E485

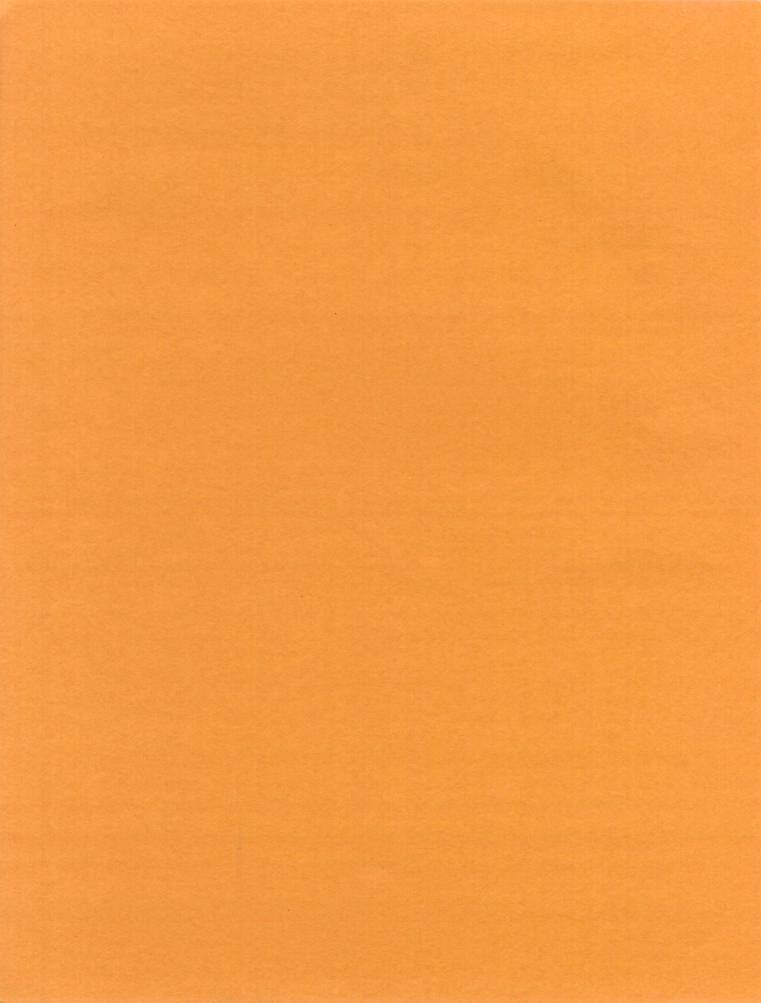
# ALABAMA SOYBEAN VARIETY TESTS 1972 LIBRARY MAY 2 1973

AUBURN UNIVERS

Donald L. Thurlow April 1973

Department of Agronomy and Soils Departmental Series No. 10

AGRICULTURAL EXPERIMENT STATION
AUBURN UNIVERSITY
R. Dennis Rouse, Director Auburn, Alabama



## INTRODUCTION

Before a soybean variety is considered for planting, it should be evaluated at a number of locations, planting dates, and over a period of years. This will tend to average the differences in soil and climatic conditions that occur throughout the State. The most critical factor in soybean production is moisture and the most critical moisture period is during pod development and filling. Since soybeans are highly photoperiodic the blooming period, period of pod development and fill, and maturity date of a particular variety does not vary greatly from year to year. Therefore, it is important that varieties from more than one maturity group be evaluated.

#### EXPERIMENTAL PROCEDURES

A randomized block design in 4 replications was used at each of 6 locations. One to three planting dates were used at each location with the first planting at the optimal time for maximum yield. All locations were on units of the Auburn University Agricultural Experiment Station. All plots were 4 rows wide and 20 feet long with 16 ft of 2 center rows harvested for yield determinations. All plots were planted with a John Deere Flexi Planter with double disc openers. Row width varied from 36 inches to 42 inches depending on location.

## SEASONAL CONDITIONS

Early in the 1972 season moisture was good and adequate stands were obtained at all plantings. Moisture was good during the early growth periods at all locations for the early planting dates. Severe drought conditions existed in 1972 during pod filling of mid to late season varieties at most locations. The 1972 season was similar to 1968 and 1969 for this respect.

Table 1. Rainfall by location during the period August 15 through September 25 for 1971 and 1972

Rainfall from August	15 to September 25
1971	1972
Inches	Inches
8.47	1.45
8.17	1.56
13.99	4.68
7.27	2.70
6.25	3.14
5.53	3.62
	1971 Inches 8.47 8.17 13.99 7.27 6.25

Table one indicates the big difference of rainfall for 1971 and 1972 at each location. The period of August 15 through September 25 is the period of pod development and fill for mid to full season varieties.

The very early varieties such as Dare were in the middle of pod filling by August 15 however Bragg had just finished blooming and was starting pod development.

Heavy rains caused delay in harvesting of some tests. The Sand Mountain varieties x date of planting test was not harvested until January 16, 1973. The early varieties for the first two planting dates in this test were severely shattered.

## DATA RECORDED

Yield of soybeans was determined by hand harvesting the 2 center rows of each plot and threshing with a plot thresher. The yields were adjusted to 13% moisture and converted to bushels (60 lb.) per acre.

Maturity was taken 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 notes were taken on the border rows 14 days after maturity. The estimates were based 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 over 20% shattering.

<u>Plant height</u> 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 pods from ground at time of 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 number of seed per bushel (60 lb.).

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 damage, and brightness. Much of the poor quality reported was due 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 to 8% purple staining.
- 4 9 to 19% purple staining.
- 5 over 20% purple staining.

#### VARIETY DATA

The entries included in these tests were varieties released prior to 1972 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 all have good nematode resistance.

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, Forrest, Hood, McNair 600, Lee 68 Davis
Plantings June 1 to 30
Dare, Forrest, Hood, Lee 68, Davis, McNair 800,
Bragg, Ransom

#### Central Alabama

Plantings April 20 to May 15
Dare, Hood, McNair 600, Lee 68, Davis
Plantings May 16 to June 5
McNair 600, Lee 68, Davis, McNair 800, Ransom, Hampton 266A, Hutton, Bragg
Plantings June 6 to 30
Davis, Bragg, Ransom, Hampton 266A, Hutton

#### Southern Alabama

Plantings May 15 to June 1
Lee 68, Hood, Davis, McNair 600, Bragg, Ransom,
McNair 800
Plantings June 2 to 30
Davis, Bragg, Ransom, McNair 800, Hampton 266A
Hutton

Soybean varieties grown in Alabama fall in Maturity Groups V, VI, VII, and VIII. The following is a list of the varieties and strains, with source of seed, tested over the past 5 years by maturity groups. For more information on these varieties, see Table 2. For information of other varieties see Bulletin 413.1

# Very Early Varieties - Maturity Croup V

Dare
Alabama Foundation Seed Stock Farm, Thorsby, Ala.
Forrest (D68-128)
USDA Delta Branch Experiment Station, Stoneville,
Miss.

# Early Varieties - Maturity Group VI

Alabama Foundation Seed Stock Farm, Thorsby, Ala.
Alabama Foundation Seed Stock Farm, Thorsby, Ala.
Alabama Foundation Seed Stock Farm, Thorsby, Ala.
McNair Seed Co., Laurinburg, N. C.
USDA Delta Branch Experiment Station, Stoneville,
Miss.
USDA Delta Branch Experiment Station, Stoneville,
Miss.
USDA Delta Branch Experiment Station, Stoneville,
Miss.
Farmers Forage Research Corporation, W. Lafayette,
Ind.
Coker Pedigreed Seed Co., Hartsville, S. C.

