2	7/25	10/7	32	5.3	1.5	1.0
Ga-Soy 17	39.8	7/29	10/16	39	6.7	1.6	1.0
Terra Vig 708	39.7	7/28	10/18	35	5.7	1.5	1.3
Agripro 70	38.6	7/31	10/17	41	7.2	1.6	1.2
Tracy	38.3	7/23	10/7	35	4.8	1.5	1.1
Coker 338	38.2	8/1	10/23	36	6.7	1.6	1.1
Davis	37.5	7/28	10/7	33	5.9	1.5	1.3
Lee 74	37.5	7/26	10/11	29	5.2	1.5	1.1
Bragg	37.1	7/29	10/16	37	7.3	1.5	1.2
Hutton	36.6	8/1	10/21	38	7.3	1.6	1.2
Coker 488	36.1	8/2	10/20	40	5.9	1.5	1.2
Centennial	35.8	7/26	10/9	35	5.8	1.5	1.0
Cobb	35.0	8/3	10/27	39	6.6	1.5	1.1
Forrest	33.2	7/19	9/28	29	4.5	1.6	1.2
			Five-year Average Planting Date June 5, 1976-1980				
Coker 156	42.9	7/25	10/9	32	5.2	1.4	1.0
Ransom	42.5	7/29	10/17	33	6.8	1.4	1.1
Coker 338	40.1	8/1	10/23	37	7.0	1.6	1.1
Bragg	39.7	7/28	10/16	37	7.4	1.6	1.2
Hutton	39.3	8/1	10/21	38	7.4	1.7	1.2
Tracy	38.9	7/23	10/8	35	5.0	1.6	1.1
Lee 74	38.9	7/26	10/12	30	5.5	1.4	1.1
Cobb	38.3	8/3	10/27	40	7.0	1.6	1.1
Davis	37.9	7/29	10/7	34	6.0	1.5	1.3
Centennial	36.7	7/26	10/10	35	5.8	1.4	1.0
Forrest	35.1	7/19	9/28	30	4.8	1.6	1.2

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 4 of this report.

Table 51. Yield, Maturity Date, Plant and First Pod Heights, Lodging[3/], Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 28, 1980 on Wiregrass Substation, Headland, (Not Irrigated)

Variety	Yield[1/] Bu./a.	Maturity[2/] Date	Plant ht.[2/] In.	Ht. 1st pod[2/] In.	Shattering[2/] Rating	Seed Quality[2/] Rating	Purple Stain[2/] Rating
Centennial	28.0 a	10/25	25	2.0	1.0	2	2
Coker 237	24.3 a-b	11/3	29	2.0	1.0	2	2
Brooks	24.3 a-b	10/30	38	3.3	1.0	2	2
Coker 156	24.2 a-b	10/31	24	1.5	1.0	2	2
Braxton	22.8 a-c	11/7	33	2.8	1.0	3	2
Coker 488	22.3 a-c	11/3	35	2.3	1.0	4	2
Dowling	22.0 a-c	11/5	32	2.8	1.0	3	3
Hutton	21.6 a-c	10/31	33	2.8	1.0	3	2
Coker 338	21.4 a-c	11/9	30	2.0	1.0	3	3
Tracy M	20.9 a-d	10/22	24	1.8	1.0	2	2
McNair 770	20.8 a-d	10/30	25	2.3	1.0	2	2
McNair 710	19.9 a-d	10/27	29	2.3	1.0	2	2
Ga-Soy 17	19.9 a-d	11/2	28	2.3	1.0	3	2
Cobb	19.4 a-d	11/5	35	3.0	1.0	3	3
Wright	19.4 a-d	11/1	29	2.3	1.0	2	2
RA 701	19.3 a-d	11/1	30	2.0	1.0	2	2
RA 700A	18.7 a-d	11/1	36	3.3	1.0	2	2
Tracy	18.6 a-d	11/4	26	2.0	1.5	2	2
Bay	18.6 a-d	10/3	21	1.8	2.0	3	2
Agripro 70	18.5 b-d	11/3	35	2.5	1.0	2	2
Bragg	18.1 b-d	10/31	31	2.8	1.0	2	2
McNair 780	18.0 b-d	10/28	24	2.0	1.5	2	2
Terra Vig 708	17.9 b-d	11/6	27	2.3	1.0	2	2

Table 51. Continued.

