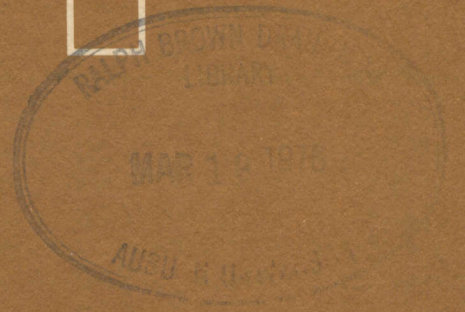


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ALABAMA SOYBEAN VARIETY TESTS 1975



Department of Agronomy
& Soils
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Donald L. Thurlow
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Agricultural Experiment
Station
Auburn University
Auburn, Alabama
Dennis Rouse, Director



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

Northern Alabama

Plantings May 1 to 31

Dare, Essex, Forrest, Coker 136, Davis, Lee 68, Lee 74,
McNair 600, Tracy

Plantings June 1 to 30

Dare, Forrest, Coker 136, Lee 68, Lee 74, Davis, Tracy, Bragg,
McNair 800, Ransom

Central Alabama

Plantings April 20 to May 15

Dare, Forrest, Davis, Lee 74, McNair 600, Tracy

Plantings May 16 to June 5

Davis, Lee 74, McNair 600, Tracy, Bragg, McNair 800, Ransom,
Hutton

Plantings June 6 to 30

Davis, Bragg, Ransom, Coker 338, Hutton

Southern Alabama

Plantings May 15 to May 31

Davis, Lee 74, McNair 600, Tracy, Bragg, Ransom, McNair 800

Plantings June 1 to 30

Davis, Bragg, Ransom, McNair 800, Coker 338, Hutton, Cobb

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INTRODUCTION

Proper evaluation of a soybean variety necessitates 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. 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 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 soybeans planters equipped with a special seed hopper adapted for small plots. Plots were four rows wide and 23 feet long with 16 feet of two center rows harvested for yield determinations. Row width varied from 36 to 42 inches depending on location. Seeding rate was 10 viable seed per foot of row.

The entries included in these tests were varieties released prior to 1975 and a number of unreleased strains in the late stages of evaluation.

DISCUSSION OF DATA

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 least significant difference (L.S.D.) at the 5% level of probability. The L.S.D. and the coefficients of variation (C.V.) are footnoted in yield tables for 1975 yield data only. The C.V. reflects the 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. Early growth was good at all locations as there was an average rainfall of .9 to 2 inches per week for the first 6 weeks for early plantings and from 2 to 3.5 inches per week for the 6 weeks period following plantings made in late June. This early rainfall caused some excess plant growth and lodging problems at Tennessee Valley Substation and Sand Mountain Substation in North Alabama and Prattville Field and Wiregrass Substation in central and South Alabama respectively.

There was a 16 to 24-day moisture stress period at all but two locations during the last 2 weeks in August and first 2 weeks of September. The two locations with no moisture stress during pod fill were Brewton Field and Gulf Coast Substation. The total rainfall from August 15 through September 30 is shown in Table 1. The total rainfall at each location was good for this period, and does not reflect the 2 to 3-week stress periods mentioned above. This stress period seemed to effect the mid season varieties in early planting and early varieties in the late planting tests more than other varieties.

Table 1. Rainfall by Location During the Period August 15 through September 30 for 1971, 1972, 1973, 1974, and 1975

Location	1971	1972	1973	1974	1975
	Inches	Inches	Inches	Inches	Inches
Black Belt Substation----- (Marion Junction)	8.59	3.85	4.88	9.87	7.72
Brewton Field----- (Brewton)	8.17	3.10	8.43	8.19	9.77
Gulf Coast Substation----- (Fairhope)	15.58	6.76	12.77	10.40	14.54
Prattville Field----- (Prattville)	7.65	4.20	2.95	10.12	9.09
Sand Mountain Substation---- (Crossville)	6.54	5.90	8.18	3.96	6.95
Upper Coastal Plain Sub.---- (Winfield)	7.49	4.81	4.82	8.71	7.45
Tennessee Valley Substation-- (Belle Mina)	4.32	5.95	3.58	4.49	5.76
Wiregrass Substation----- (Headland)	-	-	6.26	8.73	6.41

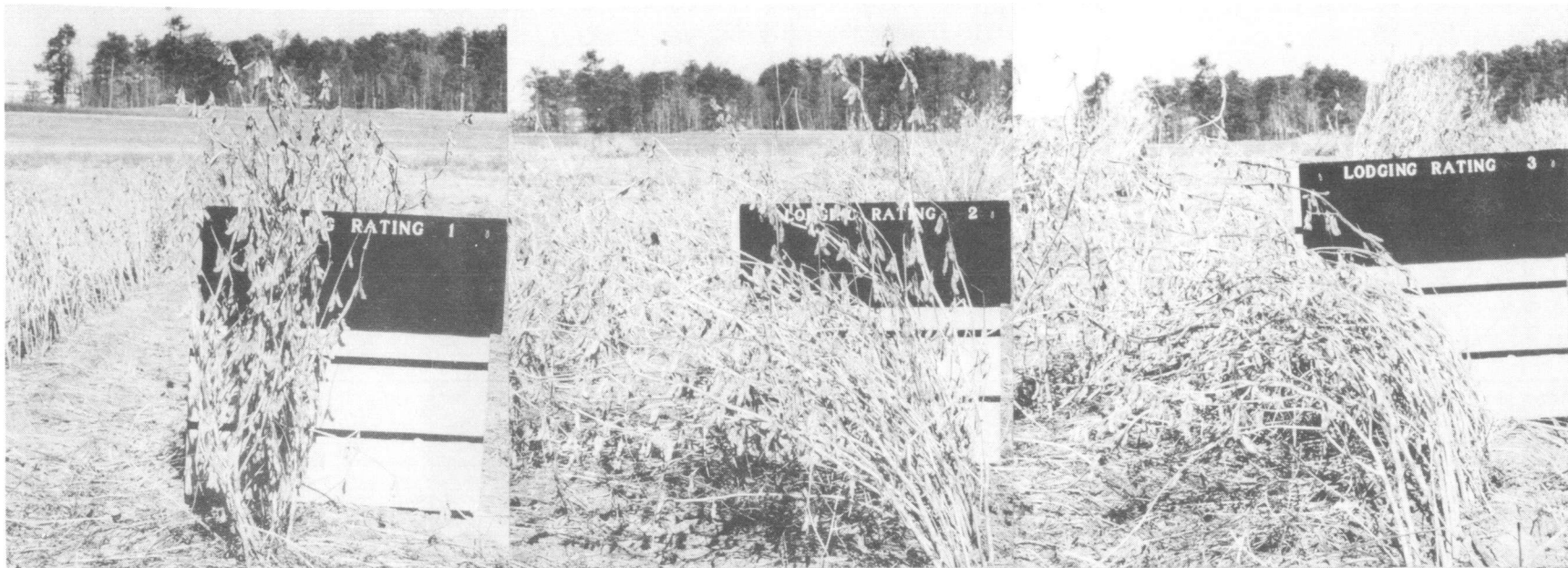
In the northern part of the State the early varieties yielded best at early planting. For example Essex yielded 62 bu/A at Tennessee Valley Substation and 34 bu/A at Sand Mountain Substation.

The late or full season varieties yielded the best at the later planting dates throughout the State and early planting dates in the southern locations. For example Hutton yielded 51 bu/A and Coker 338 yielded 39 bu/A for first and second planting respectively at Brewton Field and Ransom yielded 56 bu/A at Gulf Coast Substation.

Seed quality was fair to poor at most locations and in general the early varieties had the poorest quality, particularly when planted at the early planting dates.