# Mid-season Varieties - Maturity Group VII

Bragg	Alabama Foundation Seed Stock Farm, Thorsby, Ala.
Coker 68-38*	Coker Pedigreed Seed Co., Hartsville, S. C.
Coker 68-41*	Coker Pedigreed Seed Co., Hartsville, S. C.
McNair 800	McNair Seed Co., Laurinburg, N.C.
Ransom	Alabama Foundation Seed Stock Farm, Thorsby, Ala.

# Late Varieties - Maturity Group VIII

Hampton 266A	Coker Pedia	greed So	eed Co., Har	rtsville,	S.C.
Hutton (F63-4000)	USDA Delta	Branch	Experiment	Station,	Stoneville,
	Miss.				
F66-1166*	USDA Delta	Branch	Experiment	Station,	Stoneville,
	Mice.				

## \*Lines not released

## **ACKNOWLEDGEMENT**

The author wishes to express appreciation to Superintendents J. K. Boseck, Emmett Carden, F. T. Glaze, S. E. Gissendanner, Robert Moore, Aubrey Smith and Harold Yates for growing and harvesting of variety tests.

<sup>1/</sup>Soybean Production--Recent Research Findings, Auburn University Agricultural Experiment Station, Bulletin 413.

Table 2. Maturity and Other Characteristics of Soybean Varieties Tested

						React	ion to	indivi	dual disea	ses <u>1</u> /	Nema	tode		
		<u>Plar</u>	it charac	teristic	s		100	Tar-	Phyto-	Purple	Resist	tance	Regis	stration
		Pubes-	Flower	Pod	Hila	Bacteria	Wild-	get	phthora	seed		Root-		No.
Group	Variety	cence	color	color	color	pustule	fire	spot	rot	stain	Cysts	_knot_	and	Year <sup>2</sup> /
												. * *		
<b>V</b> .	Dare	Crey	White	Tan	Buff	R	R	R	MR	R	R	MR	50	1966
	Forrest	Tawny	White	Tan	Black	R	R	R	MR	MR	R	R	-	
VI	Hood	Grey	Purple	Lt. Tan	Buff	R	R	R	S	MR	s	S	30	1960
	Davis	Grey	White	Lt. Tan	Buff	R	R	R	R	MR	S	S	56	1966
	Lee 68	Tawny	<b>Furple</b>	Lt. Tan	Black	R	R	R	VR	R	S	S	72	1968
	Pickett 71	Grey	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	Grey	White	Tan	Buff	R	R	R	S	MR	S	R		<b>-</b>
VII	Bragg	Tawny	White	Tan	Black	R	R	R	R	S	s	R	43	1964
	McNair 800	Grey	White	Tan	Buff	P.	R	R	S	S	S	S		-
	Ransom	Tawny	Purple	Tan	Black	$\mathbf{R}$	R	R	MS	R	S	. <b>S</b>	95	1973
VIII	Hampton													
	266A	Grey	Purple	Lt. Tan	Buff	R	R	·MR	vs	. <b>S</b>	S	S	47	1964
	Hutton	Brown	Purple	Tan	Black		R	R	S	S	S	R		-
	F66-1166	Tawny	_	Brown	Black	R	R	R	S	S	S	R	_	-

<sup>1/</sup>These are relative order of resistance: VR-very resistant; R-resistant; MR-moderately resistant; S-susceptible; VS-very susceptible.

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

Table 3. Yield of Soybean Vacieties Tested at the Black Belt Substation  $\frac{1}{2}$ 

		<del></del>			Soybe	an Yield			ge Plan	ting Da	te				
		M	ay 14				Ju	ne 5				Ju	ne 27		
Variety	1 yr. <u>2</u> / 72	2 yr. 71-72	3 yr. 70- <b>72</b>	4 yr. 69-72	5 yr. 68-72	1 yr. <u>2</u> /	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72	1 yr. <u>2</u> /	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	-
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Lee 68	40.7 ab	37.3	35.8	33.9	33.6	38.0 a	34.5	30.3	29.5	28.2	27.9 abc	24.5	20.4	19.7	17.8
Dare	36.9 bc	37.5	35.6	33.4	32.7	32.7 a	33.3	31.2	30.4	28.4	23.4 c	23.2	20.9	20.9	16.9
Davis	41.9 ab	37.8	34.7	. 32.6	32.4	38.0 a	36.8	32.7	30.3	29.2	34.1 a	29.7	25.0	25.3	_
Hood	41.6 ab	38.4	34.7	32.4	31.7	38.2 a	33.1	30.8	29.2	25.6	25.5 bc	22.8	20.4	19.7	16.6
Bragg	42.0 ab	37.0	31.9	31.1	31.0	38.3 a	36.4	30.9	30.6	28.1	31.9 ab	28.5	24.1	24.6	20.6
Hampton 266A	28.9 d	23.5	21.6	23.4	23.8	41.5 a	30.8	26.6	26.1	25.6	33.0 ab	25.6	21.8	20.4	18.4
McNair 800	41.8 ab	36.7	32.4	31.5	-	36.0 a	33.4	28.7	28.2	_	34.3 a	27.1	23.5	23.0	_
McNair 600	44.3 ab	41.1	37.1	_	-	37.8 a	36.6	32.1	-	_	29.0 abc	25.4	22.1	-	-
Hutton	41.7 ab	38.2	32.8	-	_	37.9 a	35.1	29.1	_	_	28.6 abc	25.2	21.8	-	_
Ransom	42.7 ab	41.9		-	-	42.9 a	40.5	-	_	-	32.1 ab	30.2	_	-	_
Forrest	45.9 a	-	-	-		38.1 a	-	-	_	-	24.4 c	_	_	-	_
Coker 69-87A	43.1 ab	· · -	_	_	-	40.4 a	***	_	_	_	29.0 abc	-	-	-	
D64-4636	40.5 ab	. —	_		_	40 <b>.2</b> a				_	29.5 abc	· <del></del>	-	_	_
Coker 68-41	29.4 cd	-	_	_	- ,	42.9 a		_		-	29.4 abc		-	-	_
C.V.%	13.3					11.1					15.6				

 $<sup>\</sup>frac{1}{2}$ Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2/</sup>Yields followed by the same letter are not significantly different at .05 probability level. Planting dates were May 11, May 31, and June 23 for 1st, 2nd, and 3rd planting dates in 1972.