Variety	Yield[1/] Bu./a.	Maturity[2/] Date	Plant ht.[2/] In.	Ht. 1st pod[2/] In.	Shattering[2/] Rating	Seed Quality[2/] Rating	Purple Stain[2/] Rating
Essex	17.4 b-d	10/1	15	1.3	2.0	2	2
McNair 600	17.3 b-d	10/17	26	2.3	1.0	2	3
Agripro 80	17.3 b-d	11/9	34	3.0	1.0	3	2
Lee 74	17.2 b-d	10/27	18	1.5	1.0	2	3
RA 680	16.7 b-d	10/31	20	1.3	1.0	2	2
Davis	16.6 b-d	10/13	28	2.5	1.5	2	3
Forrest	16.5 b-d	10/1	18	1.8	1.3	2	3
Deltapine 403	16.4 b-d	10/1	19	2.0	1.3	2	2
Ransom	16.3 b-d	10/28	24	1.5	1.5	3	2
Agripro 71	16.2 b-d	11/1	26	2.0	1.0	2	2
Coker 76-853	16.1 b-d	10/28	27	1.8	1.5	2	2
RA 800	15.7 b-d	11/6	28	2.3	1.0	3	3
N-K 100	15.4 b-d	10/1	16	2.0	1.3	3	2
Bedford	15.0 b-d	10/3	27	3.3	1.0	2	2
RA 604	13.8 c-d	10/12	23	2.3	1.0	3	3
McNair 700	13.4 c-d	10/29	22	1.8	1.0	3	2
Big D 501	13.4 c-d	10/1	26	1.3	2.8	4	2
RA 401	11.5 d	10/2	23	1.3	3.3	4	2
C.V.% 29.4	L.S.D.$_{.05}$ = 7.6						

[1/] Yield 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 4 of this report.
[3/] Lodging was not a problem in 1980.

Table 52. Yield, Maturity Date, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, and Purple Stain of Soybean Varieties Planted May 28, 1980 on Wiregrass Substation, Headland, (Irrigated)

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Shattering[2]	Seed Quality[2]	Purple Stain[2]
	Bu./a.	Date	In.	In.	Rating	Rating	Rating
Davis	56.6 a	11/4	28	2.8	1.0	3	2
Bragg	53.6 a-b	11/4	31	2.5	1.0	2	2
McNair 700	53.6 a-b	11/4	32	2.8	1.0	2	2
McNair 710	53.3 a-b	11/3	32	2.3	1.0	2	2
Agripro 70	51.3 a-c	11/5	39	3.5	1.0	2	2
RA 680	50.7 a-c	11/4	32	2.0	1.0	2	2
Coker 156	49.4 a-d	11/4	27	2.0	1.5	2	2
McNair 600	49.3 a-d	11/4	27	2.3	1.0	3	2
Agripro 80	49.2 a-d	11/3	30	2.0	1.0	3	2
Dowling	48.9 a-d	11/6	30	2.5	1.0	3	2
RA 701	48.0 a-d	11/6	36	3.0	1.0	3	2
RA 604	48.0 a-d	11/4	25	2.3	1.0	2	2
RA 800	47.4 a-d	11/6	34	2.5	1.0	3	3
Tracy	47.2 a-d	11/4	29	2.3	2.3	3	2
Coker 338	46.4 a-d	11/8	29	2.3	1.0	4	3
Ransom	46.3 a-d	11/6	28	2.3	1.0	2	2
Centennial	46.2 a-d	11/5	28	2.0	1.0	3	3
Coker 237	45.9 a-d	11/4	29	2.5	1.0	3	2
Terra Vig 708	45.6 a-d	11/5	29	2.5	1.0	3	2
McNair 770	45.3 a-d	11/5	30	2.3	1.0	2	2
RA 700 A	44.9 a-e	11/6	37	2.8	1.0	2	2
McNair 780	44.7 a-e	11/3	28	2.0	1.0	2	2
Cobb	44.6 a-e	11/8	36	2.8	1.0	3	2
Hutton	44.5 a-e	11/6	35	2.8	1.0	2	2

Table 52. Continued.