DATA RECORDED

The yield of a crop is the primary factor of production when profits are to be maximized. Other characteristics which are important are plant height, height of 1st pod, maturity, lodging, and size and quality of seed.



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

- 1 - almost all plants erect.
- 2 - either all plants leaning slightly (less than 45°) or a few plants down.
- 3 - either all plants leaning moderately (approximately 45°) or 25 to 50% of the plants down.
- 4 - either all plants leaning considerably (more than 45°) or 50 to 80% of the plants down.
- 5 - all plants down.



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

Maturity was recorded as the date when the pods were dry and most of the leaves had dropped. Under most conditions, the stems were also dry.

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 of seedcoat due to late harvesting and to excessive rain.

Purple stain ratings were obtained by counting stained seed and expressing on a scale of 1 to 5 as follows:

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

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 tested over the past 5 years by maturity groups with source of seed for 1975. For more information on these varieties, see Table 2, for additional information of other varieties see A.U. Expt. Sta. Bulletin 413^{1/}.

Very Early Varieties - Maturity Group V

Dare	Alabama Foundation Seed Stocks Farm, Thorsby, AL.
Essex	" " " " " "
Forrest	" " " " " "
Mack	USDA Delta Branch Experiment Station, Stoneville, MS
McNair 3120*	McNair Seed Co., Laurinburg, NC
FFR-5004*	Farmers Forage Research Corp., W. Lafayette, Indiana

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

* Lines not released.

Early Varieties - Maturity Group VI

Coker 136	Coker's Pedigreed Seed Co., Hartsville, SC.
Coker 72-260*	" " " " " "
Davis	Alabama Foundation Seed Stocks Farm, Thorsby, AL
Centennial	USDA Delta Branch Experiment Station, Stoneville, MS
D70-3185*	
FFR 666	Farmers Forage Research Corporation, W. Lafayette, Ind.
FFR-6024*	" " " " " "
Lee 68	Alabama Foundation Seed Stocks Farm, Thorsby, AL
Lee 74	" " " " " "
McNair 600	McNair Seed Co., Laurinburg, NC
NAPB 603*	North American Plant Breeders, Hutchinson, Kansas
Pickett 71	USDA Delta Branch Experiment Station, Stoneville, MS
Tracy	Alabama Foundation Seed Stocks Farm, Thorsby, AL

Mid-season Varieties - Maturity Group VII

Bragg	Alabama Foundation Seed Stocks Farm, Thorsby, AL
McNair 600	McNair Seed Co., Laurinburg, NC
McNair 3043*	" " " " "
Ransom	Alabama Foundation Seed Stocks Farm, Thorsby, AL

Late Varieties - Maturity Group VIII

Hampton 266A	Coker's Pedigreed Seed Co., Hartsville, SC
Hutton	Alabama Foundation Seed Stocks Farm, Thorsby, AL
Coker 338	Coker's Pedigreed Seed Co., Hartsville, SC
Cobb	Alabama Foundation Seed Stocks Farm, Thorsby, AL

* Lines not released.

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

Group	Variety	Plant characteristics				Reaction to individual diseases ^{1/}					Nematode resistance	
		Pubescence	Flower color	Pod color	Hilum color	Bacteria pustule	Wild-file	Tar-get spot	Phyto-phthora rot	Purple seed stain	Cyst	root-knot
(Page 3)												
V	Dare	Gray	White	Tan	Buff	R	R	R	MR	R	S	MR
	Forrest	Tawny	White	Tan	Black	R	R	R	MR	MR	R	R
	Essex	Gray	Purple	Tan	Buff	R	R	R	MR	R	S	S
	Mack	Tawny	Purple	Tan	Black	R	R	R	R	R	M	S
VI	Davis	Gray	White	Lt. Tan	Buff	R	R	R	R	MR	S	S
	Lee 68	Tawny	Purple	Tan	Black	R	R	R	VR	R	S	S
	Pickett 71	Gray	Purple	Tan	Black	R	R	MR	R	R	R	S
	McNair 600	Tawny	Purple	Lt. Tan	Black	R	R	R	S	R	S	S
	D70-3185	Tawny	Purple	Tan	Black	R	R	R	R	MR	R	R
	Tracy	Tawny	White	Tan	Black	R	R	R	R	-	S	R
	Lee 74	Tawny	Purple	Tan	Black	R	R	R	VR	R	S	R
VII	Bragg	Tawny	White	Tan	Black	R	R	R	R	S	S	R
	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
VIII	Hampton 266A	Gray	Purple	Lt. Tan	Buff	R	R	MR	VS	S	S	S
	Hutton	Brown	Purple	Tan	Black	R	R	R	S	S	S	R
	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.

Table 3. Yield in Bushels per Acre^{1/} of Soybean Varieties Grown in North Alabama for 1975 when Planted at Sand Mountain Substation (SMS), Tennessee Valley Substation (TVS), and Upper Coastal Plain Substation (UCPS).

Variety	Early season planting ^{2/}				Mid season planting ^{3/}	Late season planting ^{4/}			
	TVS	SMS	UCPS	Av.	SMS	SMS	UCPS	Av.	
Essex-----	62.0	33.8	54.9	50.2	27.2	29.1	31.3	30.2	
Tracy-----	55.3	30.0	58.6	43.0	33.2	29.9	40.7	35.3	
Coker 72-260-----	43.2	31.8	59.6	46.5	31.5	30.9	34.5	32.7	
Ransom-----	52.4	28.1	55.8	45.4	33.8	31.3	40.4	35.8	
McNair 3120-----	50.7	29.3	53.8	44.6	32.1	29.7	--	--	
McNair 600-----	48.3	28.1	56.6	44.3	29.9	26.1	40.5	33.3	
MAPB 603-----	50.3	27.6	53.2	43.7	--	28.8	--	--	
Davis-----	44.2	27.8	58.4	43.5	32.0	29.7	38.9	34.3	
Bragg-----	52.9	23.7	53.0	43.2	30.1	32.7	42.1	37.4	
Hutton-----	40.4	27.5	60.7	42.9	34.9	31.9	39.0	35.4	
D70-3185-----	49.9	22.4	56.2	42.3	23.1	26.2	35.4	30.8	
Mack-----	52.2	26.0	49.9	42.7	21.4	24.4	35.3	29.3	
Lee 74-----	46.8	25.1	55.4	42.4	29.8	28.5	43.7	36.1	
FFR 666-----	51.0	26.5	48.8	42.1	30.4	23.4	--	--	
Forrest-----	51.7	24.1	48.8	41.5	26.5	26.2	36.9	31.6	
FFR 6024-----	48.1	26.0	49.7	41.3	32.5	--	--	--	
McNair 3043-----	41.6	25.8	54.6	40.7	--	--	--	--	
Dare-----	41.8	25.0	52.6	39.8	24.1	27.6	35.1	31.4	
Coker 136-----	42.0	24.3	51.6	39.3	29.5	29.2	36.5	32.8	
Lee 68-----	46.7	25.7	46.1	39.5	--	--	--	--	
Pickett 71-----	47.5	21.3	49.0	39.3	--	--	--	--	
McNair 800-----	46.7	16.6	48.5	37.3	25.0	29.6	38.9	34.2	
FFR 5004-----	46.2	18.4	--	--	--	--	--	--	
Coker 333-----	--	--	56.9	--	--	--	43.1	--	
Hampton 266A-----	--	--	50.8	--	--	--	39.2	--	
Cobb-----	--	--	--	--	27.6	31.5	47.9	--	
C.V.%	8.7	10.2	14.3	--	10.5	8.7	16.4	--	
LSD .05	5.7	3.6	10.6	--	4.3	3.6	9.1	--	

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 1, May 2, and May 14 for TVS, SMS and UCPS respectively.