Table 4. Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties by Planting Dates When Grewn on Black Belt Substation, 1972

		turity dat Planting1/	<u>e2/</u>		ing rating	<u>3/</u>		ant heigh	<u>t</u>		ght 1st p	od
					Planting			Planting			Planting	
Variety	ls t	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
							In.	In.	In.			
Dare	Sept. 17	Sept. 22	Oct. 6	3.1	2.2	1.7	35	38	29	3.5	4.1	4.5
Forrest	Sept. 23	Sert. 24	Oct. 9	2.0	2.0	2.4	33	41	27	3.2	5.5	4.5
Hood	Sept. 24	Sept. 29	Oct. 9	2.4	2.4	2.1	36	37	26	3.4	4.7	3.2
D64-4636	Sept. 26	Oct. 1	Oct. 9	1.9	2.1	2.6	34	34	26	3.2	3.2	4.7
Coker 69-87A	Sept. 27	Oct. 2	Oct. 10	2.4	2.1	1.9	37	40	29	5.4	7.0	5.7
Davis	Oct. 1	Oct. 5	Oct. 16	2.1	2.2	2.6	43	41	28	3.2	4.7	3.2
McNair 600	Oct. 9	Oct. 12	Oct. 17	2.1	2.7	2.7	37	40	30	3.0	4.6	3.4
Lee 68	Oct. 10	Oct. 11	Oct. 17	3.2	2.1	3.0	34	37	27	3.5	5.6	3.6
Ransom	Oct. 13	Oct. 20	Oct. 21	1.9	2.7	2.0	41	42	30	6.6	5.5	5.0
Hampton 266A	Oct. 16	Oct. 23	Nov. 9	4.1	2.4	3.0	43	46	33	7.0	7.0	5.5
Bragg	Oct. 17	Oct. 15	Oct. 21	3.1	3.2	3.4	42	43	33	6.0	5.5	5.0
McNair 800	Oct. 17	Oct. 14	Oct. 19	3.0	2.9	2.7	43	33	26	5.5	4.0	3.7
Coker 58-41	Oct. 25	Oct. 23	Oct. 30	4.1	2.7	3.0	43	47	31	5.0	5.7	5.0
Hutton	Oct. 29	Oct. 31	Oct. 23	3.2	3.2	2.9	42	40	29	4.7	4.5	4.2

 $<sup>\</sup>frac{1}{P}$ Planting dates were May 11, May 31, and June 23 for 1st, 2nd, and 3rd plantings, respectively.

 $<sup>\</sup>frac{2}{\text{Maturity was taken}}$  as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{3}{\text{Lodging}}$  ratings were recorded on a scale of 1 to 5 according to:

<sup>1.</sup> almost all plants erect

<sup>5.</sup> all plants down

Table 5. Maturity Date, Lodging, Plant Height and Height of First Pod of Soybean Varieties by Planting Dates When Grown on Black Belt Substation, 71-72 Average

	<u>Mat</u>	urity date Planting1/			ng rati lanting			ant hei lanting	<del></del>		ht lst lanting	<b>A</b>
Variety	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
							in.	in.	in.	in.	in.	in.
Dare	Sept. 22	Sept. 26	Oct. 10	2.3	2.3	1.8	35	33	27	4.9	4.5	4.3
Hood	Sept. 27	Oct. 1	Oct. 10	2.5	2.3	1.8	34	31	24	4.1	4.9	3.4
Davis	Oct. 3	Oct. 9	Oct. 16	2.3	2.3	2.1	41	38	25	3.4	4.1	3.4
McNair 600	Oct. 7	Oct. 10	Oct. 15	1.8	2.3	2.0	37	37	27	4.0	5.2	3.4
Lee 68	Oct. 9	Oct. 11	Oct. 16	2.9	2.4	2.7	33	32	24	4.4	5.1	3.5
McNair 800	Oct. 15	Oct. 13	Oct. 19	2.5	2.2	1.9	41	30	22	6.0	4.7	2.8
Bragg	Oct. 16	Oct. 17	Oct. 21	2.8	2.8	2.4	42	39	29	6.4	5.6	4.5
Ransom	Oct. 16	Oct. 21	Oct. 22	1.8	2.0	1.6	38	36	26	6.5	5.5	4.3
Hutton	Oct. 24	Oct. 25	Oct. 23	3.5	2.9	2.1	41	35	26	5.4	5.4	4.1
Hampton 266A	Oct. 28	Oct. 31	Nov. 9	3.2	2.1	2.4	42	42	30	8.3	6.7	4.6

<sup>—</sup> Average planting dates were May 15, June 4, and June 26 for 1st, 2nd, and 3rd plantings, respectively.
— Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

<sup>3/</sup>Lodging ratings were recorded on a scale of 1 to 5 according to:

<sup>1.</sup> almost all plants erect

<sup>2.</sup> all plants down

Table 6. Seed Chality and Size for Soybean Varieties by Planting Dates When Grown on Black Belt Substation, 1972

	Seed	quality rat Planting1/		Purple	e stain ra Planting	ting3/	Number of Seed per Bushel Planting			
Variety	1st	2nd	3rd	1st	<b>2n</b> d	3rd	lst	2nd	3rd	
							Thous.	Thous.	Thous	
Dare	· 2	2	1.5	1	1.5	3	250	262	262	
Forrest	4	4	4	1	1	3	233	278	276	
D68-4636	3	2.5	1.5	1	1	2	219	243	252	
Coker 69-87A	3	2.5	2	3	4 .	2	211	243	254	
Hood	3	2	1.5	1	2	2.5	192	206	221	
Lee 68	2	3	3	2	1	1	218	278	241	
Davis	1.5	1.5	1.5	1.5	2	1	216	259	243	
McNair 600	3	3	2	3	4	2	219	264	262	
Bragg	2	4	2	3	2	1	196	233	235	
Ransom	2	4	2	2.5	2	1	215	194	231	
McNair 800	2	1.5	2	1	2	2	259	278	281	
Coker 68-41	3	2	2	3	2	3	188	188	218	
Hampton 266A	4	3	2.5	5	4	3	183	202	205	
Hutton	2	3	2	2	1	1	169	188	233	

 $<sup>\</sup>frac{1}{P}$ Planting dates were May 11, May 31, and June 23 for 1st, 2nd, and 3rd plantings, respectively.

 $<sup>2/\</sup>text{Seed}$  quality ratings were on a scale from 1 to 5 according to 1 = very good and 5 = very poor.

 $<sup>\</sup>frac{3}{\text{Purple stain ratings were on a scale from 1 to 5 according to 1 = no purple staining and 5 = over 20% purple staining.$ 

Table 7. Yield of Soybean Varieties Tested at the Brewton Experiment Field, 19721/

			Soybean	yield by 5	yr. average pl	anting dat	tes	· Market Marie Co. (Co.) (S. 1997) A. S. Sansani ake major part of company	
		May 28					June 26	The state of the s	
Variety	1 yr.2/ 72	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	1 yr.2/ 72	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Davis	16.9 a	29.8	35.4	37.2	12.4 abc	20.1	25.3	26.1	28.6
Dare	17.3 a	28.8	33.2	33.4	13.0 ab	19.2	20.9	21.7	23.8
Hampton 266A	9.5 de	25.1	28.7	32.4	13.5 a	17.8	26.4	28.3	30.1
Bragg	11.5 cd	21.4	26.9	30.0	9.8 cdef	15.4	21.8	23.5	26.4
Lee 68	11.9 c	24.0	27.6	28.5	8.9 def	17.4	19.7	21.1	22.2
Ransom	10.3 cd	28.9		<b>-</b> .	10.2 bcde	19.1	-	-	-
McNair 600	14.3 b	27.5		· .	11.6 abcd	20.3	26.0		-
Hutton	8.0 e	27.4	***	-	7.7 ef	15.2	21.6	-	_
McNair 800	11.1 cd	27.0	· <del>-</del>		9.9 cde	17.8	24.5	24.9	-
D64-4636	18.5 a	. · · · · -	-		11.3 abcd	<b>-</b>	-	-	-
Forrest	18.4 a	•	-	_	12.7 abc	<del>-</del> ,	-	_	_
Coker 69-87A	17.8 a	• • • • • • • • • • • • • • • • • • •	-	<b>-</b>	13.3 a	_	-	-	-
Coker 68-38	10.8 cd	<del>-</del> .	-	<b>-</b> .	13.7 a	<del></del> -	-		
Coker 68-41	10.8 cd		-	-	13.5 a	_	_	- ·	-
F66-1166	4.0 f	_	_	<b>-</b>	6.9 f	_	-	_	, <b>-</b>
C.V.%	11.8				16.6	•			

 $<sup>\</sup>frac{1}{Y}$  Yield adjusted to 13% moisture and 60 pounds per bushel.

