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alabama soybean variety tests 1974

The following is a suggested list of varieties by planting dates for northern, central, and southern Alabama. Varieties are listed in order of maturity.

Northern Alabama

Plantings May 1 to 31
Dare, Essex, Forrest, Lee 68, Lee 74, McNair 600, Tracy, Davis

Plantings June 1 to 30
Dare, Forrest, Lee 68, Lee 74, Tracy, Davis, McNair 800, Bragg, Ransom

Central Alabama

Plantings April 20 to May 15
Dare, McNair 600, Lee 74, Davis, Tracy

Plantings May 16 to June 5
Lee 74, McNair 600, Tracy, Davis, McNair 800, Bragg, Ransom, Hampton 266A, Hutton

Plantings June 6 to 30
Davis, Bragg, Ransom, Hampton 266A, Hutton, Coker 338

Southern Alabama

Plantings May 15 to May 31
Lee 74, McNair 600, Tracy, Davis, Bragg, Ransom, McNair 800

Plantings June 1 to 30
Davis, Bragg, Ransom, McNair 800, Hampton 266A, Hutton, Cobb, Coker 338

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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. It is important that varieties from more than one maturity group be evaluated since soybeans are highly photoperiodic, the blooming period, period of pod development and fill, and maturity date of a particular variety do not vary greatly from year to year. 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 individual requirements.

EXPERIMENTAL PROCEDURES

All tests were conducted at outlying units of the Alabama Agricultural Experiment Station of Auburn University. A randomized block design with 4 replications was used at each of 8 locations. One to three planting dates were used at each location with the first plantings made at the optimal time for maximum yield. Plots were planted with regular commercial soybean planters equipped with a special seed hopper adapted for small plots. Plots were four rows wide and 30 feet long with 15 feet of two center rows harvested for yield determinations. Row width varied from 36 to 42 inches depending on location. Seeding rates were 10 viable seed per foot of row based on germination at 75°F.

The entires included in these tests were varieties released prior to 1974 and a number of unreleased strains in the late stages of development from the USDA Regional Testing Program. These strains were all yielding above standard varieties in their maturity group and have good nematode resistance.

DISCUSSION OF DATA

Since field plot research is subject to inherent fertility differences, and soil and soil moisture variations, it is not possible to determine the exact yield of a variety at a given location. Varietal performance may vary from year to year because of variation in rainfall, temperature, diseases, and nematodes. Therefore, long term studies are necessary in order to properly evaluate varietal performance.

Differences in the yield for 1 year's data, which may be due to chance, have been computed using Duncan's Multiple Range Test (5%) level of probability. Yields followed by a common letter are not considered to be different, however means not associated by a common

letter are considered to be different. Coefficients of variation (C.V.) are footnoted in the table. This value reflects the relative precision of the experiment, a small C.V. indicating more precision in estimating the relative performance of varieties.

SEASONAL CONDITIONS

Early season moisture was good at all locations and good stands were obtained in all tests. Due to a lack of moisture in the southern part of the State in late June and early July, plants were shorter than normal and lodging was not a problem in these tests. Lodging was, however, a problem in North Alabama at Belle Mina for the second straight year. This may be why the early maturing and shorter varieties produced higher yields at this location than the full season and later maturing varieties.

Later maturing varieties, Maturity Group VI, VII, and VIII, were also killed by frost, October 3, 1974, which occurred approximately 14 days before normal in North Alabama.

Late season moisture (Table 1) was good at all locations in the southern part of the State and resulted in yields of 47 to 62 bu/A for the better varieties planted at the optimum planting time. Table 1 also shows rainfall data from each location for the period August 15 through September 30 over the past 4 years.

Table 1. Rainfall by Location During the Period August 15 through September 30 for 1971, 1972, 1973, and 1974

Location	Rainfall from August 15 to September 30			
	1971	1972	1973	1974
	Inches	Inches	Inches	Inches
Black Belt Substation (Marion Junction)	8.59	3.85	4.88	9.87
Brewton Field (Brewton)	8.17	3.10	8.43	8.19
Gulf Coast Substation (Fairhope)	15.58	6.76	12.77	10.40
Prattville Field (Prattville)	7.65	4.20	2.95	10.12
Sand Mountain Substation (Crossville)	6.54	5.90	8.18	3.96
Upper Coastal Plain Substation (Winfield)	7.49	4.81	4.82	8.71
Tennessee Valley Substation (Belle Mina)	4.32	5.95	3.58	4.49
Wiregrass Substation (Headland)	-	-	6.26	8.73

DATA RECORDED

In order to select the proper variety many factors must be considered. The yield of a crop is the primary factor of production when profits are to be maximized. Other characteristics which are important are date of first bloom, plant height, height of 1st pod, maturity, lodging, shattering and size of quality seed. Also soybean varieties grown in this area are photoperiodic plants and therefore are effected by planting date.

Yield of soybeans was determined by cutting the two center rows of each plot and threshing with a plot thresher (or small plot combine). Plot yields were adjusted to 13% moisture and converted to bushel (60 lb.) per acre.

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.

Lodging was based on a scale of 1 to 5 according to the following criteria:

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.

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 follows:

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

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 to late harvesting and to excessive 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 - 4-8% purple staining
4 - 9 to 19% staining
5 - over 20% staining

VARIETY DATA

Soybean varieties grown in Alabama are in Maturity Groups V, VI, VII, and VIII. The following is a list of the varieties and strains with source of seed for 1974, tested over the past 5 years by maturity groups. For more information on these varieties, see Table 2, for additional information of other varieties see Bulletin 413. [1].

Very Early Varieties - Maturity Group V

Dare	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
Essex	" " " " " " "
Forrest	Sand Mountain Variety Test 1973
York	" " " " "

Early Varieties - Maturity Group VI

Davis	Sand Mountain Variety Test 1973
Hood	" " " " "
Lee 68	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
McNair 600	McNair Seed Co., Laurinburg, N. C.
Pickett 71	Sand Mountain Variety Test 1973
Tracy	USDA Delta Branch Experiment Station, Stoneville, Miss.
D64-4636*	Sand Mountain Variety Test 1973
FFR 666	Farmers Forage Research Corporation, W. Lafayette, Ind.
Coker 136	Coker's Pedigreed Seed Co., Hartsville, S. C.
Lee 74	Sand Mountain Variety Test 1973

Mid-season Varieties - Maturity Group VII

Bragg	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
McNair 600	McNair Seed Co., Laurinburg, N. C.
Ransom	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
FFR 777	Farmers Forage Research Corp., W. Lafayette, Ind.

1/Soybean production--Recent Research Findings, 1971 Auburn University Agricultural Experiment Station, Bulletin 413.

*Lines not released.

Late Varieties - Maturity Group VIII

Hampton 266A	Coker's Pedigreed Seed Co., Hartsville, S. C.
Hutton	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
Coker 338	Coker's Pedigreed Seed Co., Hartsville, S. C.
Coker 71-211*	Coker's Pedigreed Seed Co., Hartsville, S. C.
Cobb	Alabama Foundation Seed Stocks Farm, Thorsby, Al.
W-46	Wanimaker Seed Co.

*Lines not released

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

Group	Variety	Plant characteristics				Reaction to individual diseases[1/]					Nematode resistance		Registration[2/]	
		Pubescence	Flower color	Pod color	Hila color	Bacteria pustule	Wildfire	Target spot	Phytophthora rot	Purple seed stain	Cyst (Race 3)	root-knot	No.	Year
V	York	Gray	Purple	Lt. Tan	Buff	R	R	R	S	MR	S	S	70	1968
	Dare	Gray	White	Tan	Buff	R	R	R	MR	R	S	MR	50	1966
	Forrest	Tawny	White	Tan	Black	R	R	R	MR	MR	R	R	96	1973
	Essex	Gray	Purple	Tan	Buff	R	R	R	MR	R	S	S	97	1973
VI	Hood	Gray	Purple	Lt. Tan	Buff	R	R	R	S	MR	S	S	30	1960
	Davis	Gray	White	Lt. Tan	Buff	R	R	R	R	MR	S	S	56	1966
	Lee 68	Tawny	Purple	Tan	Black	R	R	R	VR	R	S	S	72	1968
	Pickett 71	Gray	Purple	Tan	Black	R	R	MR	R	R	R	S	87	1971
	McNair 600	Tawny	Purple	Lt. Tan	Black	R	R	R	S	R	S	R	-	-
	D64-4636	Gray	White	Tan	Buff	R	R	R	S	MR	S	R	-	-
	Tracy	Tawny	White	Tan	Black	R	R	R	R	-	S	S	105	1974
	Lee 74	Tawny	Purple	Tan	Black	R	R	R	VR	R	S	R	106	1975
VII	Bragg	Tawny	White	Tan	Black	R	R	R	R	S	S	R	43	1964
	McNair 800	Gray	White	Tan	Buff	R	R	R	S	S	S	S	-	-
	Ransom	Tawny	Purple	Tan	Black	R	R	R	MS	R	S	S	95	1972
VIII	Hampton 266A	Gray	Purple	Lt. Tan	Buff	R	R	MR	VS	S	S	S	47	1964
	Hutton	Brown	Purple	Tan	Black	R	R	R	S	S	S	R	100	1973
	Cobb	Gray	White	Tan	Buff	R	R	R	S	S	S	R	-	-

1/These are relative order of resistance: VR-very resistant; R-resistant; MR-moderately resistant; S-susceptible; VS-very susceptible. These are ratings given these varieties by the breeders - not based on Alabama performance alone.

2/Registration of varieties are in Agronomy Journal from 1958-1963 and Crop Science 1964-1973.