^{3/}Mid season planting was May 23 at SMS. ^{4/}Late season planting was June 18 and June 24 at SMS and UCPS respectively.

Table 4. One, Two or Three Year Averages on Growth Characteristics of Soybean Varieties Grown in North Alabama for Years 1973-75

Variety	Early season planting ^{1/}				Mid season planting ^{1/}				Late season planting ^{1/}			
	Maturity ^{3/} Date	Plant Ht. 1st		Lodging ^{3/} Rating	Maturity ^{3/} Date	Plant Ht. 1st		Lodging ^{3/} Rating	Maturity ^{3/} Date	Plant Ht. 1st		Lodging ^{3/} Rating
		Ht. ^{3/} In.	Pod ^{3/} In.			Ht. ^{3/} In.	Pod ^{3/} In.			Ht. ^{3/} In.	Pod ^{3/} In.	
3-yr. av.												
Essex-----	9/24	23	4.5	1.2	9/25	27	5.3	1.4	10/5 ^{2/}	27	5.1	1.7
Forrest-----	9/28	33	4.7	2.0	9/30	34	5.3	2.5	10/8 ^{2/}	34	6.2	2.3
Dare-----	9/27	33	5.3	2.0	9/27	35	5.3	2.0	10/6 ^{2/}	34	5.5	2.1
Coker 136----	9/30	33	6.6	1.7	10/3 ^{2/}	38	6.9	1.9	10/11 ^{2/}	35	7.1	2.1
McNair 600----	10/6 ^{2/}	36	5.4	2.4	10/8 ^{2/}	35	5.2	2.9	10/13 ^{2/}	35	5.1	2.1
Lee 63-----	10/7 ^{2/}	33	5.7	2.0	6/	6/	6/	6/	6/	6/	6/	6/
Davis-----	10/8 ^{2/}	40	6.2	3.2	10/12 ^{2/}	37	5.7	2.8	10/16 ^{2/}	35	6.0	2.3 [∞]
Lee 74-----	10/9	34	6.5	2.4	10/9 ^{2/}	33	5.4	3.1	10/17 ^{2/}	32	6.7	3.1
Bragg-----	10/15 ^{2/}	42	8.0	2.9	10/16 ^{2/}	33	6.5	2.3	10/22 ^{2/}	38	6.9	2.5
Ransom-----	10/12 ^{2/}	36	6.9	2.1	10/15 ^{2/}	35	6.5	2.3	10/22 ^{2/}	34	7.7	2.1
2-yr. av.												
FFR 666-----	10/7 ^{2/4/}	30	5.3	1.8	10/7 ^{2/}	33	6.3	3.6	10/13 ^{2/5/}	30 ^{5/}	7.8 ^{5/}	3.0 ^{5/}
Tracy-----	10/6 ^{2/4/}	37	6.2	2.8	10/17 ^{2/}	37	6.5	3.0	10/19 ^{2/}	35	5.7	2.9
McNair 800----	10/14 ^{2/5/}	37	8.9	3.4	10/22 ^{2/}	38	7.1	3.9	10/25 ^{2/}	33	6.3	2.7
Hutton-----	10/26 ^{2/5/}	39	7.6	3.4	10/17 ^{2/}	39	7.9	3.8	10/25 ^{2/}	33	7.3	3.1
1-yr. av.												
Mack-----	9/27	35	4.4	2.7	10/3	37	6.5	2.3	10/10	34	5.2	2.5
FFR 5004-----	10/4 ^{4/}	52 ^{4/}	8.4 ^{4/}	4.8 ^{4/}	6/	6/	6/	6/	6/	6/	6/	6/
NAPB 603-----	10/8	40	7.5	1.8	6/	6/	6/	6/	10/16 ^{5/}	37 ^{5/}	7.3 ^{5/}	3.0 ^{5/}
McNair 3120---	10/7	37	5.5	1.9	10/16	35	6.3	2.3	10/16 ^{5/}	36 ^{5/}	7.8 ^{5/}	3.0 ^{5/}
Pickett 71---	10/14	35	7.0	2.4	6/	6/	6/	6/	6/	6/	6/	6/
Coker 72-260-	10/6	37	6.0	1.9	10/8	37	6.3	2.3	10/17	33	5.8	2.4

Table 4. (continued)

Variety	Early season planting ^{1/}				Mid season planting ^{1/}				Late season planting ^{1/}			
	Maturity ^{3/}	Plant Ht. 1st Ht. ^{3/}	Pod ^{3/}	Lodging ^{3/}	Maturity ^{3/}	Plant Ht. 1st Ht. ^{3/}	Pod ^{3/}	Lodging ^{3/}	Maturity ^{3/}	Plant Ht. 1st Ht. ^{3/}	Pod ^{3/}	Lodging ^{3/}
FFR 6024-----	10/12	34	7.2	1.9	10/11	33	5.3	3.0	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>
D70-3185-----	10/14	40	5.3	2.3	10/9	40	7.5	1.8	10/16	36	6.6	2.4
McNair 3042----	10/15	44	7.8	3.8	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>

^{1/}Early season planting was from TVS, SMS, and UCPS with 3-year average planting dates of 5/7, 5/8, 5/15, respectively. Mid season planting from SMS with 3-year average planting date of 5/24.

^{2/}Frost killed beans 1974 on Oct. 3 at Sand Mountain and Tennessee Valley.

^{3/}An explanation of data and ratings is given on page 4 of this report.

^{4/}Data average for two locations.

^{5/}Data average for one location.

^{6/}Variety not in test.

Table 5. Average Soybean Seed Quality and Size by Variety when Grown in North Alabama^{1/} 1975

Variety	Early season planting			Mid season planting			Late season planting		
	Seed	Purple	Seed	Seed	Purple	Seed	Seed	Purple	Seed
	quality ^{4/}	stain ^{5/}	size	quality ^{4/}	stain ^{5/}	size	quality ^{4/}	stain ^{5/}	size
	Rating	Rating	G/100 seed	Rating	Rating	G/100 seed	Rating	Rating	G/100 seed
Dare-----	2.5	1.3	13.1	2	1	11.0	1.8	1.3	13.4
Essex-----	2.3	1.7	13.7	2	1	10.0	2	1.5	13.3
Forrest-----	2	2	12.0	1.5	2	10.4	1	1	12.7
FFR 5004-----	2.5 ^{2/}	2 ^{2/}	14.8 ^{2/}	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]
Mack-----	2.8	2	13.4	2	2	11.6	2	2	15.6
Coker 136-----	2.5	2.7	14.1	1	1	11.6	2.5	1.5	14.7
Davis-----	2	1.3	14.9	1.5	2	13.2	1.5	1	15.8
D70-3185-----	2	1.7	13.0	1.5	1	10.2	1.5	1	14.4
FFR 6024-----	2.3	1	13.5	2	2	11.7	3 [/]	3 [/]	3 [/]
FFR 666-----	1.7	1	13.0	1	1	10.9	2 ^{2/}	1 ^{2/}	13.8 ^{2/}
Lee 68-----	1.5	1.3	13.2	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]
Lee 74-----	1.7	1	13.2	2	1	11.2	1.8	1	14.4
McNair 600-----	2	1	13.4	1.5	1	11.3	1.8	1	13.8
McNair 3120-----	2.3	1.3	12.7	2	2	11.0	1.5 ^{2/}	1 ^{2/}	13.3 ^{2/}
NAPB 603-----	1.8	2	14.5	3 [/]	3 [/]	3 [/]	1 ^{2/}	2 ^{2/}	17.3 ^{2/}
Pickett 71-----	1.7	1	12.8	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]
Tracy-----	2	1.3	17.1	2	1	13.9	2	1.5	16.2
Bragg-----	1.5	1	14.1	1	1	11.9	1.5	1.5	16.8
Coker 72-260-----	1.3	1	13.4	2	2	11.2	2.2	1	14.5
McNair 800-----	1.3	1.3	11.3	1.5	1	9.8	1	1.5	13.1
McNair 3043-----	1.2	1	12.6	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]
Ransom-----	2	1	14.9	2	1	13.1	1.2	1	17.4
Hutton-----	2	1	16.0	2	1	13.1	1.5	1	17.9
Cobb-----	3 [/]	3 [/]	3 [/]	1.5	1	12.1 ^{2/}	2	3	16.9
Coker 338-----	1 ^{2/}	2 ^{2/}	18.4 ^{2/}	3 [/]	3 [/]	3 [/]	2 ^{2/}	2 ^{2/}	17.6 ^{2/}
Hampton 266A--	1 ^{2/}	1 ^{2/}	17.6 ^{2/}	3 [/]	3 [/]	3 [/]	2 ^{2/}	1 ^{2/}	15.3 ^{2/}

