

Department of Agronomy and Soils
Departmental Series No. 56
Agricultural Experiment Station Auburn University
R. Dennis Rouse, Director Auburn, Alabama



Alabama
Soybean Variety Tests
1979
March 1980

ALABAMA

SOYBEAN VARIETY TESTS

1979

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and
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March 1980

Department of Agronomy and Soils
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Auburn University

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

V

VI

VII

VII

Northern Alabama

Plantings May 1 to 30

Essex, Coker 156,
Forrest Lancer, Lee 74,
McNair 600,
Tracy, Tracy M

Plantings June 1 to 30

Essex, Centennial,
Forrest, Coker 156,
McNair 500 Davis, Lancer,
Lee 74,
McNair 600,
Tracy, Tracy M

Bragg,
Braxton,
Ransom

Central Alabama

Plantings May 1 to 15

Forrest Centennial,
Coker 156,
Davis, Lee 74,
McNair 600,
Tracy, Tracy M

Plantings May 16 to June 5

Forrest* Centennial,
Coker 156,
Davis, Lee 74,
McNair 600,
Tracy, Tracy M

Bragg, Braxton,
Coker 237,
RA 700, Ransom

Coker 338,
Hutton,

Plantings June 6 to 30

Centennial,
Davis

Bragg, Braxton,
Coker 237,
Ransom

Coker 338,
Hutton,
Cobb

Southern Alabama

Plantings May 20 to June 10

Centennial,
Coker 156,
Davis, Lee 74,
McNair 600,
Tracy, Tracy M

AP 70, Bragg,
Braxton,
Coker 237,
Ransom

Coker 338,
Coker 488,
Hutton,
Cobb

Plantings June 10 to 30

Davis

AP 70, Bragg,
Braxton,
Coker 237,
Ransom

Coker 338,
Coker 488,
Hutton,
Cobb

*Not suggested for Black Belt soils during this planting date.

Table of Contents

	Page
Introduction.....	1
Experimental Procedures, Discussion of Data, Season Conditions and Description of Data Recorded.....	1-5
Soybean Variety Descriptions and Disease Resistance.....	6-7
Source of Seed Used in 1978 Tests.....	8-9
Soybean Yield Data and Other Growth Characteristics by Location	
North Alabama.....	11
Sand Mountain Substation, Crossville, Ala.....	12-21
Tennessee Valley Substation, Belle Mina, Ala.....	22-25
Upper Coastal Plains Substation, Winfield, Ala.....	26-33
Central Alabama	34-35
Black Belt Substation, Marion Junction, Ala.....	36-47
Lower Coastal Plain Substation, Camden, Ala.....	48-51
Prattville Experiment Field, Prattville, Ala.....	52-59
Southern Alabama	60-61
Brewton Experiment Field, Brewton, Ala.....	62-68
Monroeville Experiment Field, Monroeville, Ala.....	69-71
Gulf Coast Substation, Fairhope, Ala.....	72-76
Wiregrass Substation, Headland, Ala	77-80
Soybean Yields and Other Growth Characteristics on Soybean Cyst Nematode Infested Fields.....	81
Northern Alabama.....	82
Southern Alabama	82
Soybean Protein and Oil Content by Location.....	83
Northern Alabama.....	84-87
Central Alabama.....	88-91
Southern Alabama.....	92-93

INTRODUCTION

To properly evaluate a soybean variety it is necessary that it be grown at a number of locations, at various planting dates, and over a period of years. This will subject the variety to differences in soil and climatic conditions that occur throughout the State. The most common limiting factor in soybean production is inadequate moisture during pod development and filling. Since soybeans are highly 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. Thus, it is important that varieties from more than one maturity group be evaluated at each location. Continued testing and evaluation of soybean varieties and experimental strains by agricultural experiment stations are essential if farmers, County Extension Agents, seedsmen, and other agricultural workers are to be provided with information to help them select varieties best adapted to their locality and best suited to meet individual requirements.

EXPERIMENTAL PROCEDURES

Tests in 1979 were conducted at Substations and Experiment Fields of the Alabama Agricultural Experiment Station of Auburn University and two locations on cyst nematode infested fields (Moody Farm, Stevenson, Alabama, and Engel Farm, Summerdale, Alabama). A randomized block design with 4 replications was used at each location with the first planting made at the optimum time for maximum yield. Plots were planted with regular commercial soybean planters equipped with special seed hoppers adapted for small plots. Plots were four rows wide and 23 feet long with 16 feet of the two inner rows harvested for yield determinations. Harvest was done with a K.E.M. small plot combine at all locations. Row width varied from 36 to 40 inches depending on location. Seeding rates were 10 viable seed per foot of row based on germination at 75° F. All plot areas were fertilized according to soil test.

The entries in these tests included varieties released prior to 1979, a number of unreleased lines in the late stages of development from the USDA Regional Testing Program, and some commercial lines. Sources of seed are listed on pages 8, 9, and 10.

DISCUSSION OF DATA

Since results of field plot research are influenced by inherent soil differences and soil moisture availability, it is not possible to determine exactly the yield potential of a variety at a given location. Varietal performance may also vary from year to year because of variation in rainfall, temperature, diseases, and nematodes. Therefore, long term yield averages are more reliable in evaluating varietal performance.

Differences in yield for 1979 have been computed using Duncan's Multiple Range Test at the 5% level of probability. Yields followed by the same letter are not considered to be significantly different. Coefficients of variation (C.V.) are footnoted in the tables. This value reflects the relative precision of the experiment; a small C.V. indicates more precision in estimating the relative performance of varieties.

SEASONAL CONDITIONS

Early season moisture was quite variable during the growing season in 1979. Northern Alabama had sufficient moisture early for good stands and early growth at both Belle Mina and Crossville. At Winfield a drought of 25 days during late June and early July delayed growth of first planting and dry soil conditions delayed the second planting from mid-June to mid-July. Rainfall of 13.7 and 11.1 inches at Belle Mina and Crossville, respectively, during the vegetative growth of the early plantings resulted in excessive growth and lodging of full season and late varieties at these two locations. Some lodging also occurred with the taller varieties at Monroeville, Winfield, and Brewton at the early plantings. The severe lodging that occurred at Fairhope was the result of hurricane Frederic. This was not only a lodging problem but a loss of more than 50 percent of the leaves. Good moisture at all three northern locations during the pod fill periods (Table 1) resulted in average yields of 42, 39, and 30 bu./a. for early planting at Belle Mina, Crossville, and Winfield, respectively.

Rainfall in central Alabama was adequate for good stands at all locations. Uniform vegetative growth was interrupted by an extended dry period of 20 to 24 days in June at all locations. It was also dry in August and early September at Marion Junction and Prattville. This resulted in average yields of 14 and 22 bu./a. for Prattville and Marion Junction, respectively, which were the lowest for any test location in 1979. Good rainfall in late August and September (table 1) at Camden resulted in good soybean yields with an average yield of 37 bu./a. for 44 varieties.

Rainfall in south Alabama was adequate for good stands for all locations. However, Monroeville was very dry in June with only 2.1 inches over a period 34 days which extended into early July. Headland also had an extended dry period of 25 days in late July and early August which occurred during the late bloom through early pod development stage for full season soybean varieties at this location. Total rainfall for the months June and July of 14.4 inches at Brewton, 11.8 inches at Fairhope, 10.8 inches at Monroeville, and 12.2 inches at Headland were above normal for these locations and resulted in good plant height at all locations. Despite this, lodging was only a problem with the taller varieties at Brewton and Monroeville for the southern locations. Good rainfall at all southern locations during pod fill (table 1) in 1979 resulted in average yields of 38, 29, 25, and 39 bu./a. for the early plantings at Brewton, Fairhope, Headland, and Monroeville, respectively. The average yields at Fairhope were 15 bu./a. lower in 1979 than in 1978 and this reduction can be attributed to damage by hurricane Frederic.

The full- to late-season varieties have tended to yield better than early varieties in southern Alabama for the past 5 years. This has not held true for Prattville and Marion Junction in central Alabama. However, the early varieties (Maturity Groups V & VI) have out yielded the full- and late-season varieties (Maturity Group VII & VIII) at the early May planting date. The very early varieties Group V at Prattville and Group VI varieties at Marion Junction have been the highest yielding varieties at the early planting for the past 5 years. The moisture stress at Prattville and Marion Junction during late pod fill in 1979 resulted in both lower yields and smaller seed size than other locations. The largest seed sizes were produced at Winfield. The full- and late-season varieties yielded more than early varieties at all locations at the later planting dates.

Table 1. Rainfall by Location During the Period August 15 through September 30 for 1974 through 1978.

Location	1975	1976	1977	1978	1979
	In.	In.	In.	In.	In.
Black Belt Substation (Marion Junction)	7.72	6.20	6.31	2.75	5.12
Brewton Experiment Field (Brewton)	9.77	5.43	8.97	3.18	9.94
Gulf Coast Substation (Fairhope)	14.54	8.33	9.96	6.49	14.42
Lower Coastal Plain Substation (Camden)	--	9.37	5.76	1.80	9.95
Monroeville Experiment Field (Monroeville)	--	7.06	6.32	3.75	7.52
Prattville Experiment Field (Prattville)	9.09	9.76	5.88	2.36	6.43*
Sand Mountain Substation (Crossville)	6.95	3.37	11.07	3.05	15.69
Upper Coastal Plain Substation (Winfield)	7.45	5.15	9.01	1.98	10.68
Tennessee Valley Substation (Belle Mina)	5.76	5.87	6.20	2.91	8.10
Wiregrass Substation (Headland)	6.41	7.42	9.59	4.34	8.97

*Four inches fell after Sept. 27

DATA RECORDED

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

Yield of soybeans was determined by harvesting the two center rows of each plot with a small plot combine. Plot yields were adjusted to 13% moisture and converted to bushels (60 pounds) per acre.

First bloom was taken as the date when there was one flower at any node on 10% of the plants.

Maturity was rated as the date when the pods were dry and most of the leaves had dropped. Under most conditions, the stems were also dry. Harvest date was approximately 7-10 days later than maturity date.

Lodging was based on a scale of 1 to 5 according to the following criteria, see page 5 for illustrations:

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

Shattering ratings were based on shattering of the border rows 14 days after maturity. The visual estimates were rated on a scale of 1 to 5 as follows:

- 1 - no shattering
- 2 - 1 to 3% shattering
- 3 - 4 to 8% shattering
- 4 - 9 to 19% shattering
- 5 - 20% or more shattering

Plant height was determined as the average length of plants from the ground to the top extremely at time of maturity.

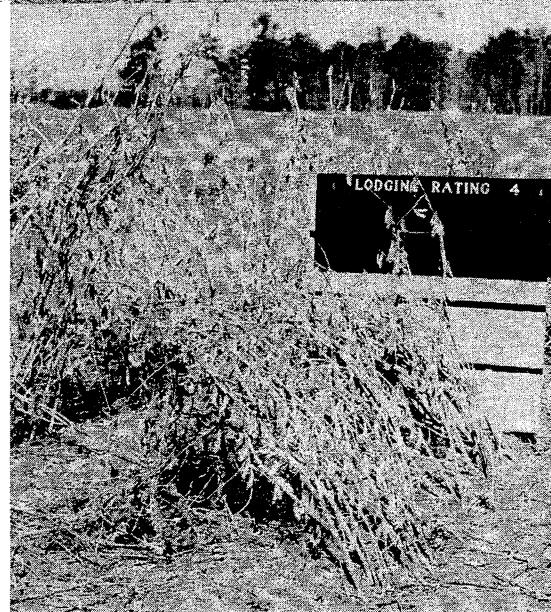
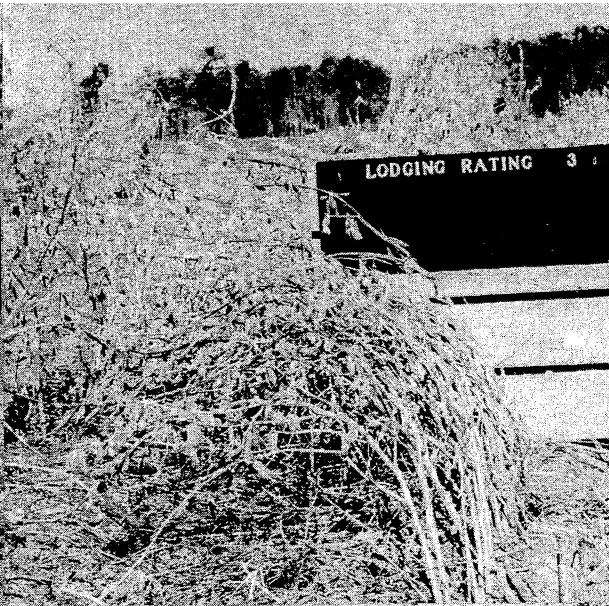
Height of first pod was determined as the average height of the lowest pods from the ground at maturity.