Variety	Yield[1/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Shattering[2/]	Seed Quality[2/]	Purple Stain[2/]
	Bu./a.	Date	In.	In.	Rating	Rating	Rating
Braxton	43.8 a-e	11/5	35	3.0	1.0	2	2
Brooks	42.4 a-f	11/7	32	2.8	1.0	2	2
Deltapine 403	42.4 a-f	10/22	24	1.5	1.0	2	2
Coker 76-853	41.9 a-f	11/5	29	2.3	1.0	2	2
Wright	41.7 a-f	11/6	30	2.5	1.0	2	2
Agripro 71	41.3 a-f	11/6	31	2.5	1.0	2	2
Coker 488	40.8 b-f	11/5	33	2.5	1.0	2	2
Ga-Soy 17	40.2 b-g	11/9	30	3.0	1.0	2	2
Tracy M	38.8 b-g	11/4	26	2.0	2.3	5	2
Bedford	37.4 c-g	10/23	25	2.8	1.5	3	3
Bay	35.8 c-g	11/1	21	2.0	1.8	3	3
Forrest	35.7 c-g	10/15	21	1.5	1.0	3	2
Lee 74	35.1 d-g	11/5	19	1.8	1.0	3	2
N-K 100	29.8 e-h	11/1	23	2.0	1.5	2	2
Big D 501	28.2 f-h	10/16	32	2.0	1.0	4	3
Essex	26.0 g-h	10/29	19	1.5	1.3	5	3
RA 401	19.1 h	10/24	25	1.5	2.3	5^{+}	4
C.V.% = 20.5	L.S.D.$_{.05}$ = 12.4						

[1/] Yield 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 4 of this report.

Table 53. Two-Year Average for Yield, Maturity Date, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 5, 1979-1980 on Wiregrass Substation, Headland

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Dowling	26.4	11/7	34	4.5	1.0	1.0
Brooks	25.9	10/31	39	4.3	1.0	1.0
Cobb	25.8	11/6	35	4.4	1.0	1.0
Centennial	24.9	10/28	29	3.3	1.0	1.0
Coker 237	24.9	11/2	29	3.4	1.0	1.0
Ga-Soy 17	24.7	11/3	32	3.5	1.0	1.1
Coker 488	24.4	11/4	36	4.8	1.0	1.0
Braxton	24.4	11/6	34	3.9	1.0	1.1
Coker 156	24.2	11/5	27	2.6	1.0	1.1
RA 701	24.2	11/1	32	3.8	1.0	1.1
Hutton	23.5	11/2	35	5.4	1.0	1.1
McNair 710	22.9	10/30	33	3.4	1.0	1.0
Agripro 70	22.3	10/30	37	4.0	1.0	1.1
Coker 338	22.1	11/9	33	4.4	1.6	1.0
Wright	21.8	11/1	32	4.0	1.0	1.1
Bragg	21.7	11/1	33	4.8	1.0	1.1
RA 700A	21.0	11/1	36	4.0	1.0	1.0
McNair 700	20.8	11/2	26	3.0	1.0	1.1
Ransom	20.7	11/4	29	3.6	1.0	1.3
Davis	20.2	10/26	30	3.4	1.0	1.6
McNair 600	19.2	10/30	29	3.4	1.0	1.0
Tracy	18.8	11/4	27	3.3	1.0	1.9
Lee 74	18.8	11/2	21	2.5	1.0	1.0
Forrest	18.1	10/13	21	2.8	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 4 of this report.