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^{1/}Averages for early planting was from Tennessee Valley, Sand Mountain and Upper Coastal Plain Substation. Late planting was from Sand Mountain and Upper Coastal Plain Substation and mid planting data was from SMS.
^{2/}Data from only one location. ^{3/}Variety not tested.
^{4/}Seed quality is rated from 1 to 5 according to the following scale: 1=very good; 2=good; 3=fair; 4=poor; and 5=very poor. ^{5/}Purple stain ratings are given on a scale of 1 to 5 as follows: 1=no purple staining; 2=1-3% seed stained; 3=4-8% seed stained; 4=9-19% stained; 5=over 20% seed stained.

Table 6. Two-Year Average Yield^{1/} in Bushels per Acre of Soybean Varieties Grown in North Alabama for 1974 and 75 when Planted at Sand Mountain Sub. (SMS), Tennessee Valley Sub. (TVS), and Upper Coastal Plain Sub. (UCPS).

Variety	Early Planting ^{2/}				Mid	Late Planting ^{4/}			
	TVS	Bu/A		Av.	Planting ^{3/}	Bu/A		Av.	
		SMS	UCPS		SMS	SMS	UCPS		
Essex	55.8	39.6	48.9	48.1	32.0	30.5	35.1	32.8	
Tracy	49.7	36.9	51.4	46.0	32.5	27.1	40.8	34.0	
Ransom	44.2	34.0	52.5	43.6	34.5	25.3	40.3	32.8	
Forrest	48.4	34.1	44.7	42.6	30.0	24.6	38.7	31.6	
Lee 74	41.6	33.0	52.3	42.3	31.4	23.7	41.9	32.8	
McNair 600	42.7	31.6	49.4	41.2	30.9	24.5	36.9	30.7	
Davis	37.7	32.0	52.1	40.6	30.7	23.1	36.1	29.6	
Bragg	42.3	29.3	49.4	40.3	29.3	26.8	38.7	32.8	
Dare	43.8	32.2	44.9	40.3	30.1	23.7	35.8	29.8	
Coker 136	40.3	33.1	47.1	40.2	30.6	26.5	36.5	31.5	
Hutton	36.7	28.8	53.4	39.6	31.3	23.0	37.5	30.2	
FFR 666	43.3	32.2	42.4	39.3	30.9	24.6	---	---	
Lee 68	40.3	31.1	42.5	38.0	---	---	---	---	
McNair 800	38.2	20.7	44.2	36.4	25.8	23.4	35.8	29.6	
Coker 338	---	---	51.1	---	---	---	38.1	---	
Hampton 266A	---	---	49.6	---	---	---	40.5	---	
Pickett 71	---	---	47.2	---	---	---	---	---	
Cobb	---	---	---	---	---	---	40.0	---	

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 5 TVS and SMS and May 11 for UCPS.

^{3/}Mid season planting was May 24 SMS.

^{4/}Late season planting was June 22 and June 17 for SMS and UCPS respectively.

Table 7. Three-Year Average Yield^{1/} in Bushel per Acre of Soybean Varieties Grown in Northern AL when Planted at Sand Mountain Substation (SMS), Tennessee Valley Substation (TVS), and Upper Coastal Plain Substation (UCPS)

Variety	Early season planting ^{2/}				Mid season planting ^{3/}		Late season planting ^{4/}		
	TVS	Bu/A SMS	UCPS	Av.	Bu/A SMS	SMS	UCPS	Av.	
Essex-----	56.5	37.1	44.2	45.9	32.8	32.1	35.5	33.8	
Forrest-----	52.0	33.7	44.5	43.4	31.6	27.4	36.9	32.1	
Ransom-----	44.4	32.6	47.8	41.6	33.3	28.9	37.9	33.4	
Lee 74-----	43.5	32.3	48.5	41.4	30.9	25.8	39.5	32.6	
Coker 136-----	45.3	33.7	45.4	41.5	31.9	28.5	34.8	31.6	
McNair 600-----	44.1	32.0	47.5	41.2	31.9	26.9	36.3	31.6	
Davis-----	40.5	33.1	48.4	40.6	30.2	27.3	33.8	30.5	
Dare-----	47.4	33.2	41.1	40.5	31.4	26.2	33.7	29.9	
Bragg-----	43.2	30.7	44.0	39.3	29.8	30.8	34.8	32.8	
Lee 68-----	43.2	30.7	42.0	38.6	-	-	-	-	
Hutton-----	39.7	-	46.3	-	32.1	28.1	34.1	31.1	
Tracy-----	-	35.8	48.4	-	33.1	-	37.9	-	
Coker 338-----	-	-	46.0	-	-	-	36.7	-	
Pickett 71-----	-	-	45.1	-	-	-	-	-	
Hampton 266A-----	-	-	43.2	-	-	-	36.2	-	
FFR 666-----	44.4	-	41.7	-	-	-	-	-	
McNair 800-----	39.6	-	41.6	-	-	-	33.4	-	

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

Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 8, May 7, and May 15 for SMS, TVS, and UCPS respectively.

^{3/}Mid season planting was May 24 for SMS.

^{4/}Late season planting was June 20 and June 21 for SMS and UCPS respectively.

Table 8. Four-, and Five-Year^{2/} Averages for Yield^{1/} of Soybean Varieties Grown at Sand Mountain Substation at Three Planting Dates

Variety	May 8	May 7	May 28	May 28	June 23	June 22
	4-yr.	5-yr.	4-yr.	5-yr.	4-yr.	5-yr.
	71-75	70-75	71-75	70-75	71-75	70-75
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Dare-----	37.1	40.1	32.9	34.0	29.6	30.9
Davis-----	37.8	39.7	33.7	34.5	29.0	30.2
McNair 600-----	36.9	39.3	34.9	36.2	29.3	31.3
Lee 68-----	36.1	38.3	--	--	--	--
Bragg-----	36.2	38.2	33.8	35.2	31.1	31.9
Ransom-----	39.0	--	36.6	--	31.4	--

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

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

Table 9. Four and Five-Year Yield of Soybean Varieties Planted May 7 at Tennessee Valley Substation

Variety	Yield Bu/A	
	4-yr. Av. ^{1/} 72-75	5-yr. Av. 71-75
Ransom-----	44.8	45.2
Bragg-----	43.2	43.7
McNair 800-----	39.3	41.6
FFR 666-----	46.2	--
Davis-----	42.5	--

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

Table 10. Four- and Five-Year Averages for Yield of Soybean Varieties Grown at the Upper Coastal Plain Substation^{1/} at Two Planting Dates