Seed size for each variety was determined from a composite sample of all replications at a given planting date and location. Seed size is reported as grams per 100 seeds. Small, medium, and large seed size will be 8-12, 13-16, and 17-20 g/100 seed, respectively, and will have approximately 3,800 to 5,700, 2,800 to 3,500 and 2,300 to 2,700 seed per pound, respectively.

Seed quality was based on a rating from 1 to 5 according to the following scale: (1) very good, (2) good, (3) fair, (4) poor, and (5) very poor. The factors considered were development of seed, wrinkling due to late harvesting and to excess rain.

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

- | | |
|-----------------------------|--------------------------|
| 1 - no purple staining | 4 - 9 to 19% staining |
| 2 - 1 to 3% purple staining | 5 - 20% or more staining |
| 3 - 4 to 8% purple staining | |



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

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

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

Group	Variety	Plant characteristics				Reaction to individual diseases ^{1/}					Nematode resistance ^{1/}		
		Pubes-cence	Flower color	Pod color	Hilum color	Bacteria pustule	Wild-fire	Tar-get spot	Phytophthora rot	Purple seed stain	Cyst (Race 3)	Root-Knot incognita	Root-Knot arenaria
IV	RA 401	Gray	Purple	Brown	Black	4/ 4/	4/ 4/	4/ 4/	S	4/ 4/	S	S	S
	RA 481	Tan	White	Tan	Brown	S	S	S	S	S	S	S	S
	Wilstar 430	Tan	Purple	Lt.Tan	15%Br 85%Bl				S	S	S	S	S
V	Bedford	Tawny	White	Tan	Black	R	R	R	R	R	R	MR	R
	Essex	Gray	Purple	Tan	Buff	R	R	R	MR	R	S	MR	S
	Forrest	Tawny	White	Tan	Black	R	R	R	MR	MR	R	R	R
	RA 526	Tawny	Purple	Tan	Brown	R	R	R	R	R	R	S	S
	RA 604	Tan	Purple	Tan	Black	4/ MR	4/ MR	4/ MR	R	4/ MR	R	4/ MR	4/ MR
	Wilstar 550	Tawny	Purple	Tan	Bf-Bl				MR	S			
VI	Coker 156 ^{2/}	Gray	White	Tan	Buff	R	R	R	--	R	S	S	S
	Davis	Gray	White	Lt.Tan	Buff	R	R	R	R	MR	S	S	S
	McNair 600	Tawny	Purple	Lt.Tan	Black	R	R	R	S	R	S	R	MR
	Centennial	Tawny	Purple	Tan	Black	R	R	R	R	MR	R	R	S
	Tracy ^{2/5/}	Tawny	White	Tan	Black	R	R	R	R	MR	S	S	S
	Lee 74	Tawny	Purple	Tan	Black	R	R	R	MR	R	S	R	MR
	Tracy M ^{5/}	Tawny	White	Tan	Black	R	R	R	R	MR	S	S	S
	RA 603	Tan	White	Tan	Black	4/ 4/	4/ 4/	4/ 4/	S	4/ 4/	R	4/ 4/	4/ 4/
	RA 680	Tan	Purple	Dk.Tan	Black	4/ 4/	4/ 4/	4/ 4/	R	4/ 4/	R	4/ 4/	4/ 4/
	Brysoy 9	Brown	Purple	Tan	Black	MR	MR	MR	MR	MR	MR	S	S
	NAPB 602	Gray	White	Tan	Buff	4/ R	4/ R	4/ R	R	4/ 4/	4/ S	4/ 4/	4/ 4/
	Terra Vig606	Gray	White	Tan	Buff						S		

Table 2. Physical Description and Disease Resistance of Some Soybean Varieties Tested (continued).

Group	Variety	Plant characteristics				Reaction to individual diseases ^{1/}					Nematode resistance ^{1/}		
		Pubes-cence	Flower color	Pod color	Hilum color	Bacteria pustule	Wild-fire	Tar-spot	Phytophthora rot	Purple seed stain	Cyst (Race 3)	Root-Knot incognita	Root-Knot arenaria
VII	Bragg	Tawny	White	Tan	Black	R	R	R	R	S	S	R	R
	Braxton	Tawny	Purple	Tan	Black	R	R	R	R	S	S	R	R
	Ga. Soy 17	Gray	White	Tan	Buff	R	R	R	R	MR	S	S	S
	Govan ^{2/}	Gray	White	Tan	Black	R	R	R	R	S	S	R	R
	Ransom	Tawny	Purple	Tan	Black	R	R	R	MS	R	S	S	S
	RA 701	Tawny	P/W	Tan	Black	4/	4/	4/	R	4/	R	4/	4/
	RA 700A	Gray	White	Tan	Brown	4/	4/	4/	R	4/	S	4/	4/
	Wilstar 790	Brown	White	Tan	Black	MR	MR	MR	MR	MR	S	4/	4/
VIII	NAPB 701	Gray	White	Tan	Buff	4/	4/	4/	R	4/	S	R	4/
	Cobb	Gray	White	Tan	Buff	R	R	R	S	S	S	R	S
	Coker 388	Gray	Purple	Lt.Tan	Buff	R	R	MR	MS	S	S	MR	S
	Coker 488	Tawny	Purple	Tan	Brown	R	R	R	S	S	S	MR	S
	Dowling	Gray	White	Tan	Buff	R	R	R	R	R	S	S	S
	Hutton	Brown	Purple	Tan	Black	R	R	R	S	S	S	R	S

^{1/}VR-very resistant; R-resistant; MR-moderately resistant; S-susceptible; VS-very susceptible. These are ratings given these varieties by the breeders.

^{2/}Sensitive to herbicide metribuzin (Sencor and Lexon).

^{3/}Resistant to Race 4 cyst nematode.

^{4/}Data not available.

^{5/}Tracy and Tracy M have good tolerance to herbicide 2,4-DB.

VARIETY DATA

Soybean varieties grown in Alabama are in Maturity Groups IV, V, VI, VII, and VIII. The following is a list of the varieties and lines with source of seed for 1979 listed by maturity groups. For more information on these varieties see table 2.

Maturity Group IV Varieties

BD 401	Big D Seed Co., Catlin, IL
BD 402	Big D Seed Co., Catlin, IL
RA 401	Ring Around Research, Plainview, TX
RA 481	Ring Around Research, Plainview, TX
Wilstar 430	Helena Chemical Co., Selma, AL

Maturity Group V Varieties

Bay (V72-580)	USDA Delta Branch Exp., Stoneville, MS
Bedford	USDA, Delta Center, Portageville, MO
BD 483	Big D Seed Co., Catlin, IL
BD 501	Big D Seed Co., Catlin, IL
D&PL 345	Delta & Pine Land Company, Scott, MS
D&PL 403	Delta & Pine Land Company, Scott, MS
Essex	Alabama Crop Improvement Assoc., Auburn, AL
Forrest	Alabama Crop Improvement Assoc., Auburn, AL
McNair 500	McNair Seed Co., Laurinburg, NC
McNair 3260*	McNair Seed Co., Laurinburg, NC
McNair 3262*	McNair Seed Co., Laurinburg, NC
NK Blend 100	Northrup King Co., Bolivar, TN
RA 604	Ring Around Research, Plainview, TX
Wilstar 550	Helena Chemical Co., Selma, AL

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

Maturity Group VI Varieties

Brysoy 9	Helena Chemical Co., Selma, AL
Centennial	Alabama Crop Improvement Assoc., Auburn, AL
Coker 156	Coker's Pedigreed Seed Co., Hartsville, SC
D&PL 5	Delta & Pine Land Company, Scott, MS
Davis	Alabama Crop Improvement Assoc., Auburn, AL
D74-7741*	USDA, Delta Center, Portageville, MO
Lancer	North American Plant Breeders, W. Memphis, AR
Lee 74	Alabama Crop Improvement Assoc., Auburn, AL
McNair 600	McNair Seed Co., Laurinburg, NC
NAPB 602	North American Plant Breeders, W. Memphis, AR
NK 207	Northrup King Co., Bolivar, TN
NK 481	Northrup King Co., Bolivar, TN
RA 680	Ring Around Research, Plainview, TX
RA 603	Ring Around Research, Plainview, TX
Tracy	Alabama Crop Improvement Assoc., Auburn, AL
Tracy M	USDA Delta Branch Exp. Station, Stoneville, MS

Maturity Group VII

Agripro 70	North American Plant Breeders, W. Memphis, AR
Bragg	Alabama Crop Improvement Assoc., Auburn, AL
Braxton	USDA Delta Branch Exp. Station, Stoneville, MS
Brooks	Gold Kist Inc., Asburn, GA
Coker 237	Coker's Pedigreed Seed Co., Hartsville, SC
Coker 76-853*	Coker's Pedigreed Seed Co., Hartsville, SC
Coker 76-1012*	Coker's Pedigreed Seed Co., Hartsville, SC
GA Soy 17	Coastal Plains Exp. Sta., Tifton, GA
Govan	USDA Delta Branch Exp. Station, Stoneville, MS

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

Maturity Group VII (continued)

McNair 700	McNair Seed Co., Laurinburg, NC
McNair 710	McNair Seed Co., Laurinburg, NC
McNair 780	McNair Seed Co., Laurinburg, NC
NAPB 701	North American Plant Breeders, W. Memphis, AR
RA 700A	Ring Around Research, Plainview, TX
RA 701	Ring Around Research, Plainview, TX
Ransom	Alabama Crop Improvement Assoc., Auburn, AL
Terra-Vig 708	Terral-Norris Seed Co., Inc., Lake Providence, LA
Wilstar 790	Helena Chemical Co., Selma, AL
Wright	Coastal Plains Experiment Station, Tifton, GA

Maturity Group VIII Varieties

Cobb	Alabama Crop Improvement Assoc., Auburn, AL
Coker 388	Coker's Pedigreed Seed Co., Hartsville, SC
Coker 488	Coker's Pedigreed Seed Co., Hartsville, SC
Dowling	Texas A&M, College Station, TX
Hutton	Alabama Crop Improvement Assoc., Auburn, AL

Northern Alabama

The tests in northern Alabama were located on Decatur clay loam at Belle Mina, Hartsells fine sandy loam at Crossville, and Savannah fine sandy loam at Winfield. Soybeans of Maturity Group VI are full season varieties for this area. Varieties of Group VII maturity tend to be taller and later maturing in northern Alabama than at more southern locations. Thus, lodging may be expected for Group VII varieties in northern Alabama; lodging was a problem in 1979 at Crossville and Winfield for the Group VII and VIII varieties. Lodging has been severe for 3 and 4 of the past 5 years at both Crossville and Belle Mina, respectively, and the taller full-season Group VI and later varieties have not yielded well. It has been the shorter varieties of Group V maturity that have been the highest yielding varieties in early plantings at Crossville and Belle Mina.

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

Coker 156 and Essex have been the highest yielding varieties for the past 5 years at Crossville and Belle Mina with 36 and 42 bu/a, respectively. Essex out yielded the next varieties Coker 156 and Forrest at Belle Mina by 7 bu/a. For late June planting at Crossville five year average yields of 33 bu/a were obtained from Hutton, Bragg, and Coker 156.

New lines that have performed well in northern Alabama for the past 2 to 4 years are Bay, Braxton, D&PL 5, McNair 500, and NK 100.