<sup>2/</sup>Yields followed by the same letter are not significantly different at .05 probability level. Planting dates were June 2 and June 30 for 1st and 2nd plantings in 1972, respectively.

Table 8. Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties by Planting Date When Grown on Brewton Experiment Field, 1972

	Maturity Plant			Lodging rating3/ Planting		height ting	Height 1st pod Planting	
Variety	1st	2nd	1st	2nd	1st	2nd	1st	2nd
					In.	In.	In.	In.
Dare	Sept. 16	Sept. 27	· 1	1	23	17	3.3	3.3
Forrest	Sept. 18	Oct. 1	1	1	21	17	3.3	2.3
Coker 69-87A	Sept. 18	Oct. 9	1	1	24	15	5.8	2.5
D64-4636	Sept. 20	Oct. 3	1	1	22	16	3.8	2.8
Davis	Sept. 25	Oct. 5	1	1	27	18	4.0	2.8
Lee 68	Sept. 27	Oct. 8	1	1	19	14	3.0	1.8
McNair 600	Sept. 28	Oct. 5	1	1	24	14	2.8	1.8
Ransom	Oct. 3	Oct. 12	1	1	25	17	5.0	3.5
McNair 800	Oct. 5	Oct. 12	1	1	22	12	5.5	1.8
Bragg	Oct. 5	Oct. 20	1	1	31	21	6.0	3.8
Coker 68-41	Oct. 9	Oct. 25	1.3	1	32	19	7.5	3.5
Hutton	Oct. 9	Oct. 25	1	1	31	22	7.5	4.5
Coker 68-38	Oct. 9	Oct. 27	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30	18	7.3	3.5
Hampton 266A	Oct. 9	Oct. 27	1	1	34	20	8.3	4.8
F66-1166	Oct. 15	Oct. 30	1	1	35	22	7.5	4.8

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{Planting}$  dates were June 2 and June 30 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings were recorded on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.$ 

Table 9. Maturity Date, Lodging, Plant Height, and Height of First Pod by Planting Dates When Grown on Brewton Experiment Field, 71-72 Average

	Maturity date1/ Planting2/			Lodging rating 3/ Planting		Plant height Planting		st pod ing	
Variety	1st	2nd	lst	2nd	1st	2nd	1st	2nd	
					In.	In.	In.	In.	
Dare	Sept. 17	Sept. 27	1.2	1.4	28	20	3.9	3.8	
Davis	Sept. 27	Oct. 4	1.2	1.4	30	22	4.4	2.9	
Lee <b>6</b> 8	Oct. 1	Oct. 7	1.5	1.4	26	18	3.9	2.4	
McNair 600	Oct. 1	Oct. 4	1.0	1.4	29	20	3.3	2.2	
McNair 800	Oct. 5	Oct. 8	1.4	1.2	29	<b>1</b> 8	5.3	2.3	
Bragg	Oct. 7	Oct. 14	1.2	1.7	36	25	6.4	3.4	
Ransom	Oct. 8	Oct. 10	1.2	1.0	<b>2</b> 8	21	5.2	3.4	
Hutton	Oct. 11	Oct. 18	1.5	1.7	35	24	6.3	4.4	
Hampton 266A	Oct. 16	Oct. 25	1.4	1.8	38	25	8.6	4.1	

<sup>1/</sup>Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

<sup>2/</sup>Planting dates were May 25 and June 21 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings were recorded on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.$ 

Table 10. Seed Quality and Size for Soybean Varieties by Planting Dates When Grown on Brewton Experiment Field, 1972

	Seed quality Planti		<b>P</b>		tain rating <u>3</u> / anting	Number of Seed per Bushe Planting			
Variety	1st	. 2nd	<del>-</del> -	lst	2nd	lst	2nd .		
						Thous.	Thous.		
Dare	2	2		1	1	313	296		
Forrest	3	2.5		1	2	324	324		
D64-4636	2	1.5		1	1	320	302		
Coker 69-87A	2	2	•	1	1	269	276		
Davis	2.5	2		1	1	262	302		
Lee 68	1.5	5		1	1	296	264		
McNair 600	2	2		1	1	291	281		
Bragg	1.5	3		1	. 1	306	264		
Ransom	2	5		1	1	309	259		
McNair 800	1	1.5		1	1	328	278		
Coker 68-38	1	3		1	2	231	243		
Coker 68-41	2.5	2.5		2	1	283	264		
Hampton 266A	2.5	2.5		1	2	283	225		
Hutton	2	3		1	1	283	227		
F66-1166	5	2		1	1	281	278		

 $<sup>\</sup>frac{1}{2}$  Seed quality ratings were on a scale from 1 to 5 according to 1 = very good and 5 = very poor

 $<sup>\</sup>frac{2}{P}$ Planting dates were June 2 and June 30 for 1st and 2nd planting, respectively.

 $<sup>\</sup>frac{3}{P}$ Purple stain ratings were on a scale from 1 to 5 according to 1 = no purple staining and 5 = over 20% purple staining.

Table 11. Yield, Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties Grown at Gulf Coast Substation

			Yield $^{ m L}/$			Maturity	Lodging,	Plant	Height
Variety	1 yr.	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72	Date <u>3</u> / 1972	Ratings4/ 1972	Height 1972	1st Poo 1972
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A			In.	In.
Bragg	31.4 b	40.7	42.2	41.7	40.0	Sept. 30	2.0	34	5.2
Lee 68	38.5 a	42.6	43.2	41.6	40.0	Sept. 25	1.0	25	4.7
Davis	39.3 a	43.5	42.4	40.4	39.0	Sept. 25	1.2	35	5.5
Hood	39.4 a	41.8	38.5	38.4	38.0	Sept. 25	1.2	33	4.5
Dare	42.8 a	43.6	39.4	38.2	37.7	Sept. 20	1.0	29	4.2
Hampton 266A	26.8 c	36.5	36.8	36.0	35.8	Oct. 5	2.0	37	5.7
McNair 800	33.2 ъ	41.8	40.1	39.5	-	Sept. 30	1.0	35	5.7
McNair 600	40.3 a	44.4	44.4	-	- ,	Sept. 25	1.7	34	5.0
Hutton	27.4 c	38.8	38.5	-	_	Oct. 10	1.7	36	6.0
Ransom	31.9 b	42.7	_	_ '		Sept. 30	1.0	38	6.5
FFR 666	40.3 a	-	_			Sept. 25	1.0	26	4.7
Coker 69-87A	<b>39.2</b> a	•		-	-	Sept. 25	1.5	35	6.0
Coker 68-38	32.0 Ъ	_	_		_	Oct. 5	1.7	35	5.7
Coker 68-41	25.7 c	_	,	· <u>-</u>		Oct. 5	1.7	36	6.7
C.V.%	9.2								

 $<sup>\</sup>frac{1}{2}$ Yields adjusted to 13% moisture and 60 pounds per bushel. Planting date was June 2 in 1972 and June 5 for for 5 year average.