Variety	Soybean yield by planting date			
	May 13	May 13	June 20	June 20
	4-yr. 72-75	5-yr. 71-75	4-yr. 72-75	5-yr. 71-75
	Bu/A	Bu/A	Bu/A	Bu/A
McNair 600-----	39.9	38.0	33.7	34.9
Ransom-----	39.7	37.6	34.8	36.3
Davis-----	40.3	37.4	31.5	34.2
Hutton-----	38.9	36.7	31.4	34.0
Pickett 71-----	38.3	35.5	--	--
Bragg-----	36.9	34.9	31.5	33.1
Hampton 266A-----	37.1	34.8	32.8	35.4
Dare-----	36.8	34.4	30.5	32.2
Lee 68-----	35.9	34.0	--	31.6
McNair 800-----	35.8	33.4	30.3	--
Forrest-----	40.0	--	33.8	--
FFR 666-----	36.0	--	--	--

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

Table 11. Yield in Bushels per Acre^{1/} of Soybean Varieties Grown in Central Alabama for 1975 when planted at Prattville Field (PF), and Black Belt Substation (BBS)

Variety	Early season planting ^{2/}			Mid season planting ^{3/}		Late season planting ^{4/}		
	PF	BBS	Av.	BBS		PF	BBS	Av.
Essex-----	47.8	29.3	38.5	18.0		21.9	20.1	21.0
Tracy-----	36.8	35.6	36.2	27.0		30.7	28.0	29.3
Coker 72-260---	35.3	36.4	35.8	26.0		23.7	23.6	23.6
Ransom-----	36.6	34.4	35.5	24.4		25.6	22.5	24.0
Hutton-----	37.8	31.5	34.6	22.0		31.1	29.0	30.0
Lee 68-----	35.8	33.5	34.6	-		23.2	-	
FFR 666-----	35.6	33.6	34.5	22.6		22.9	22.9	22.9
Coker 136-----	40.0	27.9	33.9	20.2		27.0	24.8	25.9
D70-3185-----	32.7	34.9	33.8	27.9		26.4	31.2	28.8
Dare-----	42.1	25.5	33.8	16.3		26.0	20.4	23.2
Davis-----	34.4	32.4	33.4	25.4		26.4	28.5	27.4
Lee 74-----	32.7	34.2	33.4	26.2		26.7	27.1	26.9
Mack-----	39.6	26.1	32.8	19.7		19.7	24.1	21.9
Forrest-----	37.6	27.0	32.3	19.7		23.6	21.7	22.6
McNair 600-----	33.2	31.2	32.2	22.4		26.8	26.7	26.7
Bragg-----	31.6	32.3	31.9	22.7		29.5	19.8	24.6
McNair 3120-----	41.3	21.3	31.3	21.2		19.6	24.5	22.0
NAPB 603-----	28.4	30.7	29.5	-		23.8	-	
McNair 800-----	29.9	26.5	28.2	20.1		24.3	25.2	24.7
McNair 3043-----	30.8	25.4	28.1	21.5		-	-	
Hampton 266A----	31.5	-		23.4		28.9	27.3	28.1
Coker 338-----	40.4	-		22.7		30.8	24.8	27.8
FFR 6024-----	36.6	-		-		-	-	
C.V.%-----	14.1	10.4		15.6		17.6	18.5	
LSD .05-----	6.9	4.3		5.0		6.4	6.5	

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 20 on both BBS & PF. ^{3/}Mid season planting was June 2 on BBS.

^{4/}Late season planting was June 19 and June 23 on BBS and PF respectively.

Table 12. One, Two and Three Year Averages on Growth Characteristics of Soybean Varieties Grown in Central Alabama for Years 1973-75

Variety	Early season planting ^{1/}				Mid season planting ^{1/}				Late season planting ^{1/}			
	Maturity ^{2/} Date	Plant Ht. Ht. ^{2/} In.	1st Pod ^{2/} In.	Lodging ^{2/} Rating	Maturity Date	Plant Ht. Ht. ^{2/} In.	1st Pod ^{2/} In.	Lodging ^{2/} Rating	Maturity ^{2/} Date	Plant Ht. Ht. ^{2/} In.	1st Pod ^{2/} In.	Lodging ^{2/} Rating
3-yr. av.												
Essex-----	9/14	23	2.9	1.2	4/	4/	4/	4/	9/30	23	3.0	1.1
Forrest-----	9/17	31	4.3	1.6	9/24	34	4.9	2.0	10/5	27	3.4	1.9
Dare-----	9/18	31	4.4	1.7	9/23	34	4.8	2.0	10/3	26	3.5	1.5
Coker 136-----	9/21	35	5.6	1.7	4/	4/	4/	4/	10/6	30	4.4	1.7
Davis-----	9/23	38	4.7	1.8	10/4	38	4.9	2.3	10/14	31	3.5	2.0
McNair 600-----	10/3	33	4.6	1.9	10/7	34	4.4	2.1	10/13	31	3.1	1.8
Lee 74-----	10/7	30	4.2	1.9	4/	4/	4/	4/	10/22 ^{3/}	29 ^{3/}	3.1 ^{3/}	2.1 ^{3/}
Lee 68-----	10/7	29	3.6	1.6	4/	4/	4/	4/	10/21 ^{3/}	27 ^{3/}	3.2 ^{3/}	1.8 ^{3/}
McNair 800-----	10/8	35	5.5	2.4	10/8	32	4.8	2.2	10/16	27	3.3	1.6
Bragg-----	10/12	40	7.2	2.5	10/13	38	6.5	2.5	10/21	33	4.5	1.9
Ransom-----	10/12	34	5.5	1.8	10/14	36	5.8	2.2	10/24	29	4.1	1.4
Hampton 266A--	10/12 ^{3/}	43 ^{3/}	5.8 ^{3/}	2.7 ^{3/}	11/1	43	8.2	2.3	10/30	34	5.0	2.2
2-yr. av.												
Tracy-----	10/5	36	6.7	2.5	4/	4/	4/	4/	10/20	33	3.5	2.2
FFR 666-----	10/5	25	3.0	1.5	4/	4/	4/	4/	4/	4/	4/	4/
Hutton-----	10/21	38	5.5	3.1	10/20	34	6.7	2.8	10/21	32	4.9	2.4
1-yr. av.												
Mack-----	9/12	32	4.4	2.5	9/13	29	3.5	1.8	9/28	30	2.9	2.6
MaNair 3120---	9/16	31	4.6	2.0	9/27	29	3.3	1.0	10/11	26	3.0	1.8
NAPB 603-----	10/2	38	6.2	2.0	4/	4/	4/	4/	10/13 ^{3/}	36 ^{3/}	6.3 ^{3/}	2.4 ^{3/}
Coker 72-260--	10/5	35	5.2	1.9	10/8	27	3.8	1.0	10/13	28	4.1	1.5
FFR 6024-----	10/11 ^{3/}	33 ^{3/}	6.3 ^{3/}	2.3 ^{3/}	4/	4/	4/	4/	4/	4/	4/	4/
D70-3185-----	10/10	39	6.4	2.3	10/12	36	4.8	2.0	10/17	35	5.3	2.7

Table 12. (continued)

Variety	Early season planting ^{1/}				Mid season planting ^{1/}				Late season planting ^{1/}			
	Maturity ^{2/} Date	Plant Ht. 1st Ht. ^{2/} In.	Pod ^{2/} In.	Lodging ^{2/} Rating	Maturity ^{2/} Date	Plant Ht. 1st Ht. ^{2/} In.	Pod ^{2/} In.	Lodging ^{2/} Rating	Maturity ^{2/} Date	Plant Ht. 1st Ht. ^{2/} In.	Pod ^{2/} In.	Lodging ^{2/} Rating
McNair 3043	10/16	39	7.2	2.6	10/18	33	5.5	1.0	4/	4/	4/	4/
Coker 338	10/28 ^{3/}	39 ^{3/}	5.5 ^{3/}	2.7 ^{3/}	4/	4/	4/	4/	10/26	33	5.0	2.1
Cobb	4/	4/	4/	4/	4/	4/	4/	4/	11/1	39	5.1	2.6

^{1/}Early season planting was from BBS and PF with 3 year average planting dates of May 7 and May 13, respectively. Mid season planting was from BBS with 3 year average planting date of June 5. Late season planting was from BBS and PF with 3 year average planting date of June 22 and June 13, respectively.