Table 3. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering^{3/}, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 1, 1979 on Sand Mountain Substation, Crossville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
D&PL 403	48.5 a	7/16	10/12	38	7.5	3.0	1	2	15.8
Essex	48.2 ab	7/11	10/5	30	6.8	2.3	1	2	15.1
V 72-580	46.7 abc	7/13	10/9	37	5.8	2.0	1	2	17.3
Tracy	46.6 abc	7/14	10/17	35	5.3	2.5	1	1	16.6
RA 604	46.6 abc	7/19	10/16	39	7.5	2.8	1	1	15.4
Forrest	46.4 abc	7/12	10/8	36	6.3	2.8	1	2	13.5
Coker 156	46.0 abcd	7/19	10/17	35	6.5	2.8	1	1	12.5
Tracy M	45.6 abcd	7/13	10/17	34	3.8	2.8	1	1	16.7
Braxton	45.4 abcde	7/27	10/26	39	8.5	2.8	1	1	16.6
Centennial	44.1 abcdef	7/18	10/21	39	7.3	2.8	1	1	14.4
McNair 3260	43.9 abcdefg	7/18	10/13	33	5.0	2.0	1	2	14.9
Bedford	43.5 bcdefg	7/19	10/12	45	7.5	3.3	1	2	13.0
Davis	43.2 cdefg	7/30	10/22	40	6.3	3.5	1	1	16.7
Terra-Vig 606	43.0 cdefg	7/19	10/21	40	6.8	3.0	1	1	14.5
NAPB 602	42.9 cdefg	7/29	10/21	39	7.5	3.3	1	2	18.1
RA 680	42.8 cdefg	7/17	10/19	38	7.8	2.0	1	1	13.7
D&PL 345	42.5 cdefgh	7/18	10/9	39	7.0	2.3	1	2	14.8
McNair 600	42.3 cdefgh	7/21	10/22	35	7.8	2.3	1	1	14.6
Ransom	42.3 cdefgh	7/14	10/26	34	7.3	2.5	1	1	15.2
NK-207	42.2 cdefgh	7/14	10/15	38	6.8	3.8	1	1	12.6
D74-7741	42.2 cdefgh	7/17	10/16	38	6.3	2.8	1	1	13.9
NK-100	41.9 cdefgh	7/10	10/8	33	4.3	2.5	1	2	14.5
RA 603	41.0 defghi	7/13	10/22	38	6.5	2.5	1	2	13.9
RA 481	40.4 efghi	7/2	9/29	35	5.5	2.3	1	4	16.7
Bragg	40.2 fghi	7/25	10/25	41	9.5	2.8	1	1	14.2

Table 3 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering^{3/}, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 1, 1979 on Sand Mountain Substation, Crossville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
Lee 74	40.1 fghi	7/18	10/25	29	6.0	2.8	1	1	12.3
McNair 500	40.1 fghi	7/17	10/11	35	5.3	2.3	1	2	13.3
Hutton	39.8 fghi	7/27	11/2	38	7.8	3.3	1	2	15.5
Lancer	38.7 ghi	7/22	10/10	37	6.0	2.3	1	1	13.8
D&PL 5	38.7 ghi	7/15	10/25	37	8.5	2.3	1	2	13.4
Brysoy 9	38.6 ghi	7/15	10/22	41	8.3	3.5	1	1	15.3
NK-481	37.7 hi	7/25	10/21	35	8.8	3.3	1	1	13.0
McNair 3262	35.6 i	7/26	10/13	34	7.5	3.0	1	1	14.4
RA 401	29.5 j	7/1	9/15	26	4.3	2.0	2	3	14.9
Wilstar 430	27.0 jk	6/30	9/18	28	3.8	2.0	5	5	18.5
BD 501	24.9 kl	7/1	9/17	31	3.5	2.3	2	3	15.6
BD 401	21.7 lm	6/30	9/17	26	3.5	1.8	4	5	13.0
BD 402	21.6 lm	6/30	9/16	26	3.3	1.5	5	5	16.9
BD 483	19.9 m	6/29	9/16	26	3.3	1.8	4	5	11.5

C.V.% = 7.5 L.S.D. .05 = 4.1

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

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

3/No shattering recorded.

Table 4. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering^{3/}, Seed Quality^{4/}, Purple Stain, and Seed Size of Soybean Varieties Planted May 22, 1979 on Sand Mountain Substation, Crossville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
McNair 600	43.6 a	8/3	10/25	36	6.8	2.3	1	15.9
Coker 156	43.4 a	8/1	10/22	37	6.8	2.3	1	13.5
Forrest	43.3 ab	7/27	10/13	37	7.0	2.8	1	13.6
RA 604	42.9 abc	8/1	10/18	41	9.3	2.8	1	15.9
McNair 500	42.7 bc	7/31	10/15	37	6.5	2.0	2	13.8
D&PL 5	42.7 bc	8/1	10/26	37	9.0	3.0	1	14.5
Lee 74	42.6 bc	8/1	10/26	36	8.3	3.3	1	13.9
RA 603	42.0 bc	7/25	10/21	40	8.0	3.0	1	14.1
NK-100	41.8 bc	7/23	10/2	36	6.8	2.8	2	14.8
Braxton	41.8 bc	8/7	10/29	40	9.8	3.3	1	16.7
Essex	41.5 bc	7/22	10/2	30	7.3	2.8	2	15.1
Tracy	41.4 bc	7/29	10/16	36	5.0	3.0	1	18.0
RA 680	40.6 bcd	7/31	10/18	38	8.0	2.0	1	14.0
Tracy M	40.5 bcd	7/27	10/14	34	6.3	3.0	1	18.1
D&PL 345	40.3 bcd	7/31	10/14	37	8.0	2.5	1	14.2
Bedford	39.7 bcd	8/1	10/15	42	8.3	3.0	1	14.4
Centennial	39.6 bcd	7/31	10/21	39	9.0	2.3	1	14.3
RA 401	38.9 bcd	7/19	9/20	34	6.5	1.0	3	16.5
Davis	38.5 cd	8/8	10/21	40	6.3	3.0	1	16.4
Ransom	38.4 cd	7/31	10/28	37	9.0	2.8	1	16.0
Bragg	36.5 e	8/5	10/30	40	8.5	3.5	1	15.1
Lancer	34.3 e	8/4	10/14	39	8.8	2.3	1	14.3
Hutton	34.1 e	8/8	11/4	37	8.0	4.0	1	16.3

C.V.% = 6.5 L.S.D. .05 = 6.8

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

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

3/No varieties shattered.

4/Seed quality for all varieties was very good except RA 401 which rated good.

Table 5. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Seed Quality^{3/}, Purple Stain^{3/}, and Seed Size of Soybean Varieties Planted June 27, 1979 on Sand Mountain Substation, Crossville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Seed size ^{2/} g/100 seed
Braxton	41.2 a	8/21	11/1	30	6.7	2.0	17.3
RA 604	41.1 a	8/21	10/31	31	6.3	3.3	16.3
McNair 500	38.6 ab	8/18	10/29	26	5.7	2.3	13.7
Forrest	36.7 abc	8/12	10/28	30	7.0	3.0	12.4
Ransom	36.4 abc	8/16	11/2	31	6.3	3.0	17.5
D&PL 345	36.0 abc	8/16	10/30	28	5.7	2.3	14.4
Centennial	35.9 abc	8/19	10/29	32	7.0	3.0	14.7
RA 603	35.5 abc	8/13	11/1	24	4.7	2.3	15.0
Coker 156	35.0 abc	8/17	10/25	23	4.3	2.0	14.4
McNair 600	34.9 abc	8/18	10/30	31	7.3	3.7	16.8
Bedford	34.9 abc	8/19	10/30	35	7.0	3.5	13.5
RA 680	34.7 abc	8/17	10/26	28	6.7	1.7	15.4
D&PL 5	34.4 abc	8/15	11/2	27	6.0	3.7	15.2
Hutton	34.2 abc	8/22	11/7	32	7.0	4.0	16.1
Bragg	34.1 abc	8/20	11/2	33	7.3	3.3	16.1
Davis	33.8 abc	8/21	11/2	29	5.3	3.0	16.8
Lancer	32.9 bc	8/22	11/2	31	6.0	2.0	15.9
Tracy M	32.5 bc	8/12	10/23	25	4.3	3.7	16.2
Essex	32.2 bc	8/12	10/21	19	4.3	1.7	13.3
Lee 74	31.8 bc	8/17	11/2	25	5.3	3.3	13.9
NK-100	31.0 bc	8/14	10/22	25	5.7	3.0	14.1
Tracy	30.7 c	8/14	10/24	29	5.3	4.0	16.8

C.V.% = 10.9 L.S.D. .05 = 4.7

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 of this report.

3/Seed quality was very good and purple stain was not present on any variety.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
-----Two-Year Average Planting Date May 7, 1978 and 1979-----						
Coker 156	42.3	7/19	10/13	35	6.8	2.3
Essex	42.2	7/13	9/28	28	6.6	1.6
V 72-580	41.2	7/14	9/29	38	5.1	2.0
Forrest	38.1	7/13	9/29	37	7.0	2.5
Tracy	37.8	7/15	10/16	37	7.1	2.4
Centennial	37.8	7/18	10/18	39	7.6	2.4
RA 680	36.3	7/17	10/17	39	8.1	2.0
RA 604	36.2	7/18	10/10	40	8.6	2.4
NK-100	36.1	7/12	9/29	33	5.0	2.8
Bedford	35.9	7/17	10/2	44	7.0	2.8
Braxton	35.2	7/26	10/26 ^{3/}	42	9.3	2.6
D74-7741	35.2	7/16	10/15	38	7.9	2.4
Lee 74	35.0	7/19	10/23	32	6.9	2.6
RA 603	35.0	7/13	10/18	43	6.8	2.6
McNair 600	34.6	7/19	10/16	38	8.4	2.4
D&PL 345	34.5	7/16	9/20	39	6.8	2.1
Ransom	34.4	7/16	10/23	36	8.6	2.5
Davis	33.8	7/26	10/19	40	7.1	3.0
Bragg	33.7	7/23	10/25 ^{3/}	43	10.1	2.9
McNair 500	33.7	7/16	10/1	36	5.4	2.4
Lancer	33.6	7/19	10/9	37	7.4	2.1
D&PL 5	33.6	7/17	10/25 ^{3/}	39	8.8	2.5
Hutton	33.2	7/26	11/2 ^{3/}	39	9.4	2.8
RA 401	26.6	7/6	9/15	28	4.0	1.5
-----Three-Year Average Planting Date May 6, 1977-1979-----						
Coker 156	40.0	7/17	10/17	34	5.5	2.2
Tracy	36.3	7/13	10/18	37	5.9	2.5
Essex	36.3	7/8	9/22	27	6.8 ^{4/}	1.5
Centennial	36.3	7/16	10/20	39	6.4	2.5
McNair 600	34.8	7/16	10/29	37	6.9	2.5
D&PL 5	34.6	7/16	10/26 ^{5/}	38	6.8	2.6
Lee 74	34.4	7/19	10/23	32	5.8	2.7
Hutton	34.3	7/24	10/30 ^{5/}	38	7.3	2.9
Bragg	33.9	7/22	10/26 ^{5/}	42	8.1	2.8
Forrest	33.4	7/10	9/24	36	5.3	2.3
NK-100	32.4	7/8	9/24	32	6.0 ^{4/}	2.2
Lancer	30.9	7/18	10/10	36	6.1	1.9
Davis	30.2	7/23	10/17	39	5.7	2.8
McNair 500	28.3	7/14	9/28	34	5.3 ^{4/}	2.3

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

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

3/Average data for 1979.

4/Average height to first pod 1977 and 1979.