 $<sup>\</sup>frac{2}{\text{Yields}}$  followed by the same letter are not significantly different at .05 probability level.

<sup>3/</sup>Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{4}{\text{Lodging ratings were on a scale of 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.}$ 

Table 12. Maturity Date, Lodging Ratings, Plant Height, and Height of First Pod of Soybean Varieties When Grown on Gulf Coast Substation, 1971-72 Average

Variety	Maturity date $\frac{1}{1}$ / 71-72	Lodging rating2/ 71-72	Plant height 71-72	Height 1st Poo 71-72
			In.	In.
Dare	Sept. 23	1.0	29	4.3
Hood	Sept. 30	1.1	32	4.4
Davis	Oct. 4	1.1	37	6.7
Lee 68	Oct. 4	1.0	28	5.3
McNair 600	Oct. 5	1.4	34	5.5
McNair 800	Oct. 8	1.0	35	6.1
Bragg	Oct. 10	1.5	36	5.9
Ransom	Oct. 13	1.0	31	5.3
Hampton 266A	Oct. 13	1.5	42	7.5
Hutton	Oct. 15	1.4	35	5.9

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{\text{Lodging ratings}}$  were recorded on a scale of 1 to 5 according to: 1 = almost all plants erect and 5 = all plants down.

Table 13. Yield of Soybean Varieties Tested at the Prattville Experiment Field

			Soybean y	ield by 5 y	r. average p	planting dates_/					
			lay 10				une 18				
Variety	1 yr. <u>2/</u> 72	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-70	1 yr. <u>2</u> / 72	2 yr. 71-72	3 yr. 70-72			
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A			
Davis	28.1 b	36.3	38.6	38.8	38.5	18.2 cdef	29.0	32.5			
Dare	32.2 ab	36.8	38.9	38.4	38.4	13.2 g	23.6	28.3			
Hood	32.9 ab	35.0	36.4	36.4	37.4	16.7 f	26.0	29.1			
Lee 68	20.7 efg	34.0	35.1	35.0	34.5	17.0 bcde	28.4	29.8			
Bragg	11.2 g	<b>29.</b> 8	32.1	32.4	31.9	23.4 ab	32.2	33.1			
Hampton 266A	15.4 gh	29.8	22.4	31.2	30.4	22.3 ab	31.4	30.5			
McNair 800	17.1 fg	30.2	31.5	30.8	-	21.2 abc	29.8	29.4			
Hutton	15.4 gh	33.4	35.2	•	_	23.8 a	33.7	33.8			
Pickett 71	21.1 ef	33.8	36.5	<b>-</b> .	-	18.0 cdef	27.5	29.3			
McNair 600	22.9 cde	35.4	36.1			20.7 abcd	31.0	32.6			
Ransom	14.6 gh	32.4	· _	· · · · ·	_	20.8 abcd	33.1	-			
Forrest	36.0 a	•••	_			21.4 ab	_	-			
D64-4636	33.1 ab	_	-	-		17.1 ef	-	-			
Coker 69-87A	27.3 bcd			_	-	17.6 def	-	-			
D674601	24.5 cde	-	_	_		22.9 ab	_	_			
FFR 666	22.4 def	<b>-</b> ,	<b>-</b> , :	-	-	17.9 cdef		_			
Coker 68-41	17.3 fg	-	-	• <u>-</u> ,	•	21.7 ab	-	_			
Coker 68-38	17.1 fg	-	_	•		21.6 ab	-	_			
C.V.%	14.1					10.7					

 $<sup>\</sup>frac{1}{2}$ Yield adjusted to 13% moisture and 60 pounds per bushel.

<sup>2/</sup>Yields followed by the same letter are not significantly different at .05 probability level. Planting dates were May 8 and June 28 for 1st and 2nd plantings, respectively, 1972.

Table 14. Maturity Date, Lodging, Plant Height and Height of First Pod of Soybean Varieties by Planting Dates When Grown on Prattville Experiment Field, 1972

	Maturit		Lodging 1		Plant he		Height 1s	
		ting2/	Plant		Plant		Plant	ing
Variety	1st	2nd.	lst	2nd	lst	2nd	<u>lst</u>	2nd
					In.	In.	In.	In.
Dare	Sept. 18	Oct. 2	1	3.0	28	31	2.5	4.5
Forrest	Sept. 18	Oct. 14	1	3.4	28	30	2.7	2.2
D64-4636	Sept. 22	Oct. 18	1	2.1	26	29	2.2	4.2
Coker 69-87A	Sept. 22	Oct. 25	1	2.7	27	31	3.7	3.5
Hood	Sept. 21	Oct. 9	1	2.0	30	31	3.5	3.7
Davis	Sept. 24	Oct. 22	1	2.2	36	33	5.2	3.5
Lee 68	Sept. 25	Oct. 16	1	2.4	28	28	3.2	3.2
McNair 600	Sept. 28	Oct. 20	1	2.7	32	33	4.0	1.7
FFR 666	Sept. 23	Oct. 25	1	2.5	28	28	3.5	2.2
Pickett 71	Sept. 28	Oct. 25	1	4.5	29	27	3.5	2.7
D67-4601	Oct. 5	Oct. 20	1	1.6	30	33	3.5	3.2
Bragg	Oct. 5	Oct. 20	1	3.4	37	34	5.5	1.7
Ransom	Sept. 28	Oct. 30	1	1.4	30	31	4.7	3.0
McNair 800	Oct. 9	Oct. 20	1	1.2	36	30	5.7	3.5
Coker 6838	Oct. 15	Nov. 1	2	4.1	36	35	5.5	2.2
Coker 6841	Oct. 16	Nov. 1	2.1	4.2	40	34	5.2	2.2
Hampton 266A	Oct. 14	Nov. 1	2.1	4.2	38	34	6.0	2.0
Hutton	Oct. 16	Nov. 1	1.1	3.0	35	34	4.7	2.2

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

<sup>2/</sup>Planting dates were May 8 and June 28 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings were recorded on a scale from 1 to 5 according to: 1 = almost all plants erect and 5 = all plants down.$ 

Table 15. Average Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties by Planting Dates When Grown on Prattville Experiment Field, 1971 & 72

	Maturity Planti		Lodging rat		Plant he Plant		Height 1 Plan	st pod ting
Variety	1st	2nd	1st	2nd	1st	2nd	1st	2nd
					In.	In.	In.	In.
Dare	Sept. 24	Oct. 7	1	2.3	28	28	2.7	3.4
Hood	Oct. 1	Oct. 12	1.1	2.4	29	29	3.2	2.9
Davis	Oct. 5	Oct. 20	1	2.3	36	32	4.3	2.8
McNair 600	Oct. 7	Oct. 18	1	2.6	32	31	3.4	1.8
Lee 68	Oct. 6	Oct. 16	1	3.2	30	28	3.3	2.5
Pickett 71	Oct. 7	Oct. 22	1	4.5	30	26	3.2	2.1
Bragg	Oct. 12	Oct. 22	1	3.2	39	33	5.5	2.1
Ransom	Oct. 10	Oct. 27	1	1.2	31	30	4.5	3.1
McNair 800	Oct. 14	Oct. 20	1.5	1.8	36	28	4.5	3.1
Hampton 266A	Oct. 22	Oct. 30	1.5	3.6	40	34	5.0	2.4
Hutton	Oct. 20	Oct. 30	1	2.3	38	33	4.7	2.9