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

^{3/}Data averaged for only PF.

^{4/}Variety not in test.

Table 13. Average Soybean Seed Quality and ^{1/} Size by Variety when Grown in Central Alabama for 1975

Variety	Early season planting			Mid season planting			Late season planting		
	Seed quality ^{4/}	Purple stain ^{5/}	Seed size	Seed quality ^{4/}	Purple stain ^{5/}	Seed size	Seed quality ^{4/}	Purple stain ^{5/}	Seed size
	Rating	Rating	G/100 seed	Rating	Rating	G/100 seed	Rating	Rating	G/100 seed
Dare-----	2.5	1.5	11.2	2	1	10.3	2	2	10.4
Essex-----	3.2	2	12.5	2.5	2	12.3	3	2	11.5
Forrest-----	3.2	1	10.4	2	1	9.9	2.2	1.5	8.8
Mack-----	3.5	1.5	12.0	3	1	10.6	2.2	1.5	10.7
Coker 136----	3	2	12.6	3	1	10.8	2.5	3	12.5
Davis-----	2.2	2.5	12.3	2	3	12.5	1.8	2	11.9
D70-3185----	2.5	2	12.2	2	1	12.9	2	1.5	11.4
FFR 6024----	4 ^{2/}	1 ^{2/}	12.7 ^{2/}	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]
FFR 666-----	2.9	1.5	10.4	2	1	11.0	2.5	2	10.7
Lee 68-----	2.5	2	12.2	3 [/]	3 [/]	3 [/]	1.5 ^{2/}	1 ^{2/}	10.8 ^{2/}
Lee 74-----	2.5	1.5	10.1	2	1	11.8	2.2	2	10.3
McNair 600----	3.2	2	11.9	3	3	11.5	1.8	1.5	11.6
McNair 3120---	2.5	1	10.0	2	2	10.0	2	2	9.3
NAPB 603-----	3.5	2	10.9	3 [/]	3 [/]	3 [/]	2 ^{2/}	2 ^{2/}	12.2 ^{2/}
Tracy-----	2.5	1.5	12.6	2.5	1	13.3	1.8	2	13.4
Bragg-----	1.8	2	13.0	2	1	10.2	1.8	1.5	12.3
Coker 72-260-	3	2.5	12.4	2.5	2	11.9	2	2	12.2
McNair 800----	2.2	2.5	10.9	2.5	3	10.6	1.5	1.5	9.9
McNair 3043---	3	1.5	11.2	2	1	11.1	3 [/]	3 [/]	3 [/]
Ransom-----	2	2	14.3	2	1	13.1	1.8	1.5	12.6
Cobb-----	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	3 [/]	2.5	1	12.6
Coker 338----	2 ^{2/}	1 ^{2/}	14.8 ^{2/}	2	1	13.1	2.2	1	13.6
Hampton 266A-	1.5 ^{2/}	2 ^{2/}	12.7 ^{2/}	2.5	2	14.2	2.5	1.5	13.8
Hutton-----	1.8	1.5	15.6	2.5	1	14.1	2	1	13.6

^{1/}Averages for Prattville Field and Black Belt Substation for early and late plantings and Black Belt Substation only mid planting.

^{2/}Data from only one location (Prattville Field). ^{3/}Variety not in test.

^{4/}Seed quality is rated from 1 to 5 according to the following scale: 1=very good; 2=good; 3=fair; 4=poor; and 5=very poor. ^{5/}Purple stain ratings are given on a scale of 1 to 5 as follows: 1=no purple staining; 2=1-3% of seed stained; 3=4-8% of seed stained; 4=9-19% of seed stained; 5=over 20% of seed stained.

Table 14. Two-Year Average Yield in Bushels per Acre^{1/} of Soybean Varieties Grown in Central Alabama for 1974 and 1975 when Planted at Prattville Field (PF) and Black Belt Substation (BBS)

Variety	Early season planting ^{2/}			Mid season planting ^{3/}		Late season planting ^{4/}		
	PF	BBS	Av.	BBS	PF	BBS	Av.	
Tracy-----	43.4	41.8	42.6	-	30.3	32.1	31.2	
Ransom-----	41.9	39.5	40.7	27.1	24.9	27.4	26.1	
Essex-----	46.2	33.6	39.9	26.6	26.3	26.7	26.5	
Forrest-----	41.3	36.3	38.8	24.0	29.5	25.1	27.3	
Davis-----	39.9	37.2	38.5	27.5	30.3	32.1	31.2	
FFR 666-----	39.0	37.8	38.4	-	-	-	-	
Hutton-----	40.6	35.8	38.2	21.2	31.5	28.7	30.1	
Dare-----	40.9	35.0	37.9	21.6	28.3	23.4	25.8	
Lee 74-----	39.1	36.5	37.8	-	26.4	31.2	28.8	
McNair 600-----	37.8	35.6	36.7	26.0	29.6	29.6	29.6	
Lee 68-----	38.7	33.8	36.2	-	21.3	-	-	
Bragg-----	36.9	34.6	35.7	21.6	31.2	25.3	28.2	
McNair 800-----	35.1	33.2	34.1	22.0	28.6	28.7	28.6	
Coker 338-----	41.3	-	-	-	31.8	31.1	31.4	
Hampton 266A-----	35.4	-	-	22.7	30.2	29.0	29.6	
Coker 136-----	41.7	-	-	27.9	28.4	29.9	29.1	

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 7 or May 17 on BBS and PF respectively.

^{3/}Mid season planting was June 3 on BBS.

^{4/}Late season planting was June 19 and June 22 on BBS and PF respectively.

Table 15. Three Year Average Yield in Bushels per Acre^{1/} of Soybean Varieties Grown in Central Alabama for 1973-75 when Planted at Prattville Field (PF) and Black Belt Substation (BBS)

Variety	Early season planting ^{2/}			Mid season planting ^{3/}		Late season planting ^{4/}		
	PF	Bu/A BBS	Av.	Bu/A BBS	PF	Bu/A BBS	Av.	
Essex-----	39.5	37.2	38.3	-	24.5	23.3	23.9	
Tracy-----	35.7	-	-	-	26.2	-	-	
Coker 136-----	35.4	38.23	36.8	-	25.2	24.3	24.7	
Davis-----	34.6	39.0	36.7	30.9	26.1	29.2	27.6	
Forrest-----	35.2	37.0	36.1	28.7	26.6	23.2	24.9	
Ransom-----	34.4	36.1	35.2	32.3	22.1	24.8	23.5	
Dare-----	34.1	34.7	34.4	25.3	25.8	19.5	22.7	
Lee 74-----	32.3	36.4	34.3	-	23.6	-	-	
Lee 68-----	32.1	36.3	34.2	-	19.5	-	-	
McNair 600-----	30.6	37.1	33.8	29.9	26.0	25.7	25.8	
Bragg-----	30.2	33.8	32.0	27.2	26.3	24.5	25.4	
McNair 800-----	29.0	32.1	30.5	26.7	23.2	25.2	24.2	
Hutton-----	32.8	-	-	26.7	26.1	26.2	26.1	
Hampton 266A-----	28.0	-	-	28.9	25.2	26.2	25.7	
Coker 338-----	32.7	-	-	-	26.6	-	-	
FFR 666-----	32.4	-	-	-	-	-	-	

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in tables indicate variety not tested.