5/Average maturity dates for 1977 and 1979.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
<hr/>						
-----Two-Year Average Planting Date May 26, 1978 and 1979-----						
Coker 156	33.4	7/30	10/16	35	7.1	1.8
D&PL 5	33.3	7/30	10/23	37	8.3	2.8
Lee 74	32.3	7/31	10/23	35	8.9	2.6
Forrest	31.5	7/24	10/10	36	7.5	2.3
Centennial	30.7	7/30	10/21	39	9.3	2.1
Tracy	30.1	7/28	10/15	36	6.3	2.6
McNair 600	30.0	7/31	10/19	37	7.8	2.0
Essex	29.7	7/20	10/1	26	6.6	1.9
McNair 500	29.7	7/27	10/12	36	6.8	2.0
NK-100	29.4	7/21	10/5	33	6.5	2.4
Braxton	29.0	8/5	10/29 ^{3/}	40	8.5	2.6
Ransom	28.9	7/31	10/30 ^{3/}	37	9.0	2.1
Davis	28.0	8/5	10/17	39	7.5	2.5
Bragg	26.7	8/5	10/30 ^{3/}	42	9.6	3.0
Hutton	26.3	8/7	11/4 ^{3/}	38	10.0	3.0
Lancer	26.3	8/1	10/13	37	8.9	1.8
<hr/>						
-----Three-Year Average Planting Date May 25, 1977-1979-----						
Coker 156	35.4	7/30	10/19	34	5.8	1.8
Centennial	33.6	7/29	10/22	38	8.2	2.2
Forrest	33.3	7/23	10/10	34	6.3	2.3
Lee 74	33.2	7/31	10/23	34	7.4	3.1
McNair 600	32.4	7/30	10/19	36	6.2	2.3
Ransom	31.8	7/30	10/29 ^{4/}	35	7.3	2.3
Tracy	31.7	7/27	10/17	36	5.0	2.9
McNair 500	31.0	7/26	10/12	33	5.8	2.1
Lancer	30.6	7/31	10/15	34	7.3	1.8
Bragg	29.2	8/4	10/29 ^{4/}	41	8.1	3.4
Hutton	28.4	8/6	11/1 ^{4/}	37	8.0	3.4
Essex	28.2	7/21	10/1	23	5.3	1.6
Davis	28.0	8/4	10/20	36	6.1	2.8

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

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

3/1979 maturity date.

4/1977 and 1979 average maturity dates.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
-----Two-Year Average Planting Date June 23, 1978 and 1979-----						
McNair 500	35.9	8/14	10/23 ^{3/}	30	6.5	1.8
Braxton	32.4	8/18	11/1 ^{5/}	33	7.6	1.5
D&PL5	30.5	8/13	11/2 ^{5/}	33	7.9	2.7
Bragg	30.0	8/17	10/22	35	8.7	2.5
Ransom	29.9	8/14	11/1 ^{3/}	32	7.5	2.0
McNair 600	29.7	8/18	10/28 ^{3/}	31	6.8	2.3
Forrest	29.5	8/10	10/24 ^{3/}	33	7.4	2.0
Coker 156	29.1	8/14	10/18	26	5.4	1.5
Davis	29.0	8/19	10/30 ^{3/}	33	7.3	2.0
Hutton	28.8	8/19	11/4 ^{3/}	33	8.5	2.6
Centennial	27.9	8/16	10/20	35	8.4	2.0
Tracy	26.8	8/12	10/23 ^{3/}	32	7.2	2.5
Lee 74	26.8	8/15	10/25 ^{3/}	30	6.7	2.3
Essex	26.3	8/10	10/16 ^{3/}	21	5.8	1.3
-----Three-Year Average Planting Date June 22, 1977-1979-----						
McNair 500	35.1	8/12	10/21 ^{4/}	29	5.7	1.9
Forrest	32.9	8/8	10/23 ^{4/}	32	6.3	2.1
McNair 600	32.6	8/15	10/25 ^{4/}	32	6.1	2.6
Ransom	32.3	8/13	10/28 ^{4/}	32	7.4	1.9
Coker 156	31.6	8/13	10/20	28	4.9	1.6
Bragg	31.2	8/16	10/25	35	7.8	2.8
Hutton	31.2	8/17	10/30 ^{4/}	33	7.5	2.7
Davis	31.0	8/17	10/28 ^{4/}	33	6.8	2.5
Centennial	29.7	8/13	10/23	34	7.4	2.2
Lee 74	29.4	8/14	10/23 ^{4/}	31	6.4	2.9
Essex	29.4	8/7	10/16 ^{4/}	22	5.2	1.3
Tracy	27.9	8/11	10/21 ^{4/}	32	6.3	2.7

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

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

3/Average of 1977 and 1979 maturity dates

4/1976, 1977 and 1979 average maturity dates

5/1977 maturity dates.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
<hr/>						
Coker 156	38.7	7/18	10/14	34	5.9	2.1
Essex	37.2	7/10	9/22	27	6.3 ^{5/}	1.4
Centennial	35.0	7/17	10/18	40	7.4	2.6
Tracy	34.8	7/14	10/14	37	6.4	2.6
Lee 74	34.4	7/20	10/19	33	6.6	2.6
Hutton	34.4	7/25	10/22 ^{3/}	39	7.9	3.3
McNair 600	34.2	7/17	10/15	38	7.3	2.6
Forrest	34.2	7/12	9/24	36	5.9	2.2
Bragg	33.6	7/22	10/20 ^{3/}	42	8.8	2.8
Lancer	32.1	7/19	10/9	37	6.7	1.8
Davis	31.8	7/24	10/14	39	6.3	2.8
McNair 500	29.9	7/15	9/29	35	5.4 ^{6/}	2.3
<hr/>						
-----Five-Year Average Planting Date May 5, 1975-1979-----						
Coker 156	37.3	7/16	10/11	34	6.2	1.9
Essex	36.5	7/8	9/21	27	6.2 ^{7/}	1.3
Tracy	33.8	7/13	10/13	36	6.4	2.3
McNair 600	33.0	7/16	10/13 ^{4/}	38	7.3	2.4
Hutton	33.0	7/24	10/22	38	7.7	3.2
Lee 74	32.5	7/18	10/16	33	6.6	2.5
Centennial	32.5	7/16	10/16	39	7.8	2.4
Forrest	32.2	7/10	9/25	36	5.9	2.1
Bragg	31.6	7/22	10/19 ^{4/}	42	8.8	2.8
Lancer	31.2	7/19	10/9	38	7.1	1.6
Davis	31.0	7/24	10/14	39	6.9	2.8

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

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

^{3/}1975-1977 and 1979 average maturity dates.

^{4/}1973, 1975-1977 and 1979 average maturity dates.

^{5/}Average pod height for 1975 through 1976 and 1979.

^{6/}Average pod height for 1978 and 1979.

^{7/}Average pod height for 1974 through 1976 and 1979.

Table 10. Four and Five-Year Averages For Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted Middle Season on Sand Mountain Substation, Crossville

Variety	<u>Yield</u> ^{1/} Bu./a.	<u>1st bloom</u> ^{2/} Date	<u>Maturity</u> ^{2/} Date	<u>Plant ht.</u> ^{2/} In.	<u>Ht. 1st pod</u> ^{2/} In.	<u>Lodging</u> ^{2/} Rating
<u>-----Four-Year Average Planting Date May 27, 1976-1979-----</u>						
Coker 156	35.8	7/30	10/17	34	6.6	1.8
Forrest	33.5	7/24	10/8	35	6.7	2.3
Lee 74	33.4	7/31	10/20	34	7.5	3.1
Centennial	33.2	7/29	10/20	38	9.0	2.3
McNair 500	32.3	7/27	10/10	34	6.4	2.2
McNair 600	32.1	7/30	10/16	36	6.8	2.4
Tracy	32.0	7/28	10/14	36	5.6	2.8
Lancer	32.0	7/31	10/14	36	7.4	2.0
Ransom	31.8	7/31	10/22 ^{3/}	35	8.0	2.2
Essex	30.6	7/22	9/30	25	5.7	1.5
Bragg	30.1	8/4	10/23 ^{3/}	42	8.8	3.3
Hutton	29.7	8/6	10/24 ^{3/}	37	9.1	3.7
Davis	29.1	8/5	10/19	37	6.9	2.8
<u>-----Five-Year Average Planting Date May 27, 1975-1979-----</u>						
Coker 156	34.9	7/30	10/15	35	6.5	1.9
Lee 74	32.7	7/30	10/18	35	7.2	3.2
Tracy	32.2	7/27	10/15	36	5.8	2.8
Ransom	32.2	7/30	10/22 ^{4/}	36	8.2	2.3
Forrest	32.1	7/24	10/7	35	6.5	2.3
McNair 600	31.6	7/30	10/15	36	6.5	2.5
Centennial	31.2	7/29	10/18	39	8.7	2.1
Hutton	30.8	8/6	10/24 ^{4/}	38	8.8	3.7
Bragg	30.1	8/4	10/22 ^{4/}	42	8.8	3.1
Essex	29.9	7/21	9/29	25	5.8	1.4
Davis	29.7	8/5	10/18	37	6.9	2.8

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

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

^{3/}Average maturity for 1975 through 1977 and 1979.

^{4/}Average maturity for 1973, 1975 through 1977 and 1979; frost killed soybeans on October 3, 1974.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
-----Four-Year Average Planting Date June 21, 1976-1979-----						
McNair 500	35.2	8/13	10/21 ^{5/}	28	5.5	2.0
Hutton	33.1	8/18	10/29 ^{3/}	31	7.1	2.5
Forrest	33.0	8/10	10/19 ^{3/}	30	6.0	2.1
Coker 156	33.0	8/15	10/21	27	4.6	1.4
Ransom	32.6	8/14	10/26 ^{3/}	30	6.8	1.8
McNair 600	32.5	8/16	10/22 ^{3/}	30	5.6	2.4
Bragg	32.5	8/16	10/24	33	7.5	2.5
Centennial	30.5	8/14	10/22	33	6.9	2.1
Davis	30.4	8/19	10/25 ^{3/}	32	6.5	2.4
Tracy	30.1	8/12	10/20 ^{3/}	30	5.7	2.6
Lee 74	30.0	8/15	10/21 ^{3/}	29	6.0	2.7
Essex	30.0	8/9	10/12 ^{3/}	21	4.9	1.3
-----Five-Year Average Planting Date June 21, 1975-1979-----						
Hutton	32.8	8/18	10/28 ^{4/}	32	7.8	2.6
Bragg	32.6	8/16	10/24	34	7.4	2.6
Coker 156	32.6	8/14	10/19	28	5.4	1.9
Ransom	32.3	8/15	10/26 ^{4/}	31	8.6	2.0
Forrest	31.6	8/10	10/18 ^{4/}	32	6.8	2.3
McNair 600	31.2	8/15	10/23 ^{4/}	32	6.0	2.5
Davis	30.3	8/19	10/25 ^{4/}	32	6.9	2.5
Tracy	30.0	8/12	10/19 ^{4/}	31	6.2	2.6
Essex	29.8	8/8	10/13 ^{4/}	23	5.6	1.6
Lee 74	29.7	8/15	10/20 ^{4/}	29	6.5	2.9
Centennial	29.6	8/13	10/20	33	7.0	2.3

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

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

3/Average maturity for 1975 through 1977 and 1979.

4/Average maturity for 1973, 1975, 1976, 1977, and 1979; Frost killed soybeans on October 3, 1974.

5/Average maturity for 1976, 1977 and 1979.