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{\text{Average planting dates were May 7 and June 21 for 1st and 2nd plantings, respectively.}$ 

 $<sup>\</sup>frac{3}{\text{Lodging ratings were on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.$ 

Table 16. Seed Quality and Size For Soybean Varieties by Planting Dates When Grown at Prattville Field, 1972

	Seed qua	lity ra nting2/		•	Pt		tain rat	ing	Number of See	
_		merng2/					lanting			iting
<i>l</i> ariety	lst		2nd			1st		2nd	lst	2nd
									Thous.	Thous.
are	1.5		2			1		2	276	293
Forrest	2		4			1		1.5	272	262
064-4636	1.5		2			1		1.5	257	209
Coker 69-87A	2		2			1		3	276	199
lood	2.5		3			1		2	245	231
Lee 68	1		1.5			1		2	324	235
avis	2		2			1		3	237	218
McNair 600	2		3			1.5		3	285	199
Pickett 71	1.5		1.5			1		3	349	223
FR 666	2		1.5			1		2	283	235
67-4601	2		2			1		1	250	169
Bragg	3		2			1		4	353	193
Ransom	2		2			1		5	336	180
CNair 800	2		1.5			1		2	340	221
Coker 68-38	2.5		3			1		5	344	190
Coker 68-41	2.5		3			1.5		4	328	190
lampton 266A	3		2			2		2	269	206
lutton	3		1.5			1		2	291	193

 $<sup>\</sup>frac{1}{2}$  Seed quality ratings were on a scale from 1 to 5 according to 1 = very good and 5 = very poor.

<sup>2/</sup>Planting dates were May 8 and June 28 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{P}$ Purple stain ratings were on a scale from 1 to 5 according to 1 = no purple staining and 5 = over 20% purple staining.

Table 17. Yield of Soybean Varieties Tested at the Sand Mountain Substation1/

						Soybean	<u>Yield</u>			ge Plan	ting Date				
			May 3		-	-			y 27			Ju	ne 18		
Variety	1 yr. 72 <mark>2</mark> /	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72	$\frac{1}{72} \frac{\text{yr}}{2}$ .	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72	1 yr. 722/	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr.
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Bragg		39.1	41.1	39.4	40.2	27.7 a	36.7	37.7	37.0	38.3	28.4 a	30.2	31.5	27.7	30.3
Lee 68	22.7 cd		40.4	39.0	39.5	25.3 ab	33.6	34.0	33.1	34.7	26.7 abc	29.6	30.7	27.7	30.1
Davis	16.2 f	33.7	38.1	38.2	38.8	17.4 de	30.8	32.8	33.1	34.4	22.7 ef	28.6	30.3	27.8	30.4
Dare	9.0 h	29.0	36.4	37.3	37.5	12.1 f	24.8	28.9	29.5	28.7	18.2 g	29.1	31.1	28.1	30.7
Hood	8.2 h	26.3	33.6	35.4	36.6	14.5 ef	28.2	31.1	31.0	32.8	21.6 f	29.6	30.2	27.7	30.1
McNair 800	16.6 f	31.5	35.2	35.7		19.1 cde	31.5	32.9	32.7	-	28.9 a	34.6	34.4	31.1	-
Pickett 71	23.8 bc	38.9	41.4	- '		23.8 abo	32.6	34.0	-	_	25.9abcd	e 29.1	31.0	-	_
Hutton	22.1 de	36.9	41.2		_	26.0 ab	34.4	35.6	-	-		-	-	-	-
McNair 600	22.5 cd	37.2	40.7	-	-	25.6 ab	34.7	36.6	-	-	26.4 abc	d 31.4	33.7	-	_
Ransom	22.7 cd	40.6	-			27.8 а	37.3	-	_	-	26.8 ab	33.0	-		-
Forrest	14.0 g	34.9	_		-	21.7 bc	i -	-	-	-	28.3 a	-	_	-	-
D64-4636	16.5 f	32.4	-	_	- 1	19.2 cd	<u> </u>	-	<b>-</b> ,	-	23.3 cde	f -	- ,		
Coker 68-41	24.9 ab	-	_	-	-	25.3 ab	_	_	-	_	-	-	-	_	_ ,
FFR 666	21.7 de	-	_	-	_ '	23.4 abo	. ~	-	-	-	24.6bcde	f -	_		-
Coker 69 87A	21.3 e	_	-	- 1		21.8 bc		-	_	***	23.0 def	-	_	-	-
C.V.%	4.2					13.8					8.7				

 $<sup>\</sup>frac{1}{2}$ Yields adjusted to 13% moisture and 60 pounds per bushel.

<sup>2/</sup>Yields followed by the same letter are not significantly different at .05 probability level. Planting dates were May 1, May 24, and June 20 for 1st, 2nd and 3rd plantings, respectively for 1972.

Table 18. Maturity Date, Lodging, Plant Height and Height of First Pod of Soybean Varieties by Planting Dates When Grown on Sand Mountain Substation, 1972

		Maturity date <u>l/</u> Planting <u>2</u> /				ng3/		nt heig lanting	himming the same of		tht lst lanting	A
Variety	1st	2nd	3rd	lst	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
						•	In.	In.	In.	In.	In.	In.
Dare	Sept. 22	Sept. 28	Oct. 13	2.8	2.8	3.5	37	39	38	8.3	6.8	6.8
Forrest	Sept. 22	Sept. 28	Oct. 18	2.3	2.8	4.0	38	39	36	8.5	7.5	7.8
064-4636	Sept. 28	Oct. 13	Oct. 18	2.8	2.8	3.3	34	35	30	7.8	8.3	7.0
Coker 69-87A	Oct. 4	Oct. 13	Oct. 18	3.3	3.3	2.8	38	38	34	8.3	9.3	10.0
lood	Sept. 22	Sept. 28	Oct. 18	4.0	3.3	3.8	36	37	32	8.5	6.3	6.8
Lee 68	Oct. 13	Sept. 18	Oct. 24	4.3	3.5	4.0	37	33	36	7.8	8.0	7.8
Davis	Oct. 13	Sept. 18	Oct. 30	4.3	3.8	3.5	39	41	34	9.3	9.3	7.5
CNair 600	Oct. 13	Sept. 18	Oct. 18	4.0	3.8	3.3	38	40	32	7.3	6.5	6.0
Pickett 71	Oct. 13	Sept. 18	Oct. 24	3.8	4.0	3.8	35	36	32	7.3	7.3	7.5
FFR 666	Oct. 13	Sept. 13	Oct. 18	3.8	4.0	4.0	34	34	29	7.3	8.3	7.5
Bragg	Oct. 18	Sept. 30	Oct. 30	3.0	3.0	3.8	43	45	38	11.8	9.0	9.0
Ransom	Oct. 18	Sept. 30	Oct. 30	2.8	3.3	2.8	35	39	33	7.8	8.5	9.5
AcNair 800	Oct. 13	Sept. 24	Oct. 30	5.0	3.8	2.3	35	35	29	9.0	8.8	10.8
Coker 68-41	Oct. 24	Sept. 30	-	3.0	4.0	-	<b>3</b> 9	44	_	11.3	8.8	-
Hutton	Oct. 18	Sept. 30	-	4.0	3.8	-	39	38	-	8.5	9.0	-

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{Planting}$  dates were May 1, May 24, and June 20 for 1st, 2nd, and 3rd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings}}$  were on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.