Table 3. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 14, 1974 at Black Belt Substation

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Tracy----------	48.0	a	7/07	10/03	30	2.5	1.4	1.3
Forrest----------	45.6	ab	7/07	9/17	30	4.0	1.0	1.0
Ransom----------	44.6	ab	7/10	10/13	28	4.3	1.1	1.4
Dare----------	44.6	ab	7/09	9/17	26	3.5	1.1	1.0
Coker 136--------	44.4	abc	7/11	9/22	32	4.8	1.5	1.0
Pickett 71-------	42.5	bcd	7/11	10/08	26	2.3	1.3	1.1
Davis----------	42.0	bcd	7/17	9/25	39	3.5	2.0	1.5
FFR 666----------	42.0	bcd	7/08	10/01	17	1.3	1.0	1.0
FFR 777----------	41.0	bcd	7/13	10/01	35	6.0	1.1	1.1
Hutton----------	40.1	bcd	7/18	10/17	37	5.3	1.9	1.0
McNair 600-------	40.0	bcd	7/07	10/02	29	4.3	1.0	1.0
McNair 800-------	39.9	bcd	7/24	10/11	34	5.3	1.8	1.0
Lee 74----------	38.8	cde	7/09	10/06	23	2.0	1.0	1.3
Essex----------	37.9	de	7/07	9/09	18	2.0	1.0	1.0
Hampton 266A-----	37.7	de	7/18	10/27	42	4.3	2.0	1.0
Bragg----------	36 9	de	7/11	10/12	39	6.8	1.0	1.0
Lee 68----------	34.0	e	7/09	10/11	19	1.3	1.0	1.3

C.V.% 8.7

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 3 of this report.

Table 4. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when planted June 18, 1974 at Black Belt Substation

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Coker 338	37.4	a	8/12	10/29	38	4.0	2.3	1
Tracy	36.1	ab	8/08	10/15	34	3.0	1.6	1
Davis	35.7	abc	8/13	10/19	35	3.8	1.3	1
Lee 74	35.2	abcd	8/10	10/15	30	2.8	2.1	1
Essex	33.3	abcde	8/03	10/03	26	4.0	1.0	1
McNair 600	32.5	bcdef	8/09	10/16	36	2.3	1.6	1
Ranson	32.3	bcdef	8/09	10/26	32	4.0	1.4	1
McNair 800	32.1	bcdef	8/17	10/15	32	3.8	1.4	1
Coker 136	31.0	cdefg	8/10	10/12	35	4.5	1.6	1
Bragg	30.8	defg	8/11	10/21	40	4.8	1.5	1
Hampton 266A	30.7	defg	8/16	11/01	38	6.0	2.3	1
Coker 71-211	30.7	defg	8/18	10/27	41	5.5	2.1	1
Lee 68	28.9	efg	8/11	10/19	28	2.3	1.3	1
Cobb	28.7	efg	8/19	11/04	44	4.5	1.8	1
Forrest	28.6	efg	8/07	10/11	30	3.8	1.5	1
Hutton	28.3	fg	8/15	10/25	31	3.8	1.1	1
Dare	26.5	g	8/04	10/08	28	3.0	1.0	1
W-46	26.3	g	8/18	10/27	40	4.8	2.3	1

C.V.% 9.4

1/ Yields adjusted to 13% moisture and 60 pounds per bushel. Yields with a common letter are not different ($P = 0.5$)

2/ An explanation of data and ratings is given on page 3 of this report

Table 5. Soybean Seed Quality and Size When Grown at Black Belt Substation, 1974

Variety	Planting dates: May 14, 1974 — Seed* quality Rating	Purple** stain Rating	Seed size g/100 seed	June 18, 1974 — Seed quality Rating	Purple stain Rating	Seed size g/100 seed
Essex	3	2	13.4	1	1	11.9
Davis	1	1	14.3	1	2	14.0
Bragg	1	1	14.3	1	1	13.8
Hutton	1	1	15.5	2	2	13.8
Dare	2	1	12.1	1	1	12.6
Forrest	2	1	11.7	1	1	11.1
Coker 136	2	2	13.8	1	1	14.2
FFR 666	1	2	13.0	***	***	***
FFR 777	1	1	13.5	***	***	***
Lee 68	1	1	14.5	1	1	12.4
Lee 74	1	1	14.0	1	1	12.9
Pickett 71	1	1	13.9	***	***	***
McNair 600	1	2	13.3	1	1	12.7
Tracy	2	2	18.3	2	2	16.7
McNair 800	1	1	12.3	1	1	10.6
Ransom	1	1	15.8	1	1	14.2
Hampton 266A	1	1	15.4	2	1	14.8
Cobb	***	***	***	1	1	12.4
Coker 71-211	***	***	***	2	1	14.3
W-46	***	***	***	1	1	10.5
Coker 338	***	***	***	2	1	13.9

*Seed quality is rated from 1 to 5 according to the following scale:
1 = very good 2 = good; 3 = fair 4 = poor; 5 = very poor.

**Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows:
1. No purple staining; 2. 1-3% purple staining; 3. 4-8% purple staining; 4. 9-19% purple staining
5. over 20% purple staining.

***Soybean varieties not in test.

Table 6. Two-Year Averages for Yield, Dates of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties Planted at Two Dates on Black Belt Substation During 1973 and 1974

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
			Average planting date May 15				
Coker 136	43.4	7/11	9/21	33	5.0	1.4	1.0
Davis	42.3	7/16	9/26	38	3.8	2.1	1.4
Forrest	42.0	7/10	9/17	29	3.6	1.3	1.0
Essex	41.1	7/09	9/14	21	2.3	1.2	1.3
McNair 600	40.0	7/10	10/01	30	3.6	1.1	1.0
Dare	39.4	7/11	9/17	28	3.6	1.4	1.1
Lee 68	37.6	7/10	10/04	26	2.1	1.4	1.1
Lee 74	37.5	7/11	10/03	28	3.3	1.6	1.1
Ransom	36.9	7/11	10/08	30	4.9	1.6	1.2
McNair 800	34.9	7/24	10/04	35	5.1	2.4	1.0
Bragg	34.5	7/12	10/05	39	5.8	1.4	1.0
Hampton 266A	31.3	7/20	10/28	43	7.0	1.9	1.0
			Average planting date June 23				
Davis	29.6	8/13	10/19	27	3.0	1.2	1.0
Bragg	26.8	8/12	10/21	31	3.6	1.6	1.0
Ransom	25.9	8/11	10/25	26	3.0	1.2	1.1
Hampton 266A	25.7	8/18	11/00	30	4.1	1.8	1.0
McNair 600	25.2	8/10	10/12	27	1.6	1.6	1.0
McNair 800	25.2	8/16	10/14	24	2.8	1.3	1.0
Essex	24.9	8/07	10/05	21	2.6	1.1	1.3
Lee 68	24.8	8/12	10/14	24	2.4	1.5	1.0
Hutton	24.8	8/16	10/24	27	4.1	1.5	1.0
Coker 136	24.1	8/10	10/09	28	3.4	1.3	1.0
Forrest	23.9	8/08	10/08	25	3.1	1.6	1.0
Dare	19.1	8/08	10/07	21	2.3	1.0	1.0

1/ Yields adjusted to 13% moisture and 60 pounds per bushel.
2/ An expalnation of data and ratings is given on page 3 of this report.

Table 7. Three-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties Planted at Two Planting Dates of Black Belt Substation 1972-74

Variety	Yield [1]	Maturity [2]	Plant ht. [2]	Ht. 1st pod [2]	Lodging [2]
	Bu/A	Date	In.	In.	Rating
			Average planting date May 15		
Forrest	43.3	9/19	30	3.5	1.5
Davis	42.2	9/27	40	3.6	2.1
McNair 600	41.4	10/03	32	3.4	1.4
Ransom	38.9	10/10	34	5.4	1.7
Lee 68	38.6	10/06	29	2.6	2.0
Dare	38.5	9/17	30	3.6	2.0
McNair 800	37.2	10/09	38	5.3	2.6
Bragg	37.0	10/09	40	5.8	1.9
Hampton 266A	30.5	10/24	43	7.0	2.7
			Average planting date June 25		
Davis	31.1	10/18	27	3.1	1.7
Bragg	28.5	10/21	32	4.1	2.2
McNair 800	28.2	10/16	25	3.1	1.7
Hampton 266A	28.1	11/03	31	4.6	2.2
Ransom	28.0	10/23	28	3.7	1.5
McNair 600	26.5	10/14	28	2.2	1.9
Hutton	26.0	10/24	28	4.1	2.0
Lee 68	25.8	10/15	25	2.8	2.0
Forrest	24.1	10/08	25	3.6	1.8
Dare	20.5	10/07	24	3.0	1.2

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

[2] An explanation of data and ratings is given on page 3 of this report

Table 8. Four- and Five-Year Averages for Yield of Soybean Varieties Grown at the Black Belt Substation[1/] At Two Planting Dates

Variety	Soybean yield by planting date			
	May 15		June 25	
	4-yr. 71-74	5-yr. 70-74	4-yr. 71-74	5-yr. 70-74
	Bu/A	Bu/A	Bu/A	Bu/A
McNair 600	40.5	38.2	25.3	23.4
Davis	41.1	37.8	29.6	26.8
Dare	38.4	37.1	21.1	20.2
Lee 68	37.5	36.5	24.6	22.1
McNair 800	35.8	33.4	26.1	24.2
Bragg	35.8	32.9	27.7	25.2
Hampton 266A	27.4	25.5	25.6	23.3
Ransom	39.4	----	28.1	----
Hutton	----	----	25.0	23.0

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

Table 9. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 28, 1974 at Brewton Experiment Field

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Coker 338	50.2 a	7/25	10/18	35	4.3	1	1
Hutton	49.8 a	7/27	10/16	34	5.5	1	1
Coker 71-211	48.1 ab	7/28	10/19	39	5.5	1	1
McNair 800	47.4 abc	7/30	10/09	33	4.5	1	1
Hampton 266A	46.2 abc	7/26	10/20	36	5.3	1	1
Davis	45.7 abc	7/27	10/06	36	4.0	1	1
Tracy	44.3 abcd	7/18	10/02	32	2.5	1	1
Ransom	43.6 abcd	7/20	10/13	29	4.8	1	1
D64-4636	42.5 abcde	7/18	9/30	26	2.3	1	1
McNair 600	42.0 abcde	7/17	10/06	26	2.3	1	1
Essex	41.3 abcde	7/11	9/24	21	3.3	1	1
Forrest	40.4 bcde	7/15	9/23	29	4.5	1	1
FFR 777	39.7 bcdef	7/22	10/06	31	5.5	1	1
Bragg	38.8 cdef	7/24	10/13	33	5.0	1	1
Lee 74	36.2 defg	7/19	10/07	21	1.8	1	1
Dare	36.1 defg	7/18	9/23	25	4.0	1	1
Pickett 71	34.5 efg	7/20	10/06	23	1.5	1	1
W-46	33.9 efg	8/02	10/15	37	6.0	1	1
Coker 136	32.1 fg	7/22	9/24	29	6.3	1	1
FFR 666	29.8 g	7/17	10/06	16	1.5	1	1
Lee 68	28.1 g	7/18	10/07	20	1.5	1	1

C. V.% 13.7

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 3 of this report.