Table 12. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain and Seed Size of Soybean Varieties Planted May 9, 1979 on Tennessee Valley Substation, Belle Mina

Variety	Yield ^{1/}	1st bloom ^{2/}	Maturity ^{2/}	Plant ht. ^{2/}	Ht. 1st pod ^{2/}	Lodging ^{2/}	Shattering ^{2/}	Purple Stain ^{2/}	Seed Size
	Bu./a.	Date	Date	In.	In.	Rating	Rating	Rating	g/100 seed
22	Essex	52.1 a	7/8	10/2	35	5.0	3.0	1.0	2 15.8
	D&PL 403	51.9 a	7/16	10/8	46	6.5	4.8	1.0	1 13.8
	BD 501	49.4 ab	7/11	9/17	40	4.5	2.5	1.5	3 18.1
	Braxton	48.8 abc	7/22	10/22	41	7.8	3.0	1.0	1 19.5
	D&PL 5	47.5 abcd	7/18	10/9	44	6.8	3.3	1.0	1 14.2
	V 72-580	47.5 abcd	7/12	10/6	44	6.0	2.8	1.0	1 15.7
	McNair 3260	47.3 abcd	7/17	10/6	44	6.8	3.3	1.0	1 14.3
	RA 481	45.7 abcde	7/7	9/30	46	8.0	2.3	1.0	2 14.2
	NK-100	45.6 abcde	7/8	10/3	37	5.5	3.5	5.0	1 14.9
	RA 401	45.6 abcde	7/11	9/14	43	6.3	2.0	2.0	2 15.1
	Tracy M	45.6 abcde	7/10	10/12	40	6.8	3.0	1.0	1 18.1
	Ransom	44.7 abcdef	7/17	10/22	43	9.5	3.0	1.0	1 17.0
	McNair 3262	44.7 abcdef	7/24	10/8	40	5.8	4.5	1.0	1 15.2
	RA 603	44.6 abcdef	7/12	10/14	47	7.8	4.0	1.0	2 15.1
	McNair 600	44.1 bcdefg	7/20	10/16	40	7.3	3.0	1.0	1 15.7
	Bragg	44.1 bcdefg	7/23	10/22	40	9.5	3.8	1.0	1 17.1
	RA 604	44.0 bcdefg	7/18	10/10	45	8.3	3.3	1.0	1 14.6
	Lee 74	43.3 bcdefgh	7/17	10/15	39	7.3	3.0	1.0	1 13.0
	D&PL 345	42.7 bcdefgh	7/15	10/6	47	7.5	2.5	1.0	1 15.0
	Wilstar 430	42.0 bcdefgh	7/12	9/14	41	6.3	2.3	2.0	4 21.3
	Forrest	41.9 bcdefgh	7/9	10/1	40	5.5	4.5	1.0	1 11.7
	Tracy	41.6 bcdefgh	7/11	10/11	43	6.0	3.0	1.0	1 17.1
	Coker 156	41.1 cdefgh	7/19	10/14	42	7.5	3.0	1.0	1 13.7
	McNair 500	41.0 cdefgh	7/17	10/7	43	7.0	3.3	1.0	1 12.1
	BD 483	40.9 defgh	7/12	9/4	36	4.0	2.5	5.0	2 18.9
	Hutton	40.2 defgh	7/25	10/25	42	8.0	5.0	1.0	1 17.2
	Terra-Vig 606	40.1 efgh	7/10	10/8	43	6.8	4.5	1.0	1 14.8

Table 12 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain and Seed Size of Soybean Varieties Planted May 9, 1979 on Tennessee Valley Substation, Belle Mina

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
NAPB 602	39.1 efg	7/29	10/14	42	6.8	4.5	1.0	1	17.0
Davis	39.0 efg	7/27	10/14	38	7.0	4.8	1.0	1	14.7
Bedford	38.4 efg	7/16	10/3	44	7.5	5.0	1.0	2	11.8
BD 402	38.3 efg	7/12	9/4	37	4.5	2.0	4.3	3	20.0
D74-7741	38.2 efg	7/15	10/8	44	7.0	3.8	1.0	1	13.2
RA 680	37.7 fgh	7/17	10/7	41	8.0	3.0	1.0	1	16.3
Wilstar 550	37.5 fgh	7/16	10/7	41	4.3	3.0	1.0	1	12.7
Centennial	36.5 ghi	7/18	10/6	44	8.3	3.5	1.0	1	15.5
Lancer	35.9 hi	7/20	10/8	41	6.8	3.0	1.0	1	15.3
BD 401	35.6 hi	7/12	9/4	37	4.3	2.0	3.5	2	18.9
NK-481	35.5 hi	7/24	10/8	37	9.8	3.0	1.0	1	13.2
NK-207	30.1 i	7/12	10/8	42	8.3	5.0	1.0	1	10.9

C.V.% = 10.8 L.S.D. .05 = 6.3

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

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

3/Seed quality of all varieties was good except for BD 401, BD 402, BD 483, and Wilstar 430 which showed some shriveling due to weathering.

Table 13. Two and Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights and Lodging of Soybean Varieties Planted on Tennessee Valley Substation, Belle Mina

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ^{2/} ht. In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
-----Two-Year Average Planting Date May 10, 1978 and 1979-----						
Essex	42.1	7/6	10/8	34	5.1	2.6
RA 401	38.6	7/7	10/2	43	6.6	1.8
V 72-580	35.6	7/9	10/12	42	6.0	2.8
NK-100	34.6	7/6	10/9	38	5.8	3.2
Forrest	33.0	7/7	10/8	40	5.1	3.8
Braxton	32.5	7/22	10/27	43	8.4	2.4
D74-7741	32.0	7/11	10/2	43	6.4	3.6
D&PL 5	31.5	7/17	10/16	43	7.1	2.8
RA 603	31.4	7/8	10/17	45	7.4	3.6
RA 604	31.0	7/15	10/10	45	7.4	2.9
Coker 156	30.8	7/18	10/15	42	6.8	2.3
D&PL 345	30.8	7/12	10/16	45	6.9	2.6
Ransom	30.7	7/19	10/22	43	9.3	2.3
Lee 74	30.1	7/16	10/15	39	7.8	2.4
Bragg	30.0	7/22	10/26	42	10.6	3.5
Bedford	30.0	7/13	10/6	46	7.1	4.5
Tracy	29.7	7/10	10/10	43	5.8	2.6
Lancer	29.4	7/17	10/2	39	7.6	2.6
McNair 600	29.0	7/15	10/9	41	7.6	3.1
Hutton	28.6	7/24	10/29	42	8.9	4.1
McNair 500	28.0	7/12	10/14	42	6.3	3.4
Davis	27.2	7/24	10/2	40	6.6	3.5
RA 680	27.0	7/16	10/16	42	8.5	2.2
Centennial	26.8	7/15	10/16	43	7.6	2.7
-----Three-Year Average Planting Date May 8, 1977-1979-----						
Essex	34.6	7/5	10/1	32	5.5	2.3
NK-100	29.8	7/5	10/2	37	5.6	2.8
Coker 156	28.6	7/15	10/16	40	5.8	2.0
Forrest	27.6	7/6	9/30	38	5.6	3.0
D&PL 5	27.5	7/14	10/16	42	5.9	2.5
Lee 74	27.2	7/14	10/15	37	6.1	2.3
McNair 600	26.3	7/11	10/11	41	6.4	2.6
Bragg	26.1	7/18	10/22	42	8.7	3.0
Tracy	25.8	7/8	10/12	41	5.0	2.4
Lancer	25.5	7/14	10/6	38	6.3	2.1
Hutton	24.8	7/21	10/26	42	6.8	3.4
Centennial	24.8	7/12	10/16	42	6.7	2.3
McNair 500	23.7	7/9	10/7	40	6.1	3.2
Davis	22.8	7/19	10/6	40	6.1	2.8

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

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

Table 14. Four and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant Height, and Lodging of Soybean Varieties planted on Tennessee Valley Substation, Belle Mina

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Lodging ^{2/} Rating
<hr/> -----Four-year Average Planting Date May 8, 1976-1979-----					
Essex	36.4	7/6	10/1	32	2.0
Coker 156	31.1	7/16	10/15	41	2.2
Lee 74	30.5	7/16	10/14	37	2.4
Forrest	30.2	7/8	9/30	38	2.8
McNair 600	29.7	7/14	10/10	41	2.8
Bragg	29.6	7/20	10/20	43	3.2
Lancer	29.1	7/16	10/7	39	2.2
Centennial	28.2	7/14	10/15	43	2.7
Tracy	28.1	7/11	10/10	41	2.7
McNair 500	28.1	7/11	10/5	40	3.2
Hutton	27.7	7/22	10/24	42	3.6
Davis	25.6	7/21	10/7	40	3.0
<hr/> -----Five-year Average Planting Date May 7, 1975-1979-----					
Essex	41.5	7/6	10/1	32	1.8
Coker 156	34.6	7/15	10/14	41	2.3
Forrest	34.5	7/8	10/1	38	2.6
Bragg	34.2	7/20	10/20	45	3.3
Lee 74	33.8	7/15	10/13	37	2.4
Tracy	33.5	7/10	10/10	42	2.7
McNair 600	33.4	7/13	10/10	42	3.0
Lancer	33.3	7/16	10/6	41	2.3
Centennial	32.5	7/13	10/14	43	2.9
Hutton	30.2	7/22	10/24	43	3.8
Davis	29.3	7/21	10/7	42	3.3

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

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

Table 15. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 16, 1979 on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. ^{1st} pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
D74-7741	39.7 a	7/18	10/19	39	7.8	2.0	1.0	1	2	15.5
Braxton	39.6 ab	7/27	10/24	37	9.8	2.8	1.0	1	1	20.5
Ransom	39.3 abc	7/19	10/25	33	7.3	3.3	1.0	1	1	19.6
Coker 156	38.3 abcd	7/24	10/19	37	8.5	1.3	1.0	1	1	16.7
Hutton	38.0 abcd	7/31	11/2	39	7.8	4.8	1.0	1	1	20.0
Lee 74	37.2 abcde	7/22	10/17	35	8.3	2.8	1.0	1	1	14.7
Bragg	36.5 abcde	7/27	10/22	38	7.3	3.8	1.0	1	1	18.8
D&PL 5	36.0 abcdef	7/24	10/17	40	7.8	1.8	1.0	1	1	17.7
RA 680	35.9 abcdef	7/22	10/17	35	6.3	1.3	1.3	1	1	17.4
RA 603	35.3 abcdefg	7/16	10/18	43	9.3	1.8	1.0	1	2	18.9
Tracy	34.6 abcdefg	7/18	10/15	39	6.8	2.3	1.0	1	2	19.6
NAPB 602	34.6 abcdefgh	7/28	10/15	38	8.5	2.0	1.0	1	1	20.0
D&PL 403	34.2 abcdefghi	7/21	10/6	38	7.8	2.0	1.3	1	2	16.2
RA 604	34.1 abcdefghi	7/24	10/10	42	8.3	2.0	1.0	1	2	16.1
Centennial	33.5 abcdefghi	7/22	10/18	39	7.8	1.5	1.3	1	1	17.6
Terra-Vig 606	33.0 abcdefghij	7/24	10/19	40	8.5	2.0	1.0	2	1	18.0
NK-481	32.7 abcdefghij	7/28	10/19	34	9.3	1.0	1.0	1	1	18.7
Davis	32.5 abcdefghij	7/30	10/17	38	9.3	1.8	1.0	1	2	19.9
McNair 3262	32.5 abcdefghij	7/25	10/17	31	6.0	2.0	1.0	1	1	17.6
NK-207	32.5 abcdefghij	7/19	10/17	40	6.3	2.0	1.0	1	2	18.2
Tracy M	32.4 abcdefghij	7/17	10/13	36	7.8	2.3	1.3	1	1	19.1
D&PL 345	32.3 abcdefghij	7/18	10/2	41	7.0	2.5	1.0	1	2	16.7
Lancer	31.3 bcdefghijk	7/25	10/15	40	7.8	1.0	1.5	1	2	19.7
McNair 600	31.1 cdefghijk	7/25	10/19	37	10.0	1.8	1.0	1	1	18.7
Brysoy 9	30.7 defghijkl	7/21	10/18	41	6.8	2.5	1.0	1	1	18.1
McNair 3260	30.1 defghijkl	7/21	10/4	38	5.8	1.3	1.3	1	2	15.6

Table 15(continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 16, 1979 on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
NK-100	29.2 efghijkl	7/16	10/2	35	7.5	2.0	1.8	2	2	14.4
Forrest	27.7 fghijkl	7/17	10/2	39	8.0	1.8	1.0	1	3	13.2
V72-580	27.5 ghijkl	7/18	9/29	40	7.5	1.3	1.0	2	3	18.1
Essex	27.3 ghijkl	7/16	9/26	28	7.0	1.3	1.5	2	2	12.9
McNair 500	26.6 hijkl	7/18	10/11	35	8.5	1.5	1.0	1	2	15.7
Wilstar 550	26.2 ijk1	7/19	10/18	35	6.0	1.0	1.0	1	2	14.8
Bedford	25.2 jkl	7/22	10/2	42	8.0	2.8	1.0	1	2	13.9
RA 481	23.5 klm	7/9	9/19	37	7.3	1.3	1.8	2	3	14.5
RA 401	22.7 lm	7/2	9/4	38	8.5	1.0	3.0	2	2	12.3
BD 501	17.6 m	7/6	9/12	38	8.5	1.0	2.3	3	2	13.6
BD 483	9.2 n	6/29	8/23	33	5.8	2.0	5.0	3	1	13.8
BD 402	8.3 n	7/2	8/23	30	6.0	1.8	5.0	3	2	15.3
BD 401	7.9 n	7/2	8/23	34	6.8	1.0	5.0	3	1	14.6