Table 54. Three-Year Average for Yield, Maturity Date, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 2, 1978-1980 on Wiregrass Substation, Headland

Variety	Yield[1]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu./a.	Date	In.	In.	Rating	Rating
Ga-Soy 17	27.3	10/31	32	2.8	1.0	1.1
Dowling	27.3	11/4	33	3.5	1.0	1.0
Coker 237	26.7	10/25	29	2.8	1.0	1.0
Coker 488	26.0	11/1	34	3.8	1.0	1.0
Cobb	25.8	11/4	34	3.4	1.0	1.0
McNair 710	25.6	10/25	31	2.6	1.0	1.0
Centennial	25.3	10/21	29	2.6	1.0	1.0
Bragg	25.0	10/27	33	3.8	1.0	1.1
Hutton	24.8	10/31	33	3.9	1.0	1.1
Coker 156	24.7	10/27	25	2.1	1.0	1.1
Coker 338	24.6	11/5	32	3.5	1.4	1.0
Agripro 70	24.6	10/28	35	3.2	1.0	1.1
McNair 700	23.8	10/28	25	2.4	1.0	1.1
RA 700A	23.5	10/31	37	3.3	1.0	1.0
Ransom	23.4	10/29	28	2.9	1.0	1.2
Davis	21.9	10/21	29	2.7	1.0	1.4
Forrest	21.2	10/11	20	2.2	1.0	1.1
Tracy	21.1	10/27	29	2.6	1.0	1.6
Lee 74	20.7	10/26	20	2.0	1.0	1.0

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

[2] An explanation of data and ratings is given on page 4 of this report.

Table 55.

Seed Size of Soybean Varieties as Affected by Planting Date and Location when Grown in North Alabama in 1980

Variety	Maturity group	Seed size (g/100 seed)					
		Belle Mina	Crossville			Winfield	
		May 1	May 6	May 30	June 15	May 12	June 26
Big D 483	4	14.8	15.6	--	--	14.9	--
Big D 501	5	11.7	13.9	17.0	--	14.9	13.7
RA 401	4	10.3	11.1	14.9	15.2	12.7	13.5
RA 480	4	11.7	16.5	--	--	13.3	--
Bay	5	13.7	17.9	17.9	18.9	14.0	15.6
Bedford	5	10.3	12.6	12.5	12.0	11.2	10.1
Deltapine 345	5	10.9	14.9	15.1	14.7	12.3	12.6
Deltapine 403	5	10.9	15.0	16.2	16.0	12.2	13.4
Essex	5	10.4	12.4	14.1	14.9	11.9	12.2
Forrest	5	11.4	13.3	13.1	12.8	11.5	10.7
Gail	5	--	18.5	--	--	14.4	--
Green S-333	5	--	16.1	--	--	12.8	--
Green S-737	5	9.6	14.9	--	--	13.2	--
Green S-791	5	11.3	16.3	--	--	--	--
M-V 101	5	10.8	13.2	--	--	11.4	--
McNair 500	5	10.0	13.7	13.4	12.5	11.0	11.1
N-K 100	5	10.7	14.7	15.3	14.7	11.7	12.0
NAPB 505	5	10.8	13.3	--	--	11.6	--
RAX 17-79	5	13.3	--	--	--	13.4	--
Terra Vig 505	5	9.9	--	--	--	--	--
XP-5474	5	--	14.6	--	--	13.1	--
XP-5934	5	11.5	14.1	--	--	--	--
Centennial	6	11.8	15.2	14.3	14.5	12.5	13.6
Coker 156	6	10.4	14.9	15.0	15.7	12.1	12.9
D74-7741	6	10.7	14.5	--	--	12.3	--
Davis	6	10.8	17.9	18.2	15.5	14.3	15.1
Deltapine 439	6	10.1	13.8	--	--	11.9	--
Deltapine 506	6	11.6	14.5	14.9	15.4	12.8	13.4
Gold Kist 49	6	11.4	--	--	--	14.3	--
Lancer	6	11.6	16.2	--	--	13.2	--
Lee 74	6	10.7	15.1	15.3	14.8	12.3	12.7
McNair 600	6	9.6	14.7	15.5	15.4	13.9	12.5
NK X3268	6	11.1	--	--	--	13.9	--
NK X3272	6	9.5	14.4	--	--	--	--
NK X3282	6	--	14.8	--	--	13.8	--
RA 603	6	11.9	14.6	--	--	12.5	--
RA 604	6	11.3	14.9	15.6	15.6	12.7	13.5
RA 680	6	11.8	15.9	15.0	14.9	13.7	13.2
Terra Vig 606	6	10.8	16.0	--	--	13.5	--
Tracy	6	11.4	16.9	18.3	17.5	12.9	14.8
Tracy M	6	10.5	17.1	16.5	17.8	13.8	14.4
Bragg	7	11.2	15.8	--	--	14.2	--
Braxton	7	13.2	17.1	17.3	17.1	14.3	16.1
Coker 237	7	--	--	15.2	16.2	--	12.5
Hutton	8	12.8	16.9	17.1	17.9	14.3	15.2
Ransom	7	10.3	15.8	17.0	17.4	14.2	15.7