Table 19. Average Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties by Planting Dates When Grown on Sand Mountain Substation, 1971 & 1972

		$\frac{\text{Maturity date} \frac{1}{2}}{\text{Planting} \frac{2}{2}}$				Lodging rating3/ Planting			Plant height Planting			Height 1st pod Planting		
<i>l</i> ariety	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd		
							In.	In.	In.	In.	In.	In.		
Dare	Sept. 21	Sept. 28	Oct. 13	2.4	2.6	3.1	33	37	34	6.4	5.9	5.6		
Forrest	Sept. 24	-	_	2.1	_	-	33	-		6.1	-			
D64-4636	Sept. 29	-	-	1.9	-		29	-	-	5.9	•••	-		
Hood	Sept. 25	Oct. 2	Oct. 18	3.6	3.1	2.9	34	35	30	6.7	5.9	5.6		
Lee 68	Oct. 10	Oct. 13	Oct. 18	3.6	3.6	3.9	32	34	33	6.6	7.0	6.6		
Davis	Oct. 14	Oct. 18	Oct. 25	3.4	3.6	3.0	38	37	34	8.3	8.3	6.3		
McNair 600	Oct. 10	Oct. 13	Oct. 17	3.4	3.6	2.8	36	37	33	5.4	6.0	5.2		
Pickett 71	Oct. 13	Oct. 15	Oct. 21	3.4	3.9	3.6	32	35	31	6.3	6.3	6.5		
Bragg	Oct. 17	Oct. 23	Oct. 25	3.4	3.2	3.0	43	40	35	9.0	8.5	7.7		
Ransom	Oct. 17	Oct. 24	Oct. 24	2.6	3.3	1.9	33	39	32	7.0	8.7	8.0		
McNair 800	Oct. 12	Oct. 21	Oct. 24	4.2	3.6	2.0	34	35	29	7.7	8.3	7.6		
Hutton	Oct. 18	Oct. 25	_	3.9	4.4	-	38	39	_	7.7	10.1			

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{\text{Average planting dates were May 2, May 31, and June 26 for 1st, 2nd, and 3rd plantings, respectively for 1971 & 1972.$ 

 $<sup>\</sup>frac{3}{\text{Lodging}}$  ratings were on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.

Table 20. Seed Quality and Seed Size of Soybean Varieties by Planting Dates When Grown on Sand Mountain Substation, 1972

		uality ra			e Stain r			f Seed per	Bushel Bushel	
	P	lanting <u>2</u> /			Planting			Planting		
Variety	1st	2n <b>d</b>	3rd	1st	2nd	3rd	1st	2nd	3rd	
							Thous.	Thous.	Thous.	
Dare	5	5	5	1	1	1	-4/ -4/	<del>-4</del> /	197	
Forrest	5	5	3	1	ī	ī	_4/	_4/	206	
D64-4636	5	-5	2	1	1	1	205	192	189	
Coker 69-87A	5	5	3	1	1	2	173	179/	167	
Hood	5	5	5	. 1	1	1	_4/	4/	197	
Lee 68	5	3.5	2.5	1	1	2	197	180	183	
Davis	5	5	3	1	1	1	185	163	160	
McNair 600	5	5	5	1	1	1	184	192L	196	
Pickett 71	5	- 4	2	1	· 1	1	199	186	173	
FFR 666	5	5	5	1	1	. 1	184	180	211	
Bragg	.5	3	4	1.5	1	2	173	151	149	
Ransom	5	- 4	3	1	1	1	168	154	150	
McNair 800	5	5	1.5	1	1	2	245	183	188	
Coker 68-41	3	2	-	1.5	2	_	162	146	_ ,	
Hutton	. 4	4	-	2	1	-	177	150		

 $<sup>\</sup>frac{1}{\text{Seed}}$  quality ratings were on a scale from 1 to 5 according to 1 = very good and 5 = very poor.  $\frac{2}{\text{Planting}}$  dates were May 1, May 24, and June 20 for 1st, 2nd, and 3rd plantings, respectively.

Plants were harvested January 16, 1973.

<sup>3/</sup>Purple stain ratings were on a scale from 1 to 5 according to 1 = no purple staining and 5 = over 20% purple staining.

<sup>4/</sup>Seed quality too poor to make size determinations.

Table 21. Yield of Soybean Varieties Tested at the Upper Coastal Plain Substation1/

	-			ean yield	l by aver	rage plant				
			May 12					ıne 21		
Variety	1 yr. <u>2</u> / 72	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72	1 yr. <u>2</u> /	2 yr. 71-72	3 yr. 70-72	4 yr. 69-72	5 yr. 68-72
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Hood	24.3 a	24.4	23.4	19.4	31.2	22.3 a	31.9	32.4	33.9	35.7
Dare	24.1 a	24.4	30.6	32.3	31.1	20.8 a	29.8	30.4	31.4	31.8
Davis	16.0 в	21.0	22.4	26.5	30.6	24.8 a	34.8	33.8	36.9	38.6
Bragg	15.8 ь	21.3	23.4	25.6	30.2	21.6 a	30.4	29.2	32.5	35.5
Hampton 266A	18.5 ъ	22.2	22.1	24.7	29.6	22.5 a	34.1	32.4	36.0	38.3
Lee 68	17.3 b	22.0	21.4	24.1	29.1	24.5 a	31.7	30.5	33.6	34.3
McNair 800	18.3 ь	21.0	22.1	26.2	-	21.0 a	28.8	29.1	32.2	-
F63-4000	16.6 b	22.2	23.8	-	-	23.5 a	33.9	30.7	-	
Pickett 71	18.0 ь	21.2	23.0	-	. · . <u>-</u>	23.9 a	31.2	30.9		
McNair 600	17.1 b	23.7	22.7			26.1 a	32.8	31.3	-	-
Ransom	15.6 ь	22.3	•	-	-	25.3 a	33.9		-	
D68-128	26.6 a	-		-	-	24.5 a		-	-	
D64-4636	24.1 a	· -	-	-		24.1 a	-	-	-	-
FFR 666	19.0 ь	-	_		-	25.8 a	¹ <b>-</b>	-	-	-
Coker 68-41	17.2 b	-	-	-	-	19.8 a	· <b>_</b>	-	-	
Coker 69-87A		-	_	-	-	26.0 a	· _	-		
Coker 68-38	15.6 b	· <u>-</u>	-	-	· ,	23.4 a		-	-	-
C.V.%	11.7					16.9				

 $<sup>\</sup>frac{1}{2}$ Yields adjusted to 13% moisture and 60 pounds per bushel.

 $<sup>\</sup>frac{2}{\text{Yields}}$  followed by the same letter are not significantly different at .05 probability level. Planting dates were May 5 and June 21 for 1st and 2nd plantings, respectively.