C.V.% = 16.0 L.S.D. .05 = 6.7

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

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

Table 16. Yield, First Bloom and Maturity Dates, Plant and First Pod Height, Lodging, Shattering^{4/}, Seed Quality^{3/}, Purple and Seed Size of Soybean Varieties Planted July 16, 1979 on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
Lancer	28.7 a	9/4	11/2	27	7.5	1.5	1	14.8
RA 604	28.6 a	8/29	11/2	27	5.3	2.0	1	15.3
Forrest	28.4 a	8/26	11/2	26	6.3	2.3	1	12.9
McNair 500	27.6 a	8/29	11/1	23	4.8	1.8	2	12.2
Ransom	27.4 a	8/26	11/2	23	5.8	1.8	2	15.9
McNair 600	26.3 a	8/26	11/2	26	6.3	2.5	1	15.2
D&PL 5	26.3 ab	8/25	10/29	25	5.3	2.5	1	14.1
Bragg	26.1 ab	8/31	10/29	28	6.5	3.0	1	14.6
RA 680	25.1 abc	8/27	10/21	24	5.0	1.8	1	13.5
Hutton	24.9 abc	9/2	11/4	25	6.5	2.3	1	15.3
Braxton	24.6 abc	9/2	11/2	24	4.5	1.5	1	15.7
Davis	24.1 abc	9/4	11/2	26	5.0	2.5	1	14.7
Bedford	24.0 abc	8/29	11/2	30	8.3	3.3	2	12.6
NK-100	23.7 abc	8/23	10/27	21	5.3	1.8	1	13.6
Coker 156	23.4 abc	8/27	10/28	22	4.5	1.5	1	12.9
RA 603	22.9 abc	8/25	10/30	25	5.3	1.8	1	14.1
Centennial	22.2 abc	8/27	10/27	24	6.0	2.3	1	12.9
Lee 74	21.3 abcd	8/24	10/31	20	5.3	2.3	1	13.0
D&PL 345	20.8 abcd	8/28	10/25	27	5.3	2.5	1	13.9
Essex	18.7 bcd	8/24	10/28	18	4.3	1.0	1	13.0
Tracy	17.4 cd	8/23	10/22	24	4.3	3.8	1	15.4
Tracy M	14.3 d	8/24	10/28	21	4.5	3.3	2	15.9

C.V. % = 20.0 L.S.D. .05 = 6.8

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

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

3/Seed quality of all varieties was very good.

4/No shattering observed for any varieties.

Table 17. Two Year Averages for Yield, First Bloom and Maturity Dates, Plant Height, Lodging, and Shattering of Soybean Varieties Planted May 17, 1978 and 1979 on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Braxton	27.2	7/28 ^{4/}	10/28	37	1.9	1.0
Ransom	26.4	7/19 ^{4/}	10/23	33	2.1	1.0
Coker 156	26.3	7/18 ^{3/}	10/23	36	1.1	1.1
D&PL 5	25.5	7/20 ^{3/}	10/22	39	1.9	1.0
RA 680	25.3	7/22 ^{4/}	10/22	36	1.1	1.1
Lee 74	25.2	7/21 ^{3/}	10/21	34	2.0	1.0
D74-7741	25.0	7/18 ^{4/}	10/14	37	1.5	1.0
Bragg	24.0	7/24 ^{3/}	10/26	41	3.0	1.0
Hutton	23.8	7/26 ^{3/}	10/27	38	2.9	1.0
Centennial	23.5	7/19 ^{3/}	10/23	38	1.3	1.1
Tracy	22.9	7/19 ^{3/}	10/23	38	1.9	1.0
RA 603	22.5	7/16 ^{4/}	10/23	41	1.6	1.1
RA 604	22.2	7/24 ^{4/}	10/13	38	1.5	1.0
McNair 600	21.9	7/20 ^{3/}	10/19	37	1.6	1.0
Lancer	21.4	7/21 ^{3/}	10/14	35	1.0	1.5
Davis	20.8	7/24 ^{3/}	10/16	37	1.4	1.5
Essex	20.6	7/15 ^{3/}	9/20	27	1.1	1.9
D&PL 345	20.1	7/18 ^{4/}	9/29	38	1.8	1.1
NK-100	19.6	7/15 ^{3/}	9/23	34	1.6	1.6
Forrest	18.6	7/16 ^{3/}	9/23	38	1.4	1.0
V 72-580	18.2	7/18 ^{4/}	9/22	36	1.3	1.3
RA 401	16.6	7/2 ^{4/}	9/5	35	1.0	2.8
Bedford	16.6	7/22 ^{4/}	9/23	39	2.3	1.0
McNair 500	16.4	7/16 ^{3/}	9/28	34	1.3	1.0

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

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

^{3/}1977 and 1979 bloom dates

^{4/}1979 bloom dates only.

Table 18. Two-Year Averages for Yield, Maturity Date, Plant Height, Lodging, and Shattering of Soybean Varieties Planted^{3/} on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/}	Maturity ^{2/}	Plant ht. ^{2/}	Lodging ^{2/}	Shattering ^{2/}
	Bu./a.	Date	In.	Rating	Rating
Lancer	22.4	10/26	31	1.3	1.0
Ransom	22.3	10/26	28	1.4	1.0
D&PL 5	22.3	10/25	32	2.3	1.0
McNair 600	22.0	10/26	31	1.9	1.0
Forrest	21.7	10/18	31	1.9	1.3
Braxton	21.6	10/30	32	1.3	1.0
Coker 156	21.4	10/28	26	1.3	1.0
Bragg	21.1	10/27	35	2.4	1.0
McNair 500	20.5	10/18	29	1.4	1.3
Hutton	20.5	11/1	31	1.6	1.0
Davis	20.1	10/24	32	1.8	1.0
Centennial	19.7	10/26	30	2.0	1.0
Lee 74	19.6	10/25	27	1.8	1.0
Tracy	17.1	10/21	31	2.6	1.1
Essex	15.8	10/14	21	1.0	2.3

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

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

3/Planted July 16, 1979 and June 17, 1976-78.

Table 19. Three-Year Average for Yield, First Bloom and Maturity Dates,
 Plant Height, Lodging, and Shattering of Soybean Varieties
 planted on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
-----Three-Year Average Early Planting May 15, 1977-1979-----						
Coker 156	28.1	7/23 ^{3/}	10/21	34	1.2	1.3
D&PL 5	27.2	7/20 ^{5/}	10/21	38	2.0	1.3
Lee 74	26.2	7/22 ^{3/}	10/19	34	2.2	1.3
Bragg	25.6	7/26 ^{3/}	10/25	40	2.8	1.1
Hutton	25.4	7/28 ^{3/}	10/27	38	2.8	1.3
McNair 600	24.7	7/22 ^{3/}	10/15	36	1.5	1.0
Centennial	24.3	7/21 ^{3/}	10/21	37	1.3	1.1
Davis	23.2	7/27 ^{3/}	10/12	37	1.4	1.5
Tracy	23.1	7/25 ^{3/}	10/19	36	1.9	1.1
Lancer	22.7	7/23 ^{3/}	10/11	35	1.2	1.6
NK-100	21.0	7/15 ^{5/}	9/21	33	1.4	1.4
Essex	19.5	7/17 ^{3/}	9/18	25	1.2	1.8
Forrest	19.0	7/17 ^{3/}	9/21	36	1.3	1.0
McNair 500	16.7	7/18 ^{3/}	9/27	32	1.3	1.0
-----Three-Year Average Late Planting Date ^{4/} 1977-1979-----						
Lancer	23.8	8/30 ^{3/}	10/23	32	1.7	1.6
Ransom	22.9	8/19 ^{3/}	10/27	31	1.8	1.4
Coker 156	22.8	8/16 ^{3/}	10/27	28	1.6	1.5
Bragg	21.3	8/19 ^{3/}	10/27	37	2.6	1.4
Hutton	21.2	8/20 ^{3/}	10/31	33	2.3	1.4
McNair 600	20.9	8/14 ^{3/}	10/23	32	2.3	1.6
Forrest	20.9	8/13 ^{3/}	10/12	30	1.8	1.2
Davis	20.6	8/22 ^{3/}	10/22	34	2.3	1.7
McNair 500	20.6	8/14 ^{3/}	10/12	28	1.3	1.2
Centennial	20.5	8/15 ^{3/}	10/25	32	2.3	1.3
Lee 74	20.0	8/16 ^{3/}	10/23	28	2.2	1.4
Essex	17.7	8/12 ^{3/}	10/9	21	1.2	1.8
Tracy	17.0	8/12 ^{3/}	10/18	32	2.9	1.7

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

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

3/Average of 1976, 1977, and 1979 bloom dates.

4/Planted July 16, 1979 and June 17, 1976-78.

5/Average of 1977 and 1979 bloom dates.

Table 20. Four-Year Averages for Yield, Maturity Date, Plant Height, Lodging, and Shattering of Soybean Varieties Planted on Upper Coastal Plains Experiment Station, Winfield

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
<hr/>					
Coker 156	23.7	10/23	29	1.4	1.5
Lancer	23.3	10/21	32	1.5	1.6
Forrest	22.8	10/10	30	1.7	1.2
Ransom	22.7	10/25	31	1.8	1.4
McNair 600	21.8	10/20	32	2.0	1.6
McNair 500	21.7	10/10	29	1.4	1.2
Lee 74	21.4	10/21	29	2.3	1.4
Bragg	21.2	10/25	38	2.6	1.4
Hutton	21.0	10/28	33	2.3	1.4
Centennial	20.8	10/22	33	2.1	1.3
Essex	20.7	10/8	22	1.1	1.8
Davis	19.1	10/21	33	2.1	1.7
Tracy	17.7	10/15	32	2.6	1.7
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-----Four-Year Average Early Planting Date May 16, 1976-1979-----					
Coker 156	30.8	10/18	35	1.2	1.3
McNair 600	29.6	10/13	37	1.7	1.0
Lee 74	29.6	10/16	34	2.5	1.3
Bragg	29.4	10/21	42	3.1	1.1
Hutton	28.7	10/24	38	3.2	1.3
Davis	27.1	10/11	37	1.6	1.5
Tracy	26.9	10/18	37	2.3	1.1
Centennial	26.6	10/18	38	1.4	1.1
Lancer	25.7	10/9	36	1.1	1.6
Forrest	24.9	9/24	36	1.7	1.0
Essex	24.6	9/22	26	1.3	1.8
McNair 500	21.2	9/28	33	1.5	1.0
<hr/>					

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

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

3/ Planted July 16, 1979 and June 17, 1976-78.

Table 21. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant Height, Lodging, and Shattering of Soybean Varieties Planted on Upper Coastal Plain Substation, Winfield

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
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-----Five-Year Average Early Planting Date May 15, 1975-1979-----

Coker 156	36.6	7/21 ^{5/}	10/17	35	1.2	1.3
Hutton	35.1	7/26 ^{3/}	10/24	39	3.2	1.3
McNair 600	35.0	7/19 ^{3/}	10/14	36	1.6	1.0
Lee 74	34.7	7/18 ^{3/}	10/17	33	2.2	1.3
Bragg	34.1	7/23 ^{3/}	10/21	41	2.9	1.1
Davis	33.4	7/26 ^{3/}	10/10	37	1.6	1.5
Tracy	33.2	7/16 ^{3/}	10/17	37	2.1	1.1
Centennial	32.6	7/19 ^{5/}	10/18	38	1.3	1.1
Lancer	31.2	7/22 ^{5/}	10/9	36	1.1	1.6
Essex	30.6	7/14 ^{3/}	9/23	27	1.2	1.8
Forrest	29.7	7/14 ^{3/}	9/25	35	1.5	1.0

-----Five-Year Average Late Planting Date^{4/} 1975-1979-----

Ransom	26.3	8/17 ^{3/}	10/26	32	1.8	1.4
Lee 74	25.9	8/16 ^{3/}	10/21	29	2.1	1.4
Coker 156	25.8	8/18 ^{5/}	10/23	29	1.3	1.5
McNair 600	25.6	8/16 ^{3/}	10/20	32	1.8	1.6
Forrest	25.6	8/13 ^{3/}	10/12	30	1.6	1.2
Bragg	25.4	8/19 ^{3/}	10/25	37	2.6	1.4
Hutton	24.6	8/20 ^{3/}	10/29	34	2.4	1.4
Centennial	23.7	8/18 ^{5/}	10/21	33	1.9	1.3
Davis	23.1	8/21 ^{3/}	10/21	33	2.1	1.7
Essex	22.9	8/12 ^{3/}	10/9	22	1.1	1.8
Tracy	22.3	8/16 ^{3/}	10/17	31	2.5	1.7

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

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

^{3/}1975 through 1977 and 1979 average bloom dates.