Table 56.
Seed Size of Soybean Varieties as Affected by Planting Date and Location when Grown in Central Alabama in 1980

Variety	Maturity group	Seed size (g/100 seed)			
		Prattville	Marion Junction		
		May 25	May 12	June 12	June 26
Big D 483	4	9.7	13.5	--	--
Big D 501	5	--	12.1	--	--
RA 407	4	11.3	12.3	--	--
Wilstar 550	4	9.8	--	--	--
Bay	5	12.2	13.8	--	--
Bedford	5	9.5	10.1	--	--
Deltapine 403	5	9.8	10.5	11.1	--
Essex	5	9.6	11.4	10.8	--
Forrest	5	10.1	10.7	10.4	10.2
McNair 500	5	9.6	9.5	--	--
N-K 100	5	9.7	10.6	--	--
Brysoy 9	6	13.9	11.3	--	--
Centennial	6	13.6	12.4	12.7	12.0
Coker 156	6	13.0	11.1	11.6	12.1
D74-7741	6	10.6	10.9	--	--
Davis	6	11.2	12.4	13.1	12.9
Deltapine 506	6	12.9	11.6	--	--
Lee 74	6	12.4	11.9	--	--
McNair 600	6	12.7	11.8	12.0	12.5
RA 603	6	12.9	11.4	--	--
RA 604	6	11.7	11.4	11.8	12.2
RA 680	6	13.9	12.1	12.9	13.4
Terra Vig 606	6	13.7	10.9	--	--
Tracy	6	13.1	14.0	--	--
Tracy M	6	13.0	13.4	14.3	13.7
Agripro 70	7	13.3	11.4	11.9	11.5
Agripro 71	7	13.9	11.3	--	--
Bragg	7	14.2	11.4	12.5	12.3
Braxton	7	16.2	13.5	14.3	13.9
Brooks	7	13.5	11.4	--	--
Coker 237	7	13.9	12.1	11.8	11.4
Coker 76-853	7	13.7	11.7	--	--
Ga-Soy 17	7	15.4	12.1	12.6	12.7
McNair 700	7	13.1	12.3	12.7	12.8
McNair 710	7	14.9	14.4	--	--
McNair 770	7	12.8	13.2	--	--
McNair 780	7	13.2	12.7	--	--
RA 700 A	7	14.6	12.3	--	--
RA 701	7	13.7	11.9	11.8	11.9
Ransom	7	13.7	12.9	13.1	13.3
Terra Vig 708	7	13.4	10.9	12.0	12.5
Wilstar 790	7	14.0	11.1	--	--
Wright	7	13.2	12.0	--	--
Agripro 80	8	16.6	12.6	--	--
Cobb	8	13.6	11.4	12.1	11.7
Coker 338	8	15.6	11.7	11.9	12.6
Coker 488	8	16.9	13.0	14.2	13.4
Dowling	8	15.7	13.3	13.3	12.5
Hutton	8	15.9	13.0	12.8	13.1
RA 800	8	13.6	11.9	--	--

Table 57.
Seed Size of Soybean Varieties as Affected by Planting Date and Location when Grown in South Alabama in 1980