Table 10. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted July 9, 1974 at Brewton Experiment Field

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Cobb	35.7	a	8/25	10/23	26	4.3	1	1
Davis & Bragg[3]	31.4	ab	8/20	10/17	20	2.5	1	1
Coker 71-211	31.2	ab	8/21	10/19	21	2.0	1	1
Davis	29.5	abc	8/21	10/17	20	2.5	1	1
D64-4636	27.5	bcd	8/18	10/13	18	2.8	1	1
Pickett 71	26.3	bcde	8/19	10/12	19	3.0	1	1
Coker 338	25.3	bcdef	8/19	10/18	20	2.5	1	1
Forrest	23.4	cdef	8/16	10/09	19	3.0	1	1
Hampton 266A	23.0	cdef	8/22	10/20	17	1.5	1	1
Essex	22.2	defg	8/12	10/07	15	1.5	1	1
McNair 600	22.1	defg	8/16	10/13	17	1.5	1	1
Lee 74 & Bragg[3]	21.8	defg	8/17	10/13	18	2.0	1	1
Lee 74	21.4	defg	8/16	10/13	16	1.8	1	1
Bragg	20.3	defg	8/19	10/14	18	2.3	1	1
McNair 800	20.0	efg	8/21	10/12	12	1.3	1	1
Tracy	19.9	efg	8/13	10/14	17	1.8	1	1
Ransom	19.5	efgh	8/20	10/16	17	1.8	1	1
Hutton	18.3	fghi	8/22	10/17	15	1.8	1	1
W-46	15.4	ghi	8/24	10/18	17	1.8	1	1
Dare	14.9	ghi	8/18	10/07	15	1.5	1	1
Coker 136	12.7	hi	8/20	10/09	14	2.0	1	1
Lee 68	12.0	i	8/16	10/13	14	1.3	1	1
C.V.%	19.6							

[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 3 of this report.

[3] Blends of 50% of each variety shown.

Table 11. Soybean Seed Quality and Size by Variety Where Grown at Brewton Experiment Field, 1974

Variety	Planting dates: May 28, 1974 — Seed quality* Rating	Purple** stain Rating	Seed size g/100 seed	July 9, 1974 — Seed quality Rating	Purple stain Rating	Seed size g/100 seed
Dare	2	1	15.5	2	1	13.3
Essex	1	1	14.5	1	2	14.7
Forrest	2	1	11.8	2	1	11.5
Coker 136	2	2	13.5	2	2	12.7
D64-4636	1	1	14.9	1	2	12.2
Pickett 71	1	1	11.8	1	1	13.4
Davis	3	1	15.0	1	1	14.3
Lee 68	1	2	12.9	1	1	13.7
Lee 74	1	1	14.7	2	1	14.4
FFR 666	1	2	13.5	***	***	***
McNair 600	1	1	13.7	2	2	14.5
Tracy	3	2	17.5	2	2	17.1
Bragg	1	1	15.3	2	1	14.2
McNair 800	1	1	12.7	2	1	12.3
Ransom	2	1	17.1	3	2	15.5
FFR 777	2	1	14.4	***	***	***
Hutton	1	1	17.4	2	1	16.9
Hampton 266A	1	1	15.8	2	1	17.0
Coker 338	1	1	15.7	3	1	15.3
Coker 71-211	1	1	15.1	2	2	16.3
W-46	1	1	11.0	1	1	11.7
Davis & Bragg	***	***	***	2	2	14.6
Lee 74 & Bragg	***	***	***	2	1	14.8
Cobb	***	***	***	1	1	14.0

*Seed quality is rated from 1 to 5 according to the following scale:
1 = very good; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

**Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows:
1. No purple staining; 2. 1-3% purple staining; 3. 4-8% purple staining; 4. 9-19% purple staining
5. Over 20% purple staining.

***Soybean varieties not in test.

Table 12. Two-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties when Planted May 29 at Brewton Field 1973-74

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Hutton	45.4	7/27	10/25	34	6.1	1	1.0
Coker 338	45.6	7/25	10/25	31	4.9	1	1.0
Coker 71-211	42.8	7/29	10/23	36	6.3	1	1.0
Ransom	41.1	7/21	10/20	27	4.6	1	1.0
McNair 800	40.9	8/02	10/11	31	5.0	1	1.0
Hampton 266A	40.5	7/28	10/24	35	6.4	1	1.0
Tracy	40.0	7/18	10/15	30	3.4	1	1.5
McNair 600	37.8	7/20	10/12	26	3.4	1	1.0
Bragg	37.5	7/22	10/18	33	5.5	1	1.0
Davis	36.6	7/27	10/13	32	4.5	1	1.5
Lee 74	35.9	7/19	10/13	23	2.6	1	1.0
D64-4636	34.2	7/18	10/05	25	3.6	1	1.0
Forrest	33.3	7/18	9/29	25	3.8	1	1.2
FFR 777	32.7	7/22	10/11	30	6.1	1	1.0
Pickett 71	32.6	7/20	10/15	24	2.8	1	1.0
Essex	32.6	7/15	10/01	20	3.8	1	1.5
Coker 136	29.3	7/22	9/29	28	6.5	1	1.3
Lee 68	28.1	7/19	10/15	21	2.4	1	1.0
FFR 666	27.6	7/18	10/15	19	2.5	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 3 of this report.

Table 13. Two-year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties When Planted July 2 at Brewton Field 1973-74

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Coker 71-211	34.3	8/18	10/25	28	4.9	1	1.0
Coker 338	31.0	8/16	10/24	27	4.8	1	1.0
Hampton 266A	27.3	8/18	10/23	26	5.3	1	1.0
Davis	27.2	8/17	10/18	26	4.8	1	1.4
Pickett 71	27.0	8/14	10/16	22	3.8	1	1.0
McNair 600	27.0	8/11	10/16	24	3.6	1	1.0
Hutton	26.6	8/18	10/23	23	4.0	1	1.0
D64-4636	26.0	8/12	10/11	22	4.4	1	1.0
Lee 74	24.8	8/13	10/20	21	3.1	1	1.0
Bragg	24.5	8/16	10/17	24	4.0	1	1.0
Forrest	23.9	8/11	10/08	23	4.1	1	1.0
McNair 800	22.8	8/17	10/18	18	3.0	1	1.0
Tracy	22.5	8/09	10/22	23	3.4	1	1.5
Ransom	20.8	8/15	10/25	21	3.0	1	1.0
Essex	20.4	8/08	10/09	18	2.3	1	1.5
Lee 68	20.3	8/12	10/14	20	3.5	1	1.0
Coker 136	19.1	8/15	10/08	21	4.8	1	1.3
Dare	17.1	8/14	10/06	20	3.1	1	1.6

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 3 of this report.

Table 15. Four- and Five-Year Averages for Yield of Soybean Varieties Grown on the Brewton Experiment Field[1/] At Two Planting Dates

Variety	Soybean yield by planting date			
	May 28		June 28	
	4-yr. 71-74	5-yr. 70-74	4-yr. 71-74	5-yr. 70-74
	Bu/A	Bu/A	Bu/A	Bu/A
Hutton	36.4	----	20.9	23.6
Ransom	35.0	----	20.0	----
McNair 800	33.9	----	20.3	23.8
Davis	33.2	35.9	23.7	26.1
Hampton 266A	32.8	33.4	22.5	26.8
McNair 600	32.6	----	23.6	26.4
Bragg	29.5	31.2	19.9	22.9
Lee 68	26.1	27.8	18.9	20.0
Dare	----	----	18.1	19.4

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

Table 16. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 30, 1974 at Gulf Coast Substation

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Hutton	61.1	a	7/22	10/20	36	4.8	1.8	1
Coker 338	57.9	ab	7/17	10/22	38	5.8	2.8	1
Tracy	57.8	ab	7/14	10/02	37	3.8	3.0	1
Ransom	57.6	abc	7/15	10/15	29	6.5	1.5	1
Lee 74	56.8	abcd	7/15	10/10	27	4.5	1.0	1
Bragg	55.2	bcde	7/15	10/15	42	6.3	2.0	1
McNair 600	54.4	bcde	7/15	10/09	37	4.0	2.3	1
Davis	53.6	bcde	7/22	10/07	37	5.3	3.0	1
McNair 800	52.8	bcdef	8/01	10/14	39	5.5	3.3	1
Forrest	52.7	bcdef	7/10	9/24	31	2.5	1.3	1
Pickett 71	52.3	bcdef	7/15	10/09	27	3.3	1.5	1
Cobb	51.5	cdefg	7/25	10/24	42	4.5	4.3	1
Hampton 266A	51.1	defg	7/29	10/21	42	5.5	3.8	1
Lee 68	50.6	efg	7/15	10/11	24	4.5	1.5	1
Coker 136	50.6	efg	7/17	9/26	37	4.3	1.3	1
FFR 777	49.4	efg	7/19	10/07	36	5.3	1.8	1
Dare	49.0	efg	7/10	9/24	30	3.5	1.0	1
W-46	47.2	fg	8/18	10/22	43	5.5	3.3	1
Coker 71-211	46.1	g	7/22	10/21	42	4.8	3.5	1
Essex	28.1	h	7/08	9/26	22	2.8	1.0	1.5

C.V.% 7.2

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

2/An explanation of data and ratings is given on page 3 of this report.