^{2/}Early season planting was May 7, May 18 on BBS and PF respectively.

^{3/}Mid season planting was June 5 on BBS.

^{4/}Late season planting was June 18 and June 22 on PF and BBS respectively.

Table 16. Four- and Five-Year Field^{1/} Averages for Soybean Varieties Grown in Central Alabama, 1971-75

Variety	4 yr. av. (72-75) Bu/A						5 yr. av. (71-75) Bu/A					
	Early season planting ^{2/}			Late season planting ^{3/}			Early season planting ^{2/}			Late season planting ^{3/}		
	PF	BBS	Av.	PF	BBS	Av.	PF	BBS	Av.	PF	BBS	Av.
Davis-----	33.0	39.8	36.4	24.1	30.4	27.2	35.3	38.5	36.9	27.3	29.4	28.4
Ransom-----	29.5	37.7	33.6	21.8	26.6	24.2	33.6	38.4	36.0	26.5	26.9	26.7
McNair 600-----	28.7	38.9	33.8	24.7	26.5	25.6	32.5	38.7	35.6	28.0	25.4	26.7
Dare-----	33.6	35.3	34.4	22.6	20.5	21.6	35.2	35.8	35.5	24.9	21.0	22.9
Lee 68-----	29.2	37.4	33.3	19.7	4/		32.9	36.7	34.8	23.7	4/	
Bragg-----	25.4	35.8	30.6	25.6	26.3	25.9	30.0	35.1	32.6	28.7	26.1	27.4
McNair 800-----	26.0	34.5	30.2	22.7	27.5	25.1	29.5	33.8	31.6	25.8	26.0	25.9
Hutton-----	28.5	4/		25.5	26.8	26.1	33.1	4/		29.1	25.8	27.4
Hampton 266A-----	25.5	4/		24.5	27.9	26.2	29.2	4/		27.7	26.0	26.8
Forrest-----	35.4	39.2	37.3	25.3	23.5	24.4						
Tracy-----	32.9	4/		25.4	4/							
FFR 666-----	29.9	4/		4/								

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

^{2/}Early season planting was May 15 at Prattville Field (PF) and Black Belt Substation (BBS).

^{3/}Late season planting was June 19 and June 25 for Prattville Field (PF) and Black Belt Substation (BBS) respectively.

^{4/}Variety not included in test.

Table 17. Yield in Bushels per Acre^{1/} of Soybean Varieties Grown in South Alabama for 1975 when Planted at Brewton Field (BF), Gulf Coast Substation (GCS), and Wiregrass Substation (WS).

Variety	Early season planting ^{2/}				Late Season planting ^{3/}
	GCS Bu/A	WS Bu/A	BF Bu/A	Av. Bu/A	BF Bu/A
Tracy	54.9	49.2	45.7	46.9	35.8
Ransom	55.8	36.1	44.1	45.3	37.7
Hutton	52.6	32.0	51.1	45.2	37.1
D70-3185	49.6	34.7	47.1	43.8	--
Coker 136	53.0	32.0	44.5	43.1	28.4
Coker 72-260	54.4	39.2	35.4	43.0	24.5
McNair 600	50.1	36.5	42.0	42.8	35.4
Forrest	53.3	34.1	40.2	42.5	30.7
Davis	51.2	34.7	40.3	42.0	35.4
Lee 74	51.4	31.2	42.2	41.6	30.0
McNair 3120	48.6	33.7	42.0	41.4	--
McNair 3043	52.1	26.0	45.7	41.2	--
Lee 68	52.3	29.9	39.5	40.5	--
Bragg	52.3	30.2	38.5	40.3	36.5
Dare	52.3	32.3	35.4	40.0	27.8
Coker 338	45.9	26.2	47.4	39.8	39.1
Mack	48.8	27.5	42.6	39.6	34.3
McNair 800	44.5	33.6	40.0	39.3	32.5
NAPB 603	46.2	32.8	37.6	38.6	--
FFR 666	49.6	27.5	37.6	38.2	25.8
Cobb	44.2	27.6	39.4	37.0	37.3
Essex	53.2	--	41.1	--	27.8
FFR 6024	50.6	28.3	--	--	--
C.V.%	6.7	9.4	13.5	--	9.8
L.S.D. .05	4.7	4.0	7.7	--	4.6

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicates variety not tested.

^{2/}Early season planting was May 22, May 28, June 6 on WS, BF, and GCS respectively.

^{3/}Late season planting was June 25 on BF.

Table 18. One-, Two- of Three-Year Averages on Growth Characteristics of Soybean Varieties Grown in South Alabama for Years 1973-75

Variety	Early season planting ^{1/}				Late season planting ^{1/}			
	Maturity ^{2/}	Plant Ht. ^{2/}	Ht. 1 st Pod ^{2/}	Lodging ^{2/}	Maturity ^{2/}	Plant Ht. ^{2/}	Ht. 1 st Pod ^{2/}	Lodging ^{2/}
	Dates	In.	In.	Rating	Dates	In.	In.	Rating
3-yr. av.								
Dare-----	9/24	27 ^{3/}	3.3 ^{3/}	1.1 ^{3/}	10/8	21	4.3	1.0
Essex-----	10/23 [/]	21 ^{3/}	3.6 ^{3/}	1.0 ^{3/}	10/11	19	2.8	1.0
Forrest-----	9/28	26	3.6	1.1	10/10	24	4.6	1.2
Coker 136-----	10/23 [/]	32 ^{3/}	5.5 ^{3/}	1.1 ^{3/}	10/12	20	4.3	1.1
Davis-----	10/8	33	4.3	1.9	10/19	27	3.3	1.1
Lee 68-----	10/13	22	3.1	1.1	5/	5/	5/	5/
Lee 74-----	10/14	24	3.2	1.1	10/22	21	3.1	1.0
McNair 600-----	10/12	29	3.5	1.3	10/18	25	3.8	1.0
McNair 800-----	10/13	31	4.6	1.7	10/19	19	3.8	1.0
Bragg-----	10/18	34	5.2	1.6	10/20	26	4.4	1.0
Ransom-----	10/20	28	4.6	1.3	10/26	24	4.0	1.0
Hutton-----	10/26	33	5.5	1.9	10/24	24	4.4	1.1
Coker 338-----	10/26	33	4.7	1.8	10/25	26	5.3	1.1
Hampton 266A-----	10/25 ^{3/}	32 ^{3/}	5.3 ^{3/}	3.6 ^{3/}	10/25	26	5.5	1.0
2-yr. av.								
Tracy-----	10/7	31	2.9	2.0	10/16	22	3.3	1.0
FFR 666-----	10/11 ^{4/}	15 ^{4/}	1.8 ^{4/}	1.0 ^{4/}	10/23	17	2.8	1.0
Cobb-----	10/26 ^{3/}	39 ^{3/}	3.9 ^{3/}	3.6 ^{3/}	10/29	28	5.1	1.1
1-yr. av.								
Mack-----	10/4	27	3.1	1.7	10/13	26	6.3	2.0
McNair 3120-----	10/7	27	2.9	1.2	5/	5/	5/	5/
NAPB 603-----	10/7	32	5.0	1.2	5/	5/	5/	5/
FFR 6024-----	10/10 ^{3/}	26 ^{3/}	3.5 ^{3/}	1.2 ^{3/}	5/	5/	5/	5/
D70-3185-----	10/12	34	3.8	1.9	5/	5/	5/	5/
Coker 72-260-----	10/12	26	3.1	1.1	10/23	19	3.0	1.0
McNair 3043-----	10/13	33	3.9	2.1	5/	5/	5/	5/

^{1/} Early season planting was from GCS, WS, and BF with 3 year average planting dates of June 6, May 17, and May 29 respectively. Late season planting was from BF with 3 year average planting of June 30.