^{4/}Planted July 16, 1979 and June 17, 1976-78.

^{5/}1976, 1977 and 1979 average bloom dates.

Central Alabama

The tests in central Alabama were located on Houston clay at Marion Junction, Lucedale sandy loam at Prattville, and Forkland sandy loam at Camden. Soybeans of Maturity Group VII are full season varieties in this area. Varieties of maturity Group V and VI are very early and early, respectively. Maturity Group V varieties were approximately 10 inches shorter in central than northern Alabama locations in 1979.

Bedford, D&PL 345, and RA 604 are the tallest Group V varieties planted in the Central Alabama tests. Yields of Group V varieties have been similar to full season varieties, and mature between September 6 and 30. Seed quality of these varieties may be a problem. At Prattville, Essex has produced slightly better yields than other varieties over the past 5 years, but its leaf drop and maturity tend to be erratic in central and southern locations.

Rainfall of 2.5 inches during the period from August 15 to September 26 resulted in very low yields (14 bu./a.average) for all entries in the first planting at Prattville. This was the second year in a row that rainfall during this period has been very low. There were 4 inches during the last 3 days in September which resulted in average yields of 22 bu./a. for the second planting date. The full- and late-season varieties (Group VII & VIII) have consistently had higher yields than earlier varieties when planted in June at Prattville.

When planted mid-May at central Alabama locations, the maximum yielding varieties for a particular maturity group over the past 4 to 5 years are: Group V varieties Essex and Forrest, Group VI varieties Coker 156,

Davis, and Lancer at Prattville and Coker 156, McNair 600, Centennial and Tracy at Marion Junction. Davis and Coker 156 performed better than other Group VI varieties at late June plantings at Marion Junction; Ransom a Group VII variety was superior at the late May and early June plantings; Group VIII varieties Coker 338, Hutton and Cobb were the leading varieties at later plantings at Marion Junction and Prattville.

New lines that performed well in 1979 at Marion Junction were Braxton, Coker 488, D&PL 345, McNair 500, and Tracy M for early plantings; Braxton, Dowling, Terra Vig 708 and Tracy M when planted at later dates.

New lines that performed well in 1979 at Camden were AP 70, Braxton, Coker 237, RA 604, RA 680, RA 701, and Terra-Vig 708.

Table 22. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 21, 1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
Tracy M	29.0 a	7/17	9/28	33	2.8	2.0	1.0	1	2	13.2
McNair 780	28.0 ab	7/25	10/10	37	5.3	2.0	1.0	1	2	12.7
McNair 600	27.9 ab	7/22	10/4	34	4.0	1.4	1.0	1	2	11.7
D&PL 345	27.6 abc	7/15	9/20	33	2.8	1.0	1.0	1	2	11.9
Centennial	26.8 abcd	7/21	10/2	34	2.3	1.5	1.0	1	1	10.9
Ransom	26.4 abcde	7/21	10/7	35	6.0	1.6	1.0	1	1	11.8
Coker 488	25.3 abcdef	7/30	10/15	42	6.0	1.8	1.0	1	1	11.5
Coker 76-853	25.3 abcdef	7/31	10/8	36	5.3	2.0	1.0	2	1	10.7
Braxton	25.1 abcdefg	7/25	10/10	40	6.5	1.8	1.0	4	2	12.7
McNair 710	24.9 abcdefg	7/20	10/8	35	5.3	1.6	1.0	1	2	11.9
Davis	24.7 abcdefg	7/24	9/23	32	3.0	1.5	1.4	1	1	11.0
RA 700A	24.6 abcdefg	7/31	10/10	44	7.3	2.3	1.3	1	1	10.0
McNair 700	24.4 abcdefg	7/18	10/3	29	4.0	1.3	1.0	1	1	11.4
McNair 500	24.3 abcdefg	7/14	9/19	30	1.8	1.0	1.0	1	2	10.7
Tracy	23.8 abcdefg	7/19	9/29	34	2.5	1.5	1.0	1	1	13.6
RA 680	23.8 abcdefg	7/19	10/4	32	3.0	1.0	1.0	1	1	10.7
Essex	23.3 abcdefg	7/9	9/6	20	1.8	1.0	2.0	1	1	12.0
Terra-Vig 708	23.2 abcdefg	7/22	10/6	37	5.3	1.8	1.0	1	1	10.2
AP 70	23.1 abcdefg	8/1	10/9	43	5.5	1.8	1.0	1	1	10.3
Dowling	22.0 abcdefgh	7/29	10/19	37	5.8	2.1	1.0	1	1	11.4
Coker 237	21.7 abcdefgh	7/21	10/3	34	3.8	1.1	1.0	1	1	10.7
NAPB 701	21.2 abcdefgh	7/25	10/5	34	4.0	1.8	1.0	1	1	9.9
Ga Soy 17	20.6 bcdefghi	7/25	10/8	37	5.0	1.8	1.0	1	1	10.4
Coker 156	20.2 bcdefghi	7/19	10/3	30	3.3	1.0	1.0	1	1	8.7
D74-7741	19.7 cdefghi	7/16	9/22	26	2.0	1.4	1.0	1	2	10.2
Lee 74	19.2 defghi	7/19	10/4	25	2.0	1.1	1.0	1	2	10.7

Table 22 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 21, 1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. ^{1st} pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
Bragg	19.1 defghi	7/24	10/8	40	6.3	1.8	1.0	1	1	9.4
RA 701	18.8 defghi	7/22	10/10	30	3.5	1.6	1.0	3	1	10.4
Cobb	18.7 defghi	7/30	10/18	43	7.3	2.1	1.0	1	1	9.6
V 72-580	18.6 defghi	7/13	9/17	29	2.0	1.0	1.0	1	2	13.3
NK-100	18.4 efgi	7/10	9/16	30	2.8	1.0	1.0	2	2	10.7
D&PL 5	18.4 efgi	7/29	10/5	33	2.3	1.5	1.0	1	1	11.2
Wilstar 790	18.4 efgi	7/20	10/8	38	6.5	1.5	1.0	2	2	9.4
RA 604	18.1 fghi	7/18	9/24	31	3.3	1.0	1.0	1	2	10.7
Coker 338	17.5 fghi	7/26	10/12	39	6.0	1.9	1.0	1	1	9.4
Lancer	17.3 fghi	7/25	9/28	31	4.0	1.4	1.0	1	2	10.1
Govan	17.1 fghi	7/24	10/8	32	5.3	1.0	1.0	1	1	9.3
Brooks	16.9 ghi	7/27	10/8	44	6.3	2.5	1.3	2	1	10.3
Forrest	14.7 hij	7/12	9/15	26	2.3	1.0	1.0	2	2	9.6
Hutton	14.0 hij	7/28	10/9	37	5.3	2.6	1.0	1	2	11.5
Bedford	12.7 ij	7/17	9/18	30	3.3	2.0	1.0	2	2	9.6
Coker 76-1012	9.3 j	7/24	10/4	26	4.0	1.4	1.0	3	1	12.7

C.V.% = 22.3 L.S.D. .05 = 6.6

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

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

Table 23. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality³,
 Purple Stain, and Seed Size of Soybean Varieties Planted June 7, 1979 on Black Belt Substation,
 Marion Junction

Variety	Yield ¹ / Bu./a.	1st bloom ² / Date	Maturity ² / Date	Plant ht. ² / In.	Ht. 1st pod ² / In.	Lodging ² / Rating	Shattering ² / Rating	Purple Stain ² / Rating	Seed Size ² / g /100 seed
Tracy	25.6 a	7/31	10/5	30	3.3	2.0	1.0	1	13.1
McNair 780	25.2 ab	8/4	10/13	31	5.3	2.8	1.0	2	12.5
Centennial	25.0 ab	7/31	10/9	32	5.0	1.8	1.0	1	10.5
Braxton	24.7 abc	8/3	10/15	30	5.8	1.1	1.0	1	11.5
Davis	23.8 abcd	8/3	10/3	31	3.8	2.3	1.4	1	10.1
Dowling	23.8 abcd	8/7	10/25	34	6.8	1.8	1.0	1	11.0
Tracy M	23.6 abcd	7/30	10/3	30	2.8	2.4	1.0	2	13.1
RA 700A	23.4 abcd	8/9	10/14	38	5.8	2.0	1.0	1	9.7
Coker 338	23.1 abcde	8/6	10/22	34	5.0	2.6	1.0	1	11.2
Coker 488	23.0 abcdef	8/7	10/21	36	5.8	2.3	1.0	1	10.9
McNair 600	22.9 abcdefg	8/3	10/8	31	4.5	1.4	1.0	1	11.7
Terra-Vig 708	22.3 abcdefg	8/8	10/13	33	4.8	2.0	1.0	1	10.7
McNair 710	22.2 abcdefg	8/4	10/12	31	6.0	2.5	1.0	1	12.6
RA 680	21.6 abcdefg	8/1	10/8	34	4.8	1.8	1.0	2	11.1
McNair 700	21.5 abcdefgh	7/31	10/6	27	5.8	1.1	1.0	1	10.4
D&PL 5	20.8 abcdefghi	8/1	10/9	29	3.3	2.3	1.0	1	10.5
Ransom	20.6 abcdefghi	8/3	10/14	29	6.0	1.5	1.0	1	12.2
Bragg	20.5 abcdefghi	8/3	10/12	34	6.3	2.3	1.0	1	10.5
Coker 156	20.3 abcdefghi	7/31	10/7	27	4.0	1.3	1.0	1	8.9
AP 70	19.9 bcdefghi	8/5	10/13	33	5.8	1.0	1.0	1	10.3
Lee 74	19.3 cdefghi	8/1	10/7	26	3.8	2.1	1.0	1	9.5
Ga Soy 17	19.2 cdefghi	8/5	10/13	28	5.8	1.5	1.0	1	10.9
Brooks	18.6 defghi	8/5	10/13	35	7.3	2.3	1.0	1	10.4
Coker 237	18.4 defghi	8/2	10/7	29	5.8	1.5	1.0	1	10.1
Forrest	17.8 efghi	7/27	9/24	27	3.0	1.4	1.0	2	8.7
D74-7741	17.6 efghi	7/29	10/2	26	3.5	1.8	1.0	2	9.3
Lancer	17.4 fghi	8/3	10/2	29	4.5	1.5	1.0	1	9.8
Cobb	17.3 ghi	8/9	10/22	37	7.7	2.2	1.0	1	10.1
RA 603	16.0 hi	7/27	10/7	31	3.3	2.3	1.0	1	9.6
Hutton	15.9 hi	8/6	10/18	32	5.5	3.5	1.0	1	11.3
Govan	15.9 i	8/4	10/11	29	5.3	1.0	1.0	1	9.1

C.V.% = 15.5 L.S.D..05 = 4.5

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 4 of this report.

3/Seed quality of all varieties was very good except Ransom and Cobb which rated good.