Table 17. Two-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties Planted June 5 at Gulf Coast Substation, 1973 and 1974

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Hutton	55.4	7/25	10/25	39	6.9	1.9	1.0
Coker 338	51.1	7/24	10/26	42	6.4	1.9	1.0
Davis	50.0	7/24	10/08	39	4.6	2.0	1.0
Lee 74	49.9	7/23	10/14	30	4.8	1.0	1.0
Ransom	49.9	7/20	10/22	32	6.3	1.3	1.0
Bragg	48.8	7/20	10/19	39	6.1	1.5	1.0
McNair 800	48.1	7/28	10/16	37	4.8	2.6	1.0
Hampton 266A	48.1	8/02	10/24	44	6.3	2.9	1.0
McNair 600	46.6	7/19	10/14	36	4.0	1.6	1.0
Coker 136	46.1	7/22	10/02	35	4.6	1.1	1.0
Lee 68	46.0	7/19	10/10	27	4.8	1.3	1.0
Coker 71-211	45.3	7/26	10/24	43	6.4	2.8	1.0
FFR 777	44.5	7/24	10/13	39	5.1	1.4	1.0
Forrest	43.9	7/20	9/30	31	3.3	1.1	1.0
Dare	43.6	7/16	9/29	27	3.3	1.0	1.0
Essex	35.0	7/15	10/02	23	2.9	1.0	1.3

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 3 of this report.

Table 18. Soybean Seed Quality and Size of Soybean Varieties when Planted May 30, 1974, at Gulf Coast Substation

Variety	Seed* quality Rating	Purple* stain Rating	Seed size g/100 seed
Dare	1	1	17.5
Essex	3	3	20.2
Forrest	1	1	15.8
Coker 136	1	2	17.3
Tracy	1	1	19.6
Pickett 71	1	1	14.8
Davis	1	1	17.3
Lee 68	1	1	16.8
Lee 74	1	1	16.2
FFR 777	1	1	15.4
McNair 600	1	1	16.3
Ransom	1	1	18.9
Bragg	1	1	18.0
McNair 800	1	1	17.7
Coker 338	1	1	18.8
Hampton 266A	1	1	17.9
Hutton	1	1	20.8
Coker 71-211	1	1	17.5
Cobb	1	1	16.0
W-46	1	1	14.8

* Seed quality is rated from 1 to 5 according to the following scale: 1 = very good; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

** Purple stain ratings are given to seed samples on scale of 1 to 5 as follows:

1 no purple staining
2 1-3% purple staining
3 4-8% purple staining
4 9-19% purple staining
5 over 20% purple staining

Table 19. Three-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties Planted June 4 at Gulf Coast Substation, 1972 through 1974

Variety	Yield[1/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu/A	Dates	In.	In.	Rating
Davis	46.4	10/04	38	4.9	1.7
Hutton	46.0	10/20	38	6.6	1.8
McNair 600	44.5	10/08	36	4.3	1.6
Ransom	43.9	10/14	34	6.3	1.2
Lee 68	43.5	10/05	26	4.7	1.2
Dare	43.3	9/26	28	3.6	1.0
McNair 800	43.2	10/11	36	5.1	2.1
Bragg	43.0	10/12	38	5.8	1.7
Hampton 266A	41.0	10/17	42	6.1	2.6

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

2/ An explanation of data and ratings is given on page 3 of this report.

Table 20. Four- and Five-Year Averages for Yield of Soybeans at Gulf Coast Substation 1970-74[1/] Planted June 5

Variety	4-yr. 71-74 Yield Bu/A	5-yr. 70-74 Yield Bu/A
Hutton	47.1	45.2
Davis	46.7	45.4
Ransom	46.3	-----
McNair 600	45.5	45.3
McNair 800	45.0	43.3
Bragg	44.7	44.8
Lee 68	44.3	44.3
Dare	43.6	41.1
Hampton 266A	42.3	41.3

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

Table 21. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 15, 1974 at Prattville Experiment Field

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Tracy	49.9	a	7/20	10/10	40	6.3	3.5	2.1
Ransom	47.2	ab	7/26	10/21	39	7.5	2.3	1.0
Davis	45.5	abc	7/26	10/05	39	5.8	3.3	1.0
Lee 74	45.4	abc	7/25	10/16	36	7.0	2.5	1.0
Forrest	45.0	abcd	7/16	9/25	37	5.0	1.6	1.0
D64-4636	44.8	bcd	7/18	9/30	33	3.8	2.0	1.0
Essex	44.6	bcde	7/15	9/23	26	4.8	1.0	1.0
Coker 136	43.4	bcdef	7/22	9/27	40	7.0	1.5	1.0
Hutton	43.4	bcdef	7/31	10/21	41	6.3	3.9	1.0
Hood	42.5	bcdef	7/23	9/30	36	4.3	3.4	1.0
McNair 600	42.4	bcdef	7/20	10/07	41	6.0	3.5	1.0
FFR 666	42.4	bcdef	7/19	10/09	30	4.0	1.6	1.0
Bragg	42.2	bcdef	7/27	10/18	45	8.3	4.4	1.0
Coker 338	42.2	bcdef	7/27	10/24	43	4.8	2.8	1.0
Cobb	41.9	bcdef	8/02	11/03	46	4.3	4.4	1.0
Lee 68	41.5	cdef	7/20	10/16	34	4.3	2.0	1.0
McNair 800	40.4	cdef	8/05	10/16	36	5.8	3.0	1.0
FFR 777	39.8	def	7/26	10/07	42	6.3	3.5	1.0
Dare	39.8	def	7/20	9/23	35	4.8	1.5	1.0
Coker 71-211	39.7	def	7/31	10/23	45	3.8	4.5	1.0
Hampton 266A	39.3	ef	7/31	10/23	44	4.5	3.4	1.0
W-46	38.3	f	8/05	10/23	47	3.5	3.9	1.0

C.V.% 7.7

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 3 of this report.

Table 22. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted June 18, 1974 at Prattville Experiment Field

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Cobb	39.1 a	8/13	11/07	38	5.3	3.0	1
Coker 71-211	35.9 ab	8/13	10/31	40	5.8	4.0	1
Forrest	35.3 abc	8/04	10/16	27	2.8	3.4	1
Davis	34.2 bcd	8/07	10/18	32	1.8	2.6	1
Bragg	33.0 bcde	8/07	10/29	34	5.0	3.3	1
McNair 800	33.0 bcde	8/14	10/17	27	2.8	2.1	1
Coker 338	32.9 bcde	8/10	10/31	37	4.8	2.9	1
McNair 600	32.4 bcde	8/07	10/25	32	3.0	2.1	1
D64-4636	32.0 bcdef	8/05	10/16	26	2.3	2.4	1
Hutton	31.8 bcdef	8/12	10/31	33	4.3	2.1	1
Hampton 266A	31.5 bcdef	8/13	10/31	37	4.8	4.0	1
Hood	31.2 bcdefg	8/05	10/16	28	1.3	3.9	1
Lee 74 & Bragg[3]	31.1 bcdefg	8/07	10/31	35	3.5	2.5	1
Essex	30.7 bcdefg	8/03	10/05	22	2.8	1.3	1
Dare	30.5 cdefg	8/03	10/05	25	3.3	1.5	1
W-46	30.0 cdefg	8/16	10/29	39	5.0	2.4	1
Tracy	29.9 defg	8/07	11/07	34	3.5	3.9	1
Coker 136	29.8 defg	8/07	10/16	30	2.8	2.5	1
Davis & Bragg[3]	28.1 efgh	8/07	10/30	34	3.0	2.8	1
Pickett 71	26.7 fgh	8/08	10/23	29	3.3	1.8	1
Lee 74	26.1 gh	8/07	11/05	27	2.8	1.5	1
Ransom	24.2 h	8/07	10/31	32	4.0	1.5	1
Lee 68	19.5 i	8/07	11/09	26	2.7	1.2	1
C.V.%	10.3						

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 3 of this report.

3/Blends of 50% of each vareity shown.

Table 23. Effect of Planting Date on Seed Stain, Quality, and Size of Soybeans Grown on Prattville Experiment Field, 1974

Variety	Planting dates: May 15, 1974 — Seed* quality Rating	Purple** stain Rating	Seed size g/100 seed	June 18, 1974 — Seed quality Rating	Purple stain Rating	Seed size g/100 seed
Dare	1	1	12.0	1	2	12.9
Essex	1	1	12.5	1	2	13.6
Forrest	2	1	12.2	2	1	12.4
Coker 136	1	1	12.7	1	1	15.3
D64-4636	1	1	13.6	1	1	13.4
Hood	2	1	13.2	2	1	16.2
Davis	1	1	14.4	1	1	14.3
Lee 68	1	1	12.4	1	1	14.7
Lee 74	1	1	12.0	1	1	14.3
FFR 666	1	1	13.0	***	***	***
McNair 600	1	1	11.9	1	2	14.2
Tracy	2	1	17.3	2	1	16.7
Bragg	1	1	13.5	1	1	15.4
McNair 800	1	1	11.4	1	1	10.9
Ransom	1	1	15.3	1	1	15.6
FFR 777	1	1	13.2	***	***	***
Hutton	1	1	15.7	1	1	17.5
Hampton 266A	2	1	14.9	2	1	17.0
Coker 338	1	1	15.4	2	1	17.2
Coker 71-211	2	1	14.5	1	1	17.0
Cobb	1	1	13.5	1	1	15.5
W-46	1	1	11.5	1	1	12.9
Davis & Bragg	***	***		2	1	15.1
Pickett 71	***	***		1	1	14.1
Lee 74 & Bragg	***	***		1	1	15.1

*Seed quality is rated from 1 to 5 according to the following scale: 1 = very good, 2 = good, 3 = fair, 4 = poor, 5 = very poor. **Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows: 1. No purple staining. 2. 1-3% purple staining. 3. 4-8% purple staining. 4. 9-20% purple staining. 5. over 20% purple staining.
***Soybean varieties not in test.