Variety	Maturity group	Seed size (g/100 seed) Brewton June 2	Fairhope June 10	Headland May 28 Non-Irrigated	Headland May 28 Irrigated
Big D 483	4	17.0	14.6	--	--
Big D 501	5	--	--	13.8	15.6
RA 401	4	15.0	13.3	12.8	12.3
Bay	5	16.5	14.5	12.9	17.3
Bedford	5	10.9	10.6	10.5	14.0
Deltapine 403	5	12.6	11.9	11.8	17.1
Essex	5	14.5	11.4	12.1	13.5
Forrest	5	11.4	10.3	10.7	16.4
N-K 100	5	13.5	12.2	11.7	16.9
Centennial	6	13.0	13.1	15.5	15.5
Coker 156	6	11.1	11.0	13.9	15.1
Davis	6	13.0	12.7	13.0	16.4
Lee 74	6	12.3	12.8	13.5	16.2
McNair 600	6	11.2	11.8	13.4	15.6
RA 604	6	11.7	11.9	12.8	16.8
RA 680	6	12.6	10.6	14.9	16.2
Tracy	6	15.6	14.5	15.6	17.1
Tracy M	6	16.8	12.9	11.8	17.3
Agripro 70	7	13.2	11.4	13.6	14.1
Agripro 71	7	12.5	13.0	14.4	14.9
Bragg	7	14.0	12.9	12.8	15.9
Braxton	7	15.5	15.7	14.5	16.6
Brooks	7	13.0	12.1	13.5	14.4
Coker 237	7	12.1	14.1	15.0	15.9
Coker 76-853	7	13.6	15.8	15.8	14.9
Ga-Soy 17	7	14.7	13.5	13.2	14.9
McNair 700	7	12.7	11.9	13.4	17.5
McNair 710	7	16.2	15.8	13.7	15.3
McNair 770	7	12.4	13.2	13.8	15.8
McNair 780	7	12.2	12.3	14.3	15.8
RA 700A	7	14.7	13.6	15.0	14.9
RA 701	7	13.1	13.1	15.0	15.2
Ransom	7	13.6	14.9	14.6	17.5
Terra Vig 708	7	13.7	13.4	16.0	15.6
Wright	7	13.8	10.6	14.6	14.7
Agripro 80	8	15.5	13.8	15.0	16.9
Cobb	8	13.2	11.6	13.6	13.1
Coker 338	8	14.6	14.0	13.3	12.6
Coker 488	8	15.7	13.6	14.4	16.6
Dowling	8	13.6	12.4	13.1	12.9
Hutton	8	15.9	14.1	16.1	17.5
RA 800	8	12.6	11.5	13.1	15.3

Soybean Yields on Cyst Nematode Infested Fields

The soybean cyst nematode, Heterodera glycines, is a small microscopic round worm which attacks the root systems of soybeans, snap beans, lespedeza, common vetch, and lupine.

In July of 1972 the Alabama State Department of Agriculture and Industries indicated that the soybean cyst nematode had been found in a soybean field in Escambia County. By October, 1977 Dr. F.A. Gray of the Alabama Cooperative Extension Service had indicated the soybean cyst nematode had been found in soybean fields in 23 counties in Alabama.

In 1980, field tests using from 12-14 soybean varieties were placed on a field on which the soybean cyst nematode had been found on the Engle Farm near Summerdale in Baldwin County. The tests contain 4 replications of each variety at each location respectively, and plots were four rows wide with 36-inch row spacing and 23 feet long. The varieties or lines used are listed in tables 58 and 60. The varieties or lines that have resistance to the Race 3 cyst nematode are Centennial, RA 604, RA 680, D76-9665, and D77-6057 (Group VI maturity) and Bedford and Forrest (Group V maturity). Breeding lines of Group VII maturity that have resistance to race 3 are Coker's 79-498, 79-499, 79-501, and 79-502, Florida lines F 77-1965, and F 77-1790 and Delta Branch Experiment Station, Mississippi line D 77-7969. Breeding lines of Group VIII from Florida with resistance to Race 3 of cyst nematode were F 76-8827 (Foster), F 77-1797 and F 77-1840. Bedford and D 77-6057 are also resistant to Race 4 of the cyst nematode. The very low yields of some of the cyst resistant varieties, table 58, were due to a severe problem of peanut root-knot nematode Meloidogyne arenaria. The variety Centennial is not resistant to this root-knot nematode. Bedford and Forrest have fair resistance to this root-knot nematode but are not well

adapted to southern Alabama. One of the breeding lines, F77-1840 (Table 60), appears to have good resistance to the peanut root-knot as indicated by the yield.