Table 22. Maturity Date, Lodging, Plant Height, and Height of First Pod of Soybean Varieties When Grown on Upper Coastal Plain Substation, 1972

Variety	Maturity date <u>1/</u> Planting2/		Lodging rating3/ Planting		Plant height Planting		Height 1st pod Planting		
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	
					In.	In.	In.	In.	
Dare	Sept. 27	Oct. 3	1.7	2.0	42	30	4.0	4.2	
Forrest	Sept. 27	Oct. 9	1.5	1.5	43	33	5.0	5.7	
Hood	Sept. 27	Oct. 9	2.0	1.7	41	30	4.2	3.7	
Lee 68	Oct. 3	Oct. 18	2.0	2.5	39	33	5.7	<u> </u>	
Davis	Sept. 27	Oct. 3	1.0	1.0	42	38	3.7	7.5	
McNair 600	Sept. 27	Oct. 9	1.0	1.0	43	34	5.0	6.2	
064-4636	Sept. 27	Oct. 3	1.2	1.0	38	32	3.2	4.5	
Coker 69-87A	Sept. 27	Oct. 9	1.0	1.2	40	35	5.5	4.7	
Pickett 71	Oct. 9	Oct. 18	1.5	3.0	38	38	4.5	5.0	
FFR 666	Sept. 27	Oct. 9	1.0	2.5	40	33	5.0	5.0	
Bragg	Oct. 18	Oct. 18	1.0	1.7	50	40	7.0	7.2	
Ransom	Oct. 3	Oct. 18	1.2	1.0	43	35	5.0	8.5	
McNair 800	Oct. 18	Oct. 18	2.0	1.0	40	30	5.5	6.0	
Coker 68-38	Oct. 18	Nov. 6	1.2	2.7	43	38	4.5	5.0	
Coker 68-41	Oct. 24	Oct. 24	1.7	2.5	50	42	4.7	3.2	
Hampton 266A	Nov. 6	Nov. 6	1.5	2.7	48	42	6.5	4.5	
Hutton	Oct. 18	Oct. 24	2.0	2.0	44	34	5.5	7.2	

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

<sup>2/</sup>Planting dates were May 5 and June 21 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings were recorded on a scale from 1 to 5 according to: 1 = almost all plants erect and 5 = all plants down.$ 

Table 23. Average Maturity Dates, Lodging, Plant Height and Height of First Pod of Soybean Varieties When Grown on Upper Coastal Plain Substation, 1971-72 Average

Variety	Maturity dațe <u>l</u> / Planting2/ 1st 2nd		Lodging rating 3/ Planting 1st 2nd		Plant height Planting 1st 2nd		Height 1st pod Planting 1st 2nd	
Dare	Sept. 29	Oct. 11	1.4	1.8	34	31	3.5	3.8
Hood	Oct. 6	Oct. 14	1.5	1.4	34	30	4.3	3.5
McNair 600	Oct. 8	Oct. 18	1.0	1.1	39	32	4.4	4.9
Davis	Oct. 8	Oct. 14	1.0	1.0	38	36	4.1	5.5
Lee 68	Oct. 9	Oct. 18	1.5	2.0	34	31	5.1	4.9
Ransom	Oct. 11	Oct. 25	1.1	1.0	38	34	5.4	6.5
Pickett 71	Oct. 14	Oct. 22	1.3	2.0	33	33	4.3	3.9
McNair 800	Oct. 18	Oct. 24	1.5	1.0	36	29	5.4	4.7
Bragg	Oct. 18	Oct. 23	1.0	1.4	46	34	7.4	5.6
Hutton	Oct. 18	Oct. 28	1.5	1.5	41	34	6.5	5.4
Hampton 266A	Oct. 31	Nov. 5	1.3	2.1	43	41	6.3	4.8

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the data when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{\text{Average}}$  planting dages were May 12 and June 26 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{\text{Lodging ratings were recorded on a scale from 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.$ 

Table 24. Seed Quality, Purple Stain and Number of Seed per Bushel for Soybean Varieties Grown on Upper Coastal Plain Substation, 1972

	Seed quality Plantin		Purple Stai Plan		Number of Seed per Bushel Planting		
Variety	1st	2nd	1st	2nd	lst	2nd	
					Thous.	Thous.	
Dare	1.0	1.0	1.0	1.0	271	291	
Forrest	1.5	1.0	1.0	1.0	294	291	
lood	1.5	1.0	1.0	1.0	245	281	
Lee 68	1.0	1.5	1.0	1.0	272	231	
avis	2.0	1.0	1.0	1.0	256	252	
CNair 600	2.0	2.0	2.0	1.0	294	264	
64-4636	1.0	1.0	1.0	1.0	231	297	
Coker 69-87A	2.0	1.0	2.0	1.0	240	210	
Pickett 71	1.0	1.0	2.0	2.0	288	239	
FFR 666	1.0	1.0	1.0	1.0	294	256	
Bragg	2.0	1.0	2.0	2.0	234	189	
Ransom	2.0	1.0	1.5	2.0	261	195	
AcNair 800	1.5	1.5	1.0	1.5	269	255	
Coker 68-38	1.5	1.5	2.5	5.0	212	201	
Coker 68-41	2.0	1.0	5.0	4.0	212	190	
Hampton 266A	2.0	1.0	5.0	5.0	191	197	
Hutton	1.5	1.0	1.5	1.0	207	193	

 $<sup>\</sup>frac{1}{2}$  Seed quality ratings were on a scale from 1 to 5 according to 1 = very good and 5 = very poor.

 $<sup>\</sup>frac{2}{2}$ Planting dates were May 5 and June 21 for 1st and 2nd plantings, respectively.

 $<sup>\</sup>frac{3}{2}$ Purple stain ratings were on a scale from 1 to 5 according to 1 = no purple staining and 5 = over 20% purple staining.

Table 25. Maturity Date, Lodging Rating, Plant Height, and Yield of Soybean Varieties Grown on Tennessee Valley Substation, 1972

Variety	Maturity Date <u>l</u> /	Lodging <mark>2</mark> / %	Plant Height Inches	Yield <u>3</u> / '72	2 Year Avg 71-72
				Bu/A	Bu/A
Ransom	Oct. 17	2.2	44	46.0 bc	46.3
McNair 800	Oct. 16	3.7	39	38.4 c	44.5
Bragg	Oct. 17	3.2	48	43.0 bc	44.4
Davis	Oct. 18	3.7	43	48.7 abc	
FFR 666	Oct. 18	4.7	36	51.5 abc	
Coker 68-41	Oct. 22	3.3	50	45.9 bc	
F63-4000	Oct. 23	3.3	47	54.1 ab	
Coker 68-38	Oct. 25	2.8	48	59.9 a	
C.V.%				9.2	

 $<sup>\</sup>frac{1}{M}$  Maturity was taken as the date when the pods were dry and most of the leaves had dropped. Under most conditions the stems were also dry.

 $<sup>\</sup>frac{2}{\text{Lodging ratings were on a scale of 1 to 5 according to 1 = almost all plants erect and 5 = all plants down.$ 

 $<sup>\</sup>frac{3}{\text{Yields}}$  adjusted to 13% moisture and 60 pounds per bushel. Planted May 4, 1972. Yields followed by the same letter are not significantly different at .05 probability level.