Table 24. Two-year Averages for Yield, Date of First Bloom, Date of Maturity, Plant and First Pod Height, and Lodging of Soybean Varieties Planted May 17 at Prattville Experiment Field

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Essex	35.4	7/11	9/18	23	3.3	1.0	2.3
Tracy	35.1	7/18	10/03	38	4.9	2.5	1.6
Davis	34.7	7/22	9/30	38	4.6	2.3	1.5
Forrest	34.0	7/12	9/19	31	3.5	1.3	1.5
Ransom	33.3	7/21	10/12	36	5.5	1.7	1.1
Coker 136	33.1	7/16	9/21	36	6.1	1.4	1.0
Lee 74	32.1	7/21	10/10	32	4.4	1.8	1.0
Hood	31.7	7/17	9/23	32	3.4	2.3	2.0
FFR 666	30.8	7/18	10/06	26	2.5	1.3	1.0
Hutton	30.4	7/25	10/17	40	6.0	2.7	1.0
Lee 68	30.2	7/16	10/10	31	3.3	1.5	1.0
Dare	30.1	7/14	9/21	30	3.6	1.3	1.9
McNair 600	29.4	7/16	10/02	36	4.5	2.3	1.0
Bragg	29.4	7/23	10/13	41	7.9	2.9	1.0
FFR 777	29.0	7/23	10/00	40	5.9	2.3	1.0
Coker 338	28.9	7/23	10/20	43	4.6	2.0	1.0
McNair 800	28.5	8/01	10/09	36	5.6	2.3	1.1
Coker 71-211	27.5	7/31	10/19	44	4.6	3.0	1.0
Hampton 266A	27.4	7/29	10/18	43	5.3	2.4	1.0

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 3 of this report.

Table 25. Two-Year Averages for Yield, Date of First Bloom, Date of Maturity, Plant and First Pod Height, Shattering and Lodging of Soybean Varieties Planted June 15 at Prattville Experiment Field, 1973-74

Variety	Yield[1]	1st Bloom[2]	Maturity	Plant ht.[2]	Ht. 1st Pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Forrest	28.1	8/01	10/03	28	3.4	2.2	1.4
Davis	25.9	8/05	10/09	32	3.4	1.8	1.0
Essex	25.8	7/30	9/28	21	3.3	1.1	2.3
McNair 600	25.6	8/05	10/15	33	3.0	1.6	1.0
Dare	25.6	8/01	9/31	26	3.3	1.3	1.5
Bragg	24.8	8/05	10/22	35	5.3	2.1	1.0
Hood	24.5	8/02	10/05	28	2.1	2.4	1.6
Coker 338	24.5	8/07	10/28	39	6.6	1.9	1.0
Coker 136	24.3	8/03	10/03	31	4.6	1.8	1.0
Coker 71-211	24.1	8/11	10/28	41	6.9	2.5	1.0
Tracy	23.9	8/03	10/22	34	3.6	1.9	2.8
Hutton	23.6	8/09	10/23	34	5.4	1.6	1.0
Hampton 266A	23.4	8/11	10/28	39	5.9	2.5	1.0
McNair 800	22.6	8/11	10/14	29	3.9	1.6	1.8
Lee 74	22.0	8/05	10/24	29	3.9	1.3	1.0
Pickett 71	21.5	8/06	10/16	29	4.1	1.4	1.4
Ransom	20.4	8/05	10/21	31	3.9	1.3	1.5
Lee 68	17.7	8/05	10/25	27	3.2	1.1	1.1

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

[2] An explanation of data and ratings is given on page 3 of this report.

Table 26. Three-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieties Planted at Two Dates at Prattville Experiment Field, 1972-74

Variety	Yield [1] Bu/A	Maturity [2] Date	Plant ht. [2] In.	Ht. 1st pod [2] In.	Lodging [2] Rating
		Three-year average planting date May 14			
Forrest	34.7	9/19	30	3.2	1.2
Davis	32.5	9/28	37	4.8	1.9
Hood	32.1	9/22	31	3.4	1.8
Tracy	31.5	10/04	35	4.4	2.0
Dare	30.8	9/20	29	3.3	1.2
FFR 666	28.0	10/01	27	2.8	1.2
McNair 600	27.2	10/01	34	4.3	1.8
Ransom	27.1	10/07	34	5.2	1.5
Lee 68	27.0	10/05	30	3.2	1.3
Hutton	25.4	10/16	38	5.6	2.2
McNair 800	24.7	10/09	36	5.6	1.9
Bragg	23.4	10/10	40	7.1	2.3
Hampton 266A	23.4	10/17	41	5.5	2.3
		Three-year average planting date June 19			
Forrest	25.9	10/07	28	3.0	2.6
Bragg	24.3	10/11	35	4.1	2.5
McNair 600	23.9	10/06	33	2.6	1.9
Hutton	23.7	10/26	34	4.3	2.1
Tracy	23.6	10/11	34	3.5	1.8
Davis	23.4	10/13	32	3.4	1.9
Hampton 266A	23.0	10/30	37	4.6	3.1
McNair 800	22.2	10/05	29	3.8	1.4
Hood	21.9	10/07	29	2.6	2.3
Dare	21.5	10/01	28	3.7	1.8
Ransom	20.5	10/14	31	3.6	1.3
Pickett 71	20.3	10/09	28	3.6	2.5
Lee 68	18.5	10/22	27	3.2	1.5

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

[2] An explanation of data and ratings is given on page 3 of this report.

Table 27. Four- and Five-Year Averages for Yield of Soybean Varieties Grown at Prattville Experiment Field 1970-74 At Two Planting Dates

	Soybean yield[1/] by planting date			
Variety	May 12 4-year 71-74	May 15 5-year 70-74	June 17 4-year 71-74	June 17 5-year 70-74
	Bu/A	Bu/A	Bu/A	Bu/A
Davis	35.5	37.1	27.5	29.9
Dare	33.4	35.4	24.6	27.2
Hood	33.4	34.5	25.2	27.3
McNair 600	32.4	33.4	28.3	29.8
Hutton	31.9	33.3	28.6	29.7
Lee 68	32.1	33.1	23.8	25.8
Bragg	29.6	31.0	28.5	29.8
McNair 800	29.4	30.3	26.2	26.7
Hampton 266A	28.6	24.4	27.4	27.6
Ransom	32.9	----	26.7	----

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

Table 29. Yield, Date of Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties Planted May 25, 1974 at Sand Mountain Substation

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Essex	36.8 a	7/31	9/30	30	7.5	2.1	1
Dare	36.0 ab	8/02	9/30	35	6.3	3.1	1
York	35.3 abc	7/31	3/	33	5.0	3.0	1
Ransom	35.1 abcd	8/07	3/	38	7.0	3.3	1
Forrest	33.5 abcde	7/31	9/30	37	6.8	3.9	1
Lee 74	33.1 abcde	8/09	3/	34	6.8	3.6	1
Lee 68	32.6 bcdef	8/09	3/	31	6.3	3.8	1
McNair 600	31.9 bcdef	8/09	3/	35	7.3	4.3	1
Tracy	31.8 cdefg	8/04	3/	36	6.3	3.5	1
Coker 136	31.6 cdefg	8/09	3/	37	8.0	2.6	1
FFR 666	31.3 cdefg	8/04	3/	33	5.8	4.5	1
Hood	31.0 defg	8/07	3/	36	7.0	3.0	1
FFR 777	30.6 efgh	8/09	3/	35	6.3	2.9	1
D64-4636	30.4 efgh	7/07	3/	33	7.5	3.0	1
Davis	29.4 efgh	8/14	3/	37	6.8	3.5	1
Bragg	28.4 fgh	8/09	3/	36	7.3	2.9	1
Hutton	27.6 gh	8/12	3/	37	7.8	3.9	1
McNair 800	26.6 h	8/16	3/	34	7.8	5.0	1
C.V.%	7.9						

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 3 of this report.

3/Beans killed by frost, Oct. 3.

Table 30. Yield, Date of Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties When Planted June 26, 1974 at Sand Mountain Substation

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Essex	31.9	a	8/20	3/	28	6.0	2.5	1
York	25.6	b	8/20	3/	28	5.0	3.5	1
Tracy	24.3	bc	8/20	3/	35	6.3	3.6	1
Coker 136	23.8	bc	8/20	3/	34	8.3	3.1	1
Forrest	23.0	bcd	8/20	3/	34	7.8	3.4	1
McNair 600	22.9	bcd	8/20	3/	35	5.8	3.3	1
D64-4636	21.6	bcde	8/20	3/	30	7.3	3.3	1
Lee 68	21.4	bcde	8/20	3/	33	7.0	3.1	1
Bragg	20.8	bcdef	8/20	3/	38	9.3	3.1	1
FFR 666	20.7	bcdef	8/20	3/	31	7.8	3.0	1
Dare	19.9	bcdefg	8/20	3/	31	5.3	3.5	1
Ransom	19.2	cdefg	8/20	3/	31	6.8	3.9	1
Lee 74	18.8	cdefg	8/20	3/	28	8.3	4.3	1
McNair 800	17.2	defg	8/20	3/	29	6.3	3.4	1
Davis	16.5	efgh	8/20	3/	34	6.8	2.9	1
Hood	15.2	fgh	8/20	3/	34	8.0	3.6	1
Hutton	14.0	gh	8/20	3/	25	5.5	4.0	1
FFR 777	10.9	h	8/20	3/	34	7.0	3.6	1

C.V.%12.5

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

2/An explanation of data and ratings is given on page 3 of this report.