Table 58. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Seed Quality, and Purple Stain of Soybean Varieties Planted June 11, 1980 on Engle Farm, Summerdale

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
Coker 79-499	19.9 a	8/7	10/17	29	5.3	1.0	2	1
Coker 79-498	17.8 a	8/3	10/11	29	6.3	1.0	3	1
RA 680	16.5 a	8/2	10/5	24	4.0	1.0	2	1
F768827	16.5 a	8/6	10/14	23	3.3	1.5	2	1
Centennial	15.9 a	8/2	10/7	25	5.3	1.3	2	2
Bedford	15.5 ab	7/29	9/22	25	6.0	1.0	2	2
RA 604	14.4 ab	8/1	9/29	24	5.8	1.0	2	1
Forrest	13.8 ab	7/26	9/18	22	4.8	1.0	2	1
RA 701	13.4 abc	8/3	10/14	26	5.0	1.0	2	1
Coker 79-501	13.4 abc	8/6	10/15	27	5.8	1.0	3	1
F768757	12.9 abc	8/4	10/12	26	5.5	1.0	2	1
Hutton	8.7 bcd	8/5	10/10	25	7.3	1.0	2	1
Braxton	6.8 cd	8/4	10/8	26	7.5	1.0	2	2
Coker 79-502	5.5 d	8/3	10/7	25	8.0	1.0	2	1

C.V.% = 12.5 $L.S.D._{.05}$ = 6.7

[1] Yield 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 4 of this report.

Table 59. Two and Three-Year Averages for Yield and Plant Height for Soybean Varieties and Lines Grown on Soybean Cyst and Root-Knot Infested Field on Engle Farm, Summerdale, Planted June 11, 1978-80

Variety	Yield[1/]		Plant ht.	
	Bu./a.		In.	
	1979-80	1978-80	1979-80	1978-80
Bedford	17.6	16.1	30	29
Centennial	16.3	15.7	28	30
Forrest	13.8	12.9	26	25
Braxton	8.0	6.0	31	30
Hutton	6.3	5.3	28	28
RA 701	11.6	--	28	--

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

Table 60. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Seed Quality, and Purple Stain of Soybean Varieties and Breeding Lines Planted June 11, 1980 on Engle Farm, Summerdale

Variety	Yield[1]	1st bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Seed quality[2]	Purple stain[2]
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating
F77-1840	26.0 a	8/4	10/17	29	4.3	1	2	1
D76-9665	18.7 b	8/2	10/7	24	3.7	1	2	1
F77-1797	18.7 b	8/5	10/20	25	4.3	1	2	2
Centennial	18.2 b	8/2	10/8	25	5.3	1	2	1
F77-1790	17.4 bc	8/5	10/20	27	4.0	1	2	1
F76-8827	16.4 bc	8/5	10/15	25	4.0	1	2	2
Govan	15.6 bc	8/5	10/10	18	3.7	1	2	2
F77-1965	15.4 bc	8/5	10/14	21	3.0	1	2	1
D77-7969	12.9 bcd	8/3	10/7	19	2.3	1	2	1
D77-6057	11.6 cd	8/1	10/2	24	7.3	1	3	2
Bragg	9.1 d	8/3	10/11	27	7.3	1	3	1
Braxton	8.8 d	8/3	10/9	24	5.3	1	3	2

C.V.% = 28 L.S.D.$_{.05}$ = 6.5

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

[2] An explanation of data and ratings is given on page 4 of this report.

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