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

^{3/} Data averaged for two locations. ^{4/} Data averaged for only one location. ^{5/} Variety not in test.

Table 19. Average Soybean Seed Quality and Size by Variety when Grown in South Alabama^{1/} 1975

Variety	Early season planting ^{1/}			Late season planting ^{2/}		
	Seed quality ^{4/} Rating	Purple stain ^{5/} Rating	Seed size G/100 seed	Seed quality ^{4/} Rating	Purple stain ^{5/} Rating	Seed size G/100 seed
Dare-----	3.7	2	14.6	2.5	2	14.7
Essex-----	3.2 ^{2/}	3 ^{2/}	16.4 ^{2/}	2	4	16.3
Forrest-----	3.5	2.7	13.2	2	2	12.8
Mack-----	3.7	2.3	15.8	2.5	3	15.2
Coker 136-----	3.5	3.3	15.3	2	1	11.1
Davis-----	2.5	2	14.4	2	2	15.5
D70-3185-----	3	2	14.4	3/	3/	3/
FFR 6024-----	3.5 ^{2/}	2 ^{2/}	14.5 ^{2/}	3/	3/	3/
FFR 666-----	2.3	1.7	14.5	1.5	2	15.6
Lee 68-----	2.7	1.7	14.2	3/	3/	3/
Lee 74-----	2.3	1	14.4	2	2	15.5
McNair 600-----	3	1.7	14.1	2	2	15.4
McNair 3120-----	3.3	2.3	13.5	3/	3/	3/
NAPB 603-----	3	2.3	14.7	3/	3/	3/
Tracy-----	2.7	2	17.3	2	1	18.1
Bragg-----	1.7	1	14.8	2	1	16.5
Coker 72-260-----	3.2	2.3	14.9	1.5	2	16.5
McNair 800-----	1.7	1.3	12.0	1	1	11.8
McNair 3043-----	1.7	1	13.7	3/	3/	3/
Ransom-----	2.2	1.7	16.2	2	1	17.6
Cobb-----	2	1	14.3	3	2	16.1
Coker 338-----	2.7	1.3	17.2	2	1	18.1
Hutton-----	2.3	1	17.9	2	1	17.3
Hampton 266A-----	2.5 ^{2/}	1.5 ^{2/}	15.6 ^{2/}	2	1	17.2

^{1/}Averages for early plantings from Brewton Field, Gulf Coast Substation and Wiregrass Substation and late planting from Brewton Field only.

^{2/}Average of only two locations. ^{3/}Variety not tested.

^{4/}Seed quality is rated from 1 to 5 according to the following scale: 1=very good; 2=good; 3=fair; 4=poor; and 5=very poor.

^{5/}Purple stain ratings are given on a scale of 1 to 5 as follows: 1=no purple staining; 2=1-3% seed stained; 3=4-8% seed stained; 4=9-19% seed stained; and 5=over 20% seed stained.

Table 20. Two-Year Average Yields in Bushels per Acre^{1/} of Soybean Varieties Grown in South Alabama for 1974 and 75 when Planted at Brewton Field (BF), Gulf Coast Substation (GCS) and Wiregrass Substation (WS).

Variety	Early season planting ^{2/}				Late Season planting ^{3/}
	GCS	WS	BF	Av.	BF
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Hutton	57.1	36.7	51.0	48.2	27.7
Tracy	56.4	42.0	45.0	47.8	28.4
Ransom	56.7	39.0	45.8	47.1	28.6
Davis	52.4	40.8	43.0	45.4	32.4
McNair 600	52.2	39.3	42.0	44.5	28.7
Coker 338	51.9	34.4	48.8	45.0	32.2
Forrest	53.0	38.0	40.5	43.8	27.1
McNair 800	48.7	38.9	43.7	43.7	25.3
Lee 74	54.1	35.5	39.2	42.9	25.9
Bragg	53.7	34.4	38.6	42.2	28.4
Coker 136	51.8	35.9	39.1	42.2	20.5
Dare	50.6	37.8	35.7	41.3	21.4
Lee 68	51.4	33.1	33.8	39.4	--
Cobb	47.9	31.8	--	--	36.5
Hampton 266A	--	28.5	42.8	--	29.8
Essex	40.7	--	41.2	--	24.8
FFR 666	--	--	33.7	--	--

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicate variety not tested.

^{2/}Early season planting was May 16, May 28, and June 3 on WS, BF, and GCS respectively.

^{3/}Late season planting was July 2 on BF.

Table 21. Three-year Average Yields^{1/} of Soybean Varieties Grown in South Alabama for 1973-75 when Planted at Brewton Field (BF), Gulf Coast Substation (GCS) and Wiregrass Substation (WS).

Variety	Early season planting ^{2/}				Late season planting ^{3/}
	GCS Bu/A	WS Bu/A	BF Bu/A	Av. Bu/A	BF Bu/A
Hutton	54.4	32.5	47.6	44.8	30.1
Ransom	51.8	32.9	42.1	42.2	26.4
Coker 338	49.4	28.9	46.2	41.5	33.7
McNair 800	46.9	35.2	40.6	40.9	26.0
Davis	50.4	33.5	37.8	40.5	29.9
McNair 600	47.8	33.8	39.2	40.2	29.8
Lee 74	50.4	30.2	38.0	39.5	26.6
Bragg	49.9	32.0	37.8	39.1	28.5
Forrest	47.0	31.5	35.6	38.0	26.2
Lee 68	48.1	29.0	31.9	36.3	---
Hampton 266A	---	26.9	40.1	---	30.4
Essex	41.1	---	35.5	---	22.7
Coker 136	48.4	---	34.4	---	22.2
Dare	46.5	33.0	---	---	20.6
FFR 666	---	---	31.0	---	---

^{1/}Yield adjusted to 13% moisture and 60 pounds per bushel. Blank areas in table indicates variety not tested.

^{2/}Early season planting was May 17, May 29, and June 5 on WS, BF, and GCS respectively.

^{3/}Late season planting was June 30 on BF.

Table 22. Four and Five Year Yield^{1/} Averages for Soybean Varieties Grown in South Alabama 1971-75

Variety	4-yr. Av. (72-75)				5-yr. Av. (71-75)			
	Early season planting ^{2/}			Late season planting ^{3/}	Early season planting ^{2/}			Late sea. planting ^{3/}
	GCS	BF	Av.	BF	GCS	BF	Av.	BF
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Hutton-----	47.7	37.7	42.7	24.5	48.2	39.5	43.8	24.1
Ransom-----	46.8	34.1	40.4	22.4	48.2	36.8	42.5	23.5
Davis-----	47.6	32.8	40.2	25.6	47.6	34.6	41.1	26.0
McNair 600----	45.9	33.0	39.4	25.2	46.4	34.5	40.0	26.0
McNair 800----	43.5	33.2	38.4	22.0	44.9	35.2	40.0	22.7
Bragg-----	45.3	31.3	38.3	23.8	46.2	31.3	38.8	23.2
Lee 68-----	45.7	26.9	36.3	4/	45.9	28.7	37.3	4/
Hampton 266A	4/	32.5		26.2	4/	34.1		25.4
Dare-----	45.6	4/		18.7	45.2	4/		20.1
Forrest-----	4/	31.3		22.8	4/	4/		4/

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

^{2/}Early season planting was May 29 for Brewton Field (BF) and June 5 for Gulf Coast Substation (GCS).

^{3/}Late season planting was June 28 for Brewton Field (BF).

^{4/}Variety not included in test.