3/Beans killed by frost October 3, 1974.

Table 31. Soybean Seed Quality and Size by Variety When Grown at Sand Mountain Substation, 1974

Variety	Planting dates: May 8, 1974 Seed* quality	May 8, 1974 Purple** stain	May 8, 1974 Seed size	May 25, 1974 Seed quality	May 25, 1974 Purple stain	May 25, 1974 Seed size
	Rating	Rating	g/100 seed	Rating	Rating	g/100 seed
Dare	1	1	12.8	1	1	13.0
Essex	1	1	15.7	1	1	12.9
Forrest	1	1	14.2	1	1	12.2
Coker 136	1	1	16.1	1	1	12.7
York	1	1	18.7	1	1	17.7
Hood	1	1	15.3	2	1	14.3
Davis	1	1	15.8	1	1	12.5
Lee 68	1	1	12.5	1	1	11.7
Lee 74	1	1	13.4	1	1	12.1
D64-4636	2	1	15.4	1	1	12.1
McNair 600	1	1	12.3	1	1	11.8
Tracy	1	2	18.7	1	1	12.4
Bragg	1	1	14.8	1	1	15.8
McNair 800	1	1	12.2	1	1	10.1
Ransom	1	1	14.8	2	1	13.6
FFR 666	1	1	14.0	1	1	12.1
Hutton	1	1	13.4	1	1	13.5
FFR 777	***	***	***	2	1	14.3

*Seed quality is rated from 1 to 5 according to the following scale:
1 = very good; 2 = good; 3 = fair; 4 = poor; 5 = very poor

**Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows:
1. No purple staining; 2. 1-3% purple staining; 3. 4-8% purple staining; 4. 9-19% purple staining
5. Over 20% purple staining

***Variety not in test.

Table 32. Two-Year Averages for Yield, Date of Maturity, Plant and First Pod Height and Lodging of Soybean Varieites Planted at Three Dates on Sand Mountain Substation 1973 and 1974

Variety	Yield[1] Bu/A	Maturity[2] Date	Plant ht.[2] In.	Ht. 1st pod[2] In.	Lodging[2] Rating	Shattering[2] Rating
			Average planting date May 11			
Tracy	38.8	10/02	31	3.3	3.5	1
Essex	38.7	9/21	23	4.0	1.0	1
Forrest	38.6	9/26	31	4.4	2.6	1
Coker 136	38.4	9/27	36	5.4	2.6	1
York	37.9	9/24	26	4.3	1.4	1
Dare	37.3	9/27	31	4.0	2.1	1
Lee 74	36.0	10/11[3]	33	6.9	1.8	1
Davis	35.7	10/04[3]	36	4.1	3.3	1
Ransom	34.8	10/05	31	6.0	2.1	1
Bragg	34.2	10/15	40	5.6	2.9	1
McNair 600	33.9	10/01	33	4.9	2.5	1
Lee 68	33.1	10/10	32	5.1	1.6	1
Hood	32.1	9/27	31	5.4	2.0	1
			Average planting date May 25			
Essex	35.6	9/24	26	4.8	1.6	1
Dare	35.0	9/28	32	4.6	2.1	1
Forrest	34.1	9/28	34	4.9	2.5	1
Coker 136	33.1	9/27[3]	36	6.0	1.8	1
Tracy	33.0	10/05[3]	33	4.1	2.8	1
Ransom	33.0	10/12[3]	34	5.3	2.1	1
McNair 600	32.9	10/06[3]	33	4.9	2.9	1
Lee 74	31.5	10/09[3]	31	5.1	2.9	1
Hutton	30.7	10/24[3]	33	5.1	2.9	1
Hood	30.3	10/01[3]	32	4.5	2.0	1
Bragg	29.6	10/15[3]	36	5.4	2.1	1
Davis	29.3	10/10[3]	35	5.0	2.8	1
D64-4636	28.7	10/01[3]	30	5.1	2.1	1
Lee 68	28.7	10/10[3]	28	4.6	2.4	1
			Average planting date June 21			
Essex	33.6	10/02[3]	25	5.3	1.8	1
Bragg	29.8	10/21[3]	38	8.6	2.7	1
Coker 136	28.1	10/08[3]	34	7.4	2.3	1
Forrest	28.0	10/04[3]	33	6.3	2.8	1
Ransom	27.6	10/22[3]	31	6.5	2.4	1
McNair 600	27.4	10/08[3]	34	4.8	2.3	1
Hutton	26.3	10/24[3]	29	6.5	3.0	1
Davis	26.1	10/23[3]	35	7.1	2.2	1
Dare	25.5	10/03[3]	31	4.9	2.4	1
Lee 68	24.6	10/14[3]	32	6.1	2.6	1
Lee 74	24.4	10/19[3]	30	7.6	4.1	1

[1] Yield adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 3 of this report.
[3] Frost killed beans 1974 on 10/3 - 1973 Maturity Dates are listed.

Table 33. Three-Year Averages for Yield, Date of Maturity, Plant and First Pod Heights and Lodging of Soybean Varieties Planted at Three Dates at Sand Mountain Substation, 1971, 1973, and 1974.

Variety	Yield [1]	Maturity [2]	Plant ht. [2]	Ht. 1st pod [2]	Lodging [2]
	Bu/A	Date	In.	In.	Rating
			Average planting date May 8		
Ransom	42.6	10/09	31	6.1	2.2
Dare	41.2	9/25	30	4.2	2.1
Davis	40.8	10/09[3]	37	5.2	3.0
Bragg	40.3	10/16[3]	41	6.2	3.2
York	40.2	9/25	25	3.6	1.3
McNair 600	39.9	10/03	33	4.4	2.6
Lee 68	39.6	10/09[3]	30	5.3	2.0
Hood	36.2	9/27	31	5.3	2.4
			Average planting date May 29		
Ransom	37.6	10/15[3]	36	6.5	2.5
McNair 600	36.5	10/07[3]	34	5.1	3.1
Dare	35.8	9/28	33	4.8	2.2
Bragg	35.0	10/16[3]	35	6.3	2.5
Davis	34.3	10/14[3]	35	5.8	3.0
Hood	34.2	10/14[3]	32	4.8	2.3
Lee 68	33.1	10/09[3]	31	5.1	2.9
			Average planting date June 24		
Ransom	31.4	10/20[3]	31	6.5	2.0
Bragg	30.5	10/21[3]	36	7.9	2.6
McNair 600	30.4	10/12[3]	34	4.7	2.3
Dare	30.3	10/08[3]	31	4.8	2.6
Davis	28.8	10/22[3]	35	6.3	2.3
Lee 68	27.3	10/23[3]	31	5.9	3.0

[1] Yield adjusted to 13% moisture and 60 pounds per bushel.
[2] An explanation of data and ratings is given on page 3 of this report.
[3] Average maturity for 1971 and 1973 as frost killed soybean on October 3, 1974.

Table 34. Four-, and Five-Year[2/] Averages for Yield[1/] of Soybean Varieties Grown at Sand Mountain Substation At Three Planting Dates

Variety	May 8 4-yr. 70-74	May 6 5-yr. 69-74	May 29 4-yr. 70-74	May 27 5-yr. 69-74	June 23 4-yr. 70-74	June 21 5-yr. 69-74
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Dare	43.9	42.9	36.4	35.2	31.7	29.0
Davis	42.7	41.6	35.1	34.7	30.3	28.1
York	42.5	41.2	----	----	----	----
Bragg	41.8	40.1	36.5	35.9	31.7	28.4
Lee 68	41.5	39.9	33.8	32.9	28.9	26.7
Hood	39.4	39.5	35.1	34.0	----	----
McNair 600	42.1	----	37.8	----	32.6	----

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

2/ These data do not include 1972 yield due to delayed harvest.

Table 35. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties When Planted May 9, 1974 at Tennessee Valley Substation

Variety	Yield[1/]		1st Bloom	Maturity	Plant ht.	Ht. 1st pod	Lodging	Shattering
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Essex	49.6	a	7/10	9/25	28	5.3	1.5	1
York	47.3	ab	7/08	9/30	34	5.5	2.9	1
Dare	45.8	ab	7/12	10/01	40	6.5	2.6	1
Forrest	45.2	ab	7/11	9/30	36	5.3	2.9	1
Tracy	44.1	b	7/08	*	40	7.0	3.6	1
Hood	39.2	c	7/17	10/05	40	7.3	4.3	1
Coker 136	38.5	c	7/15	10/04	44	9.0	2.1	1
McNair 600	37.1	cd	7/11	*	40	6.3	3.3	1
Lee 74	36.5	cde	7/16	*	35	7.3	4.3	1
Ransom	36.0	cde	7/16	*	37	8.3	2.5	1
FFR 666	35.5	cde	7/13	*	31	7.0	2.8	1
Lee 68	33.9	cdef	7/15	*	36	5.8	2.4	1
Hutton	33.1	def	7/25	*	39	7.3	4.5	1
Bragg	31.7	def	7/25	*	45	10.5	4.4	1
Davis	31.1	ef	7/25	*	43	7.5	4.8	1
McNair 800	29.7	f	7/25	*	36	10.0	5.0	1
FFR 777	29.1	f	7/22	*	44	8.8	4.4	1

C.V.% 9.1

*Frost killed soybeans Oct. 3, 1974.

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 3 of this report.

Table 36. Two-year Averages for Yield, Date of First Bloom, Date of Maturity, Plant and First Pod Height, and Lodging of Soybean Varieties Planted May 10 at Tennessee Valley Substation, 1973 and 1974

Variety	Yield[1]	1st Bloom[3]	Maturity[3]	Plant ht.[3]	Ht. 1st pod[3]	Lodging[3]	Shattering[3]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Essex	53.7	7/09	9/25	32	4.6	1.7	1
Forrest	52.2	7/11	9/27	34	4.4	2.4	1
York	51.7	7/09	9/28	33	4.5	2.3	1
Dare	50.2	7/14	9/28	37	5.3	2.4	1
Coker 136	47.0	7/15	10/01	41	7.0	1.7	1
Hood	43.3	7/17	10/03	37	6.1	3.6	1
McNair 600	42.0	7/13	10/07[2]	38	4.9	3.4	1
Lee 74	41.9	7/16	10/08[2]	36	7.1	4.0	1
Lee 68	41.4	7/14	10/07[2]	36	5.6	3.1	1
FFR 666	41.1	7/15	10/06[2]	33	6.5	2.9	1
Ransom	40.4	7/17	10/12[2]	38	7.1	2.8	1
Hutton	39.4	7/23	10/19[2]	40	6.9	4.4	1
Davis	38.6	7/23	10/11[2]	41	6.8	4.6	1
Bragg	38.4	7/22	10/13[2]	43	9.0	4.3	1
McNair 800	36.1	7/23	10/11[2]	38	8.3	4.5	1
FFR 777	32.8	7/20	10/06[2]	42	7.9	4.4	1

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/Maturity date for 1973 as frost killed soybeans Oct. 3, 1974.
3/An explanation of data and ratings is given on page 3 of this report.

Table 37. Three- and Four-Year Yield and Three-Year Averages for Date of Maturity, Plant Height and Lodging of Soybean Varieties Planted May 7 at Tennessee Valley Substation

Variety	Yield		Maturity[2]	Plant ht.[2]	Lodging[2]
	3-yr. Av.[1] 72-74	4-yr. Av. 71-74	Dates	In.	Rating
FFR 666	44.6	-----	10/12 [3]	34	3.5
Ransom	42.3	43.3	10/15 [3]	40	2.6
Davis	42.0	----	10/14 [3]	42	4.3
Bragg	39.9	41.4	10/15 [3]	45	3.9
McNair 800	36.8	40.3	10/14 [3]	38	4.2

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

2/ An explanation of data and ratings is given on page 3 of this report.

3/ Maturity dates 1971-1973. Frost killed soybeans October 3, 1974.

Table 38. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 7, 1974 at Upper Coastal Plain Substation

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Ransom	49.3 a	7/12	10/09	37	7.8	1.5	1
Lee 74	49.1 ab	7/12	10/07	33	7.8	2.3	1
Hampton 266A	48.4 abc	7/25	10/20	40	7.5	3.0	1
Hutton	46.1 abcd	7/18	10/23	32	6.8	2.3	1
Davis	45.8 abcd	7/23	10/07	44	9.0	2.5	1
Bragg	45.8 abcd	7/14	10/18	42	10.3	1.8	1
Pickett 71	45.5 abcd	7/15	10/08	30	6.0	2.5	1
Coker 338	45.4 abcd	7/15	10/25	37	7.8	3.0	1
Coker 71-211	45.1 abcd	7/23	10/23	41	7.3	3.0	1
Tracy	44.1 abcd	7/11	10/02	32	7.3	1.9	1
Cobb	43.5 abcd	7/28	10/28	46	10.0	2.3	1
Essex	42.9 abcd	7/10	9/18	26	4.0	1.0	1
Coker 136	42.6 abcd	7/12	10/01	38	6.8	1.3	1
McNair 600	42.2 abcd	7/11	10/02	34	6.3	1.3	1
Forrest	40.5 abcd	7/10	10/01	33	6.0	2.0	1
McNair 800	40.0 abcd	7/30	10/07	37	7.8	2.8	1
Hood	39.2 abcd	7/11	10/01	33	6.5	1.8	1
FFR 777	39.0 abcd	7/15	10/07	40	9.5	1.3	1
Lee 68	38.9 bcd	7/11	10/07	33	5.5	1.8	1
York	38.2 cd	7/10	9/18	29	4.8	1.5	1
Dare	37.2 d	7/11	9/28	30	5.3	1.3	1
FFR 666	36.1 d	7/11	10/04	28	5.3	1.5	1

C.V.%14.4

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 3 of this report.

Table 39. Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted June 14, 1974 at Upper Coastal Plain Substation

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Hampton 266A	41.8 a	8/19	10/28	42	7.5	3.8	1
Tracy	40.9 a	8/12	10/18	38	4.3	2.8	1
Forrest	40.5 a	8/05	10/08	36	5.8	2.5	1
Lee 74	40.2 a	8/12	10/18	34	5.5	3.3	1
Ransom	40.1 a	8/12	10/20	36	6.3	2.0	1
Essex	38.9 a	8/05	10/01	29	4.3	1.3	1
York	38.8 a	8/05	10/05	31	3.8	1.8	1
Coker 136	36.6 a	8/12	10/12	38	7.8	2.0	1
Dare	36.4 a	8/05	10/07	37	5.8	1.5	1
Hutton	36.0 a	8/16	10/18	35	6.3	2.3	1
Lee 74 & Bragg[3]	35.4 a	8/12	10/18	38	4.8	3.3	1
Bragg	35.3 a	8/14	10/20	45	6.3	2.8	1
Lee 68	34.8 a	8/10	10.18	31	4.3	2.3	1
Coker 71-211	34.5 a	8/21	10/28	43	6.0	3.8	1
Davis & Bragg[3]	34.2 a	8/15	10/18	41	5.3	2.5	1
Davis	33.4 a	8/16	10/18	39	4.3	2.5	1
McNair 600	33.2 a	8/12	10/10	38	6.5	2.3	1
Hood	33.1 a	8/10	10/07	37	4.0	1.8	1
Coker 338	33.0 a	8/15	10/28	44	7.5	3.3	1
McNair 800	32.6 a	8/23	10/18	37	5.8	2.3	1
Pickett 71	32.5 a	8/12	10/18	33	5.0	3.3	1
Cobb	32.1 a	8/24	10/28	48	8.5	3.0	1
W-46	27.6 a	8/23	10/25	44	7.3	4.0	1

C.V.% 15.6

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

2/An explanation of data and ratings is given on page 3 of this report.

3/ Blends of 50% of each variety shown.

Table 40. Soybean Seed Quality and Size by Variety Where Grown at Upper Coastal Plain Substation, 1974

Variety	Planting dates: May 7, 1974 Seed* quality Rating	May 7, 1974 Purple** stain Rating	May 7, 1974 Seed size g/100 seed	June 14, 1974 Seed quality Rating	June 14, 1974 Purple stain Rating	June 14, 1974 Seed size g/100 seed
Dare	1	1	13.3	1	1	15.4
Essex	1	1	11.7	1	1	14.2
Forrest	1	1	12.8	1	1	14.1
Coker 136	1	1	15.1	1	1	16.1
York	1	1	15.4	1	1	17.0
Hood	1	1	15.7	1	1	16.8
Davis	1	1	15.5	1	1	14.8
Lee 68	1	1	13.70	1	1	14.0
Lee 74	1	1	14.7	1	1	13.1
FFR 666	1	1	14.7	-	-	-
McNair 600	1	1	14.4	1	1	13.2
Tracy	1	1	18.0	2	1	16.8
Bragg	1	1	15.97	1	1	13.9
McNair 800	1	1	14.1	1	1	11.7
Ransom	1	1	17.6	1	1	14.8
FFR 777	1	1	15.5	-	-	-
Hutton	1	1	17.7	1	1	13.7
Hampton 266A	1	1	15.9	1	1	14.3
Coker 338	1	1	17.6	1	1	15.2
Coker 71-211	1	1	15.6	1	1	14.3
Cobb	1	1	14.5	1	1	12.1
Pickett 71	1	1	14.9	1	1	13.1
Davis & Bragg	-	-	-	1	1	14.7
Lee 74 & Bragg	-	-	-	1	1	13.5
W-46	-	-	-	1	1	10.8

*Seed quality is rated from 1 to 5 according to the following scale:
1 = very good; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

**Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows:
1. No purple staining; 2. 1-3% purple staining; 3. 4-8% purple staining; 4. 9-19% purple staining
5. over 20% purple staining.

Table 41. Two Year Average Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted May 16, 1973-74 at Upper Coastal Plain Substation

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Lee 74	45.0	7/17	10/06	32	7.0	2.4	1
Ransom	43.8	7/18	10/06	37	7.3	1.3	1
Davis	43.4	7/23	10/02	41	6.4	1.9	1
Tracy	43.3	7/17	9/30	33	5.8	1.4	1
Pickett 71	43.2	7/19	10/06	29	4.8	2.3	1
McNair 600	43.0	7/17	9/31	34	5.6	1.3	1
Coker 136	42.4	7/17	9/28	37	6.9	1.1	1
Forrest	42.3	7/13	9/27	33	5.9	1.6	1
Coker 338	40.6	7/19	10/17	38	6.3	2.3	1
Hood	40.2	7/17	9/28	32	5.4	1.4	1
Lee 68	40.0	7/17	10/03	33	5.4	1.6	1
Bragg	39.5	7/19	10/12	42	10.0	1.4	1
Hampton 266A	39.5	7/25	10/15	38	7.1	2.4	1
Hutton	39.1	7/21	10/15	36	8.3	1.9	1
Coker 71-211	39.0	7/23	10/16	40	7.0	2.4	1
Essex	38.9	7/13	9/18	27	4.3	1.0	1
FFR 666	38.1	7/17	9/31	28	4.9	1.4	1
McNair 800	38.1	7/30	10/06	38	7.6	2.1	1
York	37.8	7/13	9/18	29	4.0	1.3	1
FFR 777	37.0	7/19	10/06	38	8.8	1.3	1
Dare	35.3	7/13	9/26	29	5.1	1.1	1

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 3 of this report.

Table 42. Two-year Average Yield, Date of First Bloom and Maturity, Plant and First Pod Height, Lodging and Shattering of Soybean Varieties when Planted June 20, 1973-74 at Upper Coastal Plain Substation

Variety	Yield[1]	1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A	Dates	Dates	In.	In.	Rating	Rating
Essex	37.6	8/04	10/03	28	4.6	1.3	1.0
Lee 74	37.4	8/09	10/15	34	6.3	2.3	1.0
Forrest	36.9	8/04	10/06	34	5.4	1.8	1.0
Ransom	36.7	8/11	10/18	34	6.5	1.5	1.0
Tracy	36.5	8/11	10/13	35	5.4	2.3	1.3
York	36.0	8/04	10/05	29	4.0	1.4	1.0
Hampton 266A	34.7	8/19	10/25	41	7.1	2.5	1.0
McNair 600	34.1	8/11	10/09	37	5.0	1.8	1.0
Coker 136	34.0	8/11	10/09	37	7.6	1.5	1.0
Pickett 71	33.9	8/15	10/13	34	4.6	2.6	1.0
Coker 338	33.5	8/16	10/24	42	6.1	2.4	1.0
Dare	33.0	8/07	10/06	35	5.4	1.3	1.0
Hutton	31.6	8/13	10/17	35	7.3	1.6	1.0
Hood	31.3	8/14	10/08	35	5.6	1.4	1.0
Davis	31.2	8/17	10/13	37	4.5	1.9	1.0
Bragg	31.2	8/08	10/18	40	6.3	1.9	1.0
Lee 68	30.7	8/14	10/11	33	5.0	2.0	1.0
McNair 800	30.6	8/20	10/14	33	5.9	1.8	1.0
Coker 71-211	30.5	8/16	10/24	41	5.4	2.5	1.0

1/Yields adjusted to 13% moisture and 60 pounds per bushel.
2/An explanation of data and ratings is given on page 3 of this report.

Table 43. Three-Year Averages for Yield, Date of Maturity, Plant and First Pod Heights and Lodging of Soybean Varieties Planted at Two Dates at Upper Coastal Plain Substation, 1972-74

Variety	Yield [1]	Maturity [2]	Plant ht. [2]	Ht. 1st pod [2]	Lodging [2]
	Bu/A	Date	In.	In.	Rating
			Average planting date May 12		
Forrest	37.1	9/27	36	5.6	1.6
Hood	34.9	9/28	35	5.0	1.6
Pickett 71	34.8	10/07	32	4.7	2.0
McNair 600	34.4	9/29	37	5.4	1.2
Ransom	34.4	10/05	39	6.5	1.2
Davis	34.3	9/31	41	5.5	1.6
Hampton 266A	32.5	10/22	41	6.9	2.1
Lee 68	32.4	10/03	35	5.5	1.8
FFR 666	31.7	9/30	32	4.9	1.3
Bragg	31.6	10/14	45	9.0	1.3
Dare	31.6	9/26	34	4.8	1.3
Hutton	31.6	10/16	38	7.3	1.9
McNair 800	31.5	10/10	39	6.9	2.1
			Average planting date June 19		
Ransom	32.9	10/18	35	7.2	1.3
Forrest	32.7	10/07	34	5.5	1.7
McNair 600	31.4	10/09	36	5.4	1.5
Hampton 266A	30.7	10/29	41	6.3	2.6
Pickett 71	30.6	10/15	35	4.8	2.8
Davis	29.1	10/10	37	5.5	1.6
Dare	28.9	10/05	33	5.0	1.5
Hutton	28.9	10/20	35	7.2	1.8
Lee 68	28.7	10/14	33	5.2	2.2
Hood	28.3	10/08	33	5.0	1.5
Bragg	28.0	10/18	40	6.6	1.8
McNair 800	27.4	10/15	32	5.9	1.5

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

[2] An explanation of data and ratings is given on page 3 of this report.

Table 44. Four- and Five-Year Averages for Yield of Soybean Varieties Grown at the Upper Coastal Plain Substation[1/] At Two Planting Dates

	Soybean yield by planting date			
	May 15	May 13	June 22	June 20
Variety	4-yr. 71-74	5-yr. 70-74	4-yr. 71-74	5-yr. 70-74
	Bu/A	Bu/A	Bu/A	Bu/A
Dare	29.9	32.5	31.4	31.4
Pickett 71	32.2	31.1	32.6	32.1
Davis	32.2	30.8	33.0	32.8
McNair 600	33.4	30.8	33.5	32.4
Hood	32.3	30.1	31.6	32.0
Hutton	30.6	29.9	32.7	32.1
Bragg	30.4	29.8	30.8	30.0
Hampton 266A	30.8	29.1	34.4	33.3
Lee 68	31.0	28.8	31.2	30.6
McNair 800	29.6	28.5	29.7	29.7
Ransom	33.0	----	35.3	----

1/ Yield adjusted to 13% moisture and 60 pounds oer bushel.

Table 45. Yield, Date of First Bloom and Maturity Plant and First Pod Height, Lodging, and Shattering of Soybean Varieties when Planted May 13, 1974 at Wiregrass Substation

Variety	Yield[1]		1st Bloom[2]	Maturity[2]	Plant ht.[2]	Ht. 1st pod[2]	Lodging[2]	Shattering[2]
	Bu/A		Dates	Dates	In.	In.	Rating	Rating
Davis	46.9	a	7/15	10/05	38	3.3	2.4	1
McNair800	44.1	ab		10/11	34	3.8	1.8	1
Tracy	43.8	ab	7/10	10/05	29	1.8	1.9	1
Dare	43.3	ab	7/10	9/16	27	3.5	1.0	1
Coker 338	42.6	bc	7/12	10/18	34	3.3	2.3	1
McNair 600	42.2	bc	7/12	10/09	28	1.8	1.0	1
Essex	42.1	bc	7/10	9/16	21	2.3	1.0	1
Ransom	41.9	bc	7/13	10/14	27	3.0	1.0	1
Forrest	41.9	bc	7/10	9/16	28	3.0	1.3	1
Hutton	41.4	bc	7/15	10/17	37	4.5	2.3	1
Coker 71-211	40.9	bc	7/17	10/17	36	3.8	3.3	1
Pickett 71	40.6	bcd	7/14	10/08	24	2.3	1.0	1
Hampton 266A	40.1	bcde	7/17	10/17	36	5.0	3.0	1
Lee 74	39.8	bcde	7/15	10/09	23	1.3	1.0	1
Coker 136	39.7	bcde	7/12	9/13	34	5.5	1.4	1
Bragg	38.7	cde	7/13	10/13	32	3.0	1.4	1
D 63-4636	38.4	cde	7/12	9/20	26	1.3	1.1	1
Lee 68	36.4	de	7/15	10/12	17	1.3	1.0	1
Cobb	36.1	e	7/18	10/21	41	2.0	3.3	1
W-46	32.0	f		10/17	41	4.3	3.8	1

C.V.% 6.9

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 3 of this report.

Table 46. Soybean Seed Quality and Size by Variety When Grown at Wiregrass Substation, and Planted May 13, 1974

Variety	Seed* quality Rating	Purple** stain Rating	Seed size g/100 seed
Dare	3	2	17.7
Essex	3	2	19.3
Forest	3	2	16.1
Coker 136	2	2	15.8
K 64-4636	1	2	17.6
Pickett 71	1	1	15.8
Davis	1	2	18.4
Lee 68	1	1	17.5
Lee 74	1	2	16.7
Ransom	1	1	17.7
McNair 600	1	2	15.6
Tracy	2	2	19.1
Bragg	1	1	15.4
McNair 800	1	2	13.5
Hampton 266A	1	1	17.4
Coker 338	1	1	18.1
Hutton	1	1	20.2
Coker 71-211	1	1	16.6
Cobb	1	1	15.8
W-46	1	1	13.9

* Seed quality is rated from 1 to 5 according to the following scale: 1=very good; 2=good; 3=fair; 4=poor; 5=very poor.

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

1. No purple staining
2. 1-3% purple staining
3. 4-8% purple staining
4. 9-19% purple staining
5. over 20% purple staining

Table 47. Two Year Averages for Yield, Date of First Bloom, Date of Maturity, Plant and First Pod Height, and Lodging of Soybean Varieties Planted May 14 at Wiregrass Substation

Variety	Yield[1/]	1st Bloom[2/]	Maturity[2/]	Plant ht.[2/]	Ht. 1st pod[2/]	Lodging[2/]
	Bu/A	Dates	Dates	In.	In.	Rating
McNair 800	36.0		10/13	27	4.0	1.4
Dare	33.3	7/09	9/20	22	3.1	1.0
Coker 71-211	33.2	7/18	11/01	30	4.3	2.1
Davis	33.0	7/12	10/04	29	3.8	1.7
Bragg	33.0	7/12	10/29	28	4.1	1.2
Essex	32.8	7/08	9/20	18	2.5	1.0
Hutton	32.8	7/16	11/01	30	5.0	1.6
McNair 600	32.4	7/12	10/11	23	2.9	1.0
Hamtpon 266A	32.0	7/18	10/28	29	4.6	2.0
Ransom	31.3	7/12	10/23	23	3.5	1.0
Forrest	30.2	7/08	9/20	22	2.9	1.1
Coker 338	30.2	7/14	11/01	27	3.9	1.6
Lee 74	29.6	7/13	10/16	21	2.1	1.0
D64-4636	29.2	7/09	9/22	21	2.0	1.1
Lee 68	28.6	7/13	10/14	17	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 3 of this report.