Table 24. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering^{3/}, Seed Quality^{4/},
 Purple Stain^{4/} and Seed Size of Soybean Varieties Planted June 26, 1979 on Black Belt Substation,
 Marion Junction

Variety	Yield ^{1/}	1st bloom ^{2/}	Maturity ^{2/}	Plant ht. ^{2/}	Ht. 1st pod ^{2/}	Lodging ^{2/}	Seed Size ^{2/}
	Bu./a.	Date	Date	In.	In.	Rating	g/100 seed
McNair 780	17.3 a	8/17	10/19	23	4.3	2.3	13.0
Davis	17.2 a	8/16	10/16	20	2.0	1.8	10.9
Coker 488	17.1 a	8/21	10/25	25	4.0	2.3	11.6
McNair 700	17.1 a	8/14	10/17	19	2.8	1.1	12.4
McNair 710	16.9 a	8/18	10/20	22	3.0	2.5	12.7
Centennial	16.5 ab	8/13	10/19	23	4.8	2.3	11.7
Coker 237	16.2 abc	8/13	10/17	21	4.0	1.0	11.8
Braxton	15.6 abcd	8/17	10/20	22	3.5	1.4	13.5
Ransom	14.8 abcde	8/16	10/22	24	3.5	2.5	12.6
Coker 338	14.7 abcde	8/20	10/26	23	3.8	2.5	11.6
Coker 156	14.4 abcdef	8/12	10/16	17	2.8	1.1	10.8
Cobb	13.9 abcdef	8/22	10/26	27	5.3	2.0	9.8
AP 70	13.8 abcdef	8/17	10/20	23	3.0	1.8	11.1
Dowling	13.7 abcdef	8/20	10/26	24	3.8	2.6	10.8
RA 700A	13.6 abcdef	8/22	10/20	26	4.0	2.6	11.1
Brooks	13.4 abcdef	8/20	10/22	26	5.0	2.0	10.5
Hutton	12.7 bcdef	8/20	10/23	24	3.5	3.4	12.5
Bragg	12.3 cdef	8/17	10/20	23	4.3	2.1	11.6
Terra-Vig 708	12.2 def	8/16	10/23	20	3.0	2.0	11.5
Govan	12.1 def	8/17	10/18	20	3.3	1.0	9.5
Ga Soy 17	11.4 ef	8/17	10/22	22	3.5	2.3	12.0
Lee 74	11.3 ef	8/15	10/18	17	3.3	2.6	10.7
Forrest	10.6 f	8/8	10/12	17	3.0	1.9	9.9

C.V. % = 16.5 L.S.D..05 = 3.3

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

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

3/Davis which shattered less than 1% was the only variety that shattered.

4/All seed quality was very good and AP 70, Braxton, Coker 156, and Forrest which had less than 3% purple stained seeds were the only varieties with purple stain.

Table 25. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 18, 1978 and 1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
McNair 500	32.3	7/7	9/18	31	1.9	1.3	1.1
Braxton	31.8	7/25 ^{3/}	10/13	40	4.4	1.7	1.0
Coker 488	31.6	7/28 ^{3/}	10/19	42	5.3	1.5	1.0
McNair 600	31.3	7/22 ^{3/}	10/1	33	3.0	1.3	1.0
Davis	30.9	7/25 ^{3/}	9/23	33	2.6	1.4	1.2
Coker 237	30.8	7/21 ^{3/}	10/1	34	3.8	1.1	1.1
RA 700A	30.6	7/31 ^{4/}	10/15	43	5.4	2.2	1.4
McNair 710	29.7	7/20 ^{4/}	10/12	35	4.3	1.3	1.0
Tracy	29.6	7/20 ^{3/}	9/27	35	2.9	1.9	1.0
Ransom	29.6	7/21 ^{3/}	10/12	34	5.1	1.4	1.0
Essex	29.2	7/3	9/9	19	1.6	1.0	1.5
NK-100	28.9	7/7	9/14	28	2.6	1.0	1.1
AP 70	28.9	7/30 ^{3/}	10/14	43	4.6	1.5	1.1
Centennial	28.2	7/20 ^{3/}	10/5	35	2.5	1.6	1.0
Coker 156	28.2	7/19 ^{3/}	10/1	31	3.1	1.0	1.0
Terra-Vig 708	27.6	7/24 ^{3/}	10/10	36	4.3	1.4	1.1
McNair 770	27.5	7/19 ^{3/}	10/2	34	3.5	1.2	1.0
Forrest	26.8	7/5	9/14	25	2.0	1.1	1.0
Coker 338	26.5	7/29 ^{3/}	10/20	38	5.3	1.6	1.0
Ga Soy 17	26.1	7/28 ^{3/}	10/11	39	5.0	2.0	1.0
Dowling	25.9	7/29 ^{4/}	10/22	38	5.4	1.9	1.3
Govan	25.7	7/24 ^{4/}	10/8	33	4.1	1.0	1.0
Bragg	25.3	7/25 ^{4/}	10/9	40	4.9	1.8	1.0
Lancer	25.2	7/13	9/24	32	3.8	1.3	1.1
Cobb	25.0	7/29 ^{3/}	10/23	42	5.9	2.1	1.4
D&PL 5	24.9	7/20 ^{3/}	10/5	33	2.1	1.4	1.0
Lee 74	24.3	7/19 ^{3/}	10/5	25	2.3	1.1	1.0
Hutton	22.8	7/25	10/15	38	4.6	2.6	1.1

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

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

^{3/}Bloom dates for 1977 and 1979.

^{4/}Bloom dates for 1979.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st Pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
<hr/> -----Two-year Average Planting Date June 6, 1978 and 1979-----							
McNair 710	31.3	8/2	10/18	33	4.9	1.8	1.0
Braxton	31.3	8/1	10/21	35	5.5	1.2	1.0
Coker 338	29.0	8/5	11/1	36	5.0	1.9	1.1
Terra-Vig 708	28.9	7/31	10/19	32	4.0	1.6	1.1
RA 700A	28.4	8/6	10/18	39	5.4	2.1	1.0
AP 70	28.4	8/3	10/19	36	4.5	1.3	1.0
Davis	28.0	7/31	10/3	33	3.4	1.6	1.6
Centennial	27.9	7/29	10/12	34	4.4	1.6	1.0
Ransom	27.1	8/1	10/18	31	5.3	1.4	1.0
Bragg	26.6	8/1	10/17	36	5.4	2.3	1.0
Coker 488	26.4	8/6	10/26	36	6.4	1.8	1.0
Tracy	26.3	7/29	10/3	32	4.0	2.3	1.0
Coker 156	26.0	7/30	10/9	28	3.9	1.1	1.0
Ga Soy 17	26.0	8/3	10/16	33	5.1	1.9	1.1
Dowling	25.9	8/6	10/28	36	6.5	2.1	1.0
Coker 237	25.5	8/1	10/10	31	5.0	1.4	1.0
Forrest	24.9	7/24	9/23	25	3.0	1.2	1.0
Govan	24.8	8/2	10/14	31	4.3	1.0	1.0
Lancer	23.8	7/31	10/2	30	4.1	1.3	1.3
Hutton	22.0	8/4	10/22	34	5.8	3.1	1.0
Cobb	21.6	8/8	10/30	39	7.7	2.1	1.0
<hr/> -----Two-year Average Planting Date June 27, 1978 and 1979-----							
Coker 338	20.9	8/18	11/12	25	5.3	1.8	1.0
McNair 710	20.6	8/16	10/26	24	3.5	1.8	1.1
Braxton	20.1	8/15	10/30	25	4.3	1.2	1.0
Cobb	19.7	8/21	10/31	30	5.5	1.6	1.1
Coker 156	19.2	8/13	10/20	20	2.8	1.1	1.0
Terra-Vig 708	19.0	8/15	11/2	24	3.5	1.5	1.0
AP 70	18.2	8/15	10/27	25	3.9	1.4	1.0
RA 700A	17.7	8/20	10/29	28	4.4	2.1	1.0
Bragg	17.3	8/15	10/25	26	4.8	1.8	1.0
Coker 488	17.0	8/20	11/4	25	3.9	1.6	1.0
Hutton	16.9	8/17	11/1	24	4.3	2.3	1.0
Coker 237	16.9	8/13	10/22	21	3.6	1.0	1.0
Davis	16.4	8/15	10/20	21	2.5	1.4	1.1
Ga Soy 17	16.3	8/16	10/27	24	3.5	1.6	1.0
Centennial	15.5	8/13	10/22	23	4.1	1.6	1.0
Govan	15.4	8/16	10/23	22	3.3	1.0	1.0
Dowling	15.0	8/18	11/2	25	4.8	1.8	1.1
Forrest	12.9	8/10	10/13	19	2.5	1.4	1.0
Ransom	11.1	8/14	10/29	20	2.6	1.8	1.0

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

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

Table 27. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties, Planted May 19, 1977-1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 237	31.8	7/21 ^{4/}	10/6	33	3.3	1.1	1.1
McNair 600	30.7	7/20 ^{3/}	10/3	32	3.1	1.2	1.0
Ransom	30.7	7/20 ^{3/}	10/16	32	4.3	1.3	1.0
Coker 488	30.7	7/28 ^{4/}	10/22	39	4.7	1.4	1.0
RA 700A	30.4	7/31 ^{5/}	10/18	40	4.4	2.1	1.3
Coker 156	30.3	7/18 ^{3/}	10/5	29	3.1	1.0	1.0
Davis	30.1	7/23 ^{3/}	9/27	30	2.9	1.3	1.5
Tracy	29.8	7/18 ^{3/}	10/1	32	2.9	2.0	1.0
AP 70	29.5	7/30 ^{4/}	10/15	40	4.4	1.4	1.0
Centennial	29.0	7/18 ^{3/}	10/7	32	2.6	1.5	1.0
Ga Soy 17	28.7	7/28 ^{4/}	10/14	38	4.8	1.8	1.0
Coker 338	28.4	7/27 ^{3/}	10/23	36	4.3	1.5	1.0
D&PL 5	27.1	7/20 ^{4/}	10/8	32	2.3	1.4	1.0
Govan	27.1	7/24 ^{5/}	10/12	31	3.6	1.0	1.0
Terra-Vig 708	26.8	7/24 ^{4/}	10/13	32	3.9	1.3	1.0
Cobb	26.5	7/28 ^{3/}	10/26	40	4.9	1.8	1.3
Bragg	26.1	7/24 ^{3/}	10/13	38	4.5	1.7	1.0
Lee 74	25.3	7/18 ^{3/}	10/7	24	2.0	1.0	1.0
Hutton	24.9	7/25	10/17	35	4.3	2.1	1.0
Essex	24.3	7/6	9/11	18	1.6	1.0	1.6
Forrest	22.8	7/10	9/19	22	1.8	1.1	1.0
Lancer	21.3	7/16	10/1	27	3.2	1.2	1.1

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

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

3/1976, 1977 and 1979 average bloom dates.

4/1977 and 1979 average bloom dates.

5/1979 bloom dates.

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

Variety	Yield ^{1/} Bu./a	1st bloom ^{2/} Dates	Maturity ^{2/} Dates	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
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-----Three-year Average Planting Date June 6, 1977-79-----

Ransom	29.6	8/1	10/21	29	4.7	1.3	1.0
Centennial	28.5	7/29	10/13	31	4.1	1.5	1.0
Coker 156	28.4	7/30	10/11	28	3.8	1.1	1.0
Coker 338	27.7	8/6	10/31	34	4.1	1.8	1.0
Bragg	27.2	8/1	10/19	34	4.7	2.0	1.0
Davis	27.1	7/31	10/6	30	3.2	1.4	1.4
Tracy	26.1	7/29	10/7	29	3.6	2.3	1.0
Hutton	24.4	8/4	10/23	32	4.6	2.4	1.0
Forrest	22.7	7/24	9/27	22	2.5	1.1	1.0
Lancer	22.6	8/2	10/6	26	3.3	1.2	1.2
Cobb	22.0	8/6	10/31	36	6.0	1.8	1.0

-----Three-year Average Planting Date June 25, 1977-1979-----

Coker 338	20.7	8/18	11/10	25	4.4	1.5	1.0
Bragg	19.6	8/15	10/26	25	4.0	1.6	1.0
Cobb	18.4	8/20	11/3	28	4.7	1.4	1.1
Coker 156	17.0	8/12	10/22	19	2.4	1.0	1.0
Davis	16.8	8/15	10/21	21	2.2	1.3	1.2
Centennial	15.7	8/14	10/24	22	3.2	1.5	1.0
Hutton	15.5	8/17	11/1	23	3.4	1.9	1.0
Forrest	12.9	8/10	10/16	19	2.0	1.3	1.0
Ransom	12.1	8/15	11/2	20	2.3	1.5	1.0

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

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

Table 29. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 17, 1976-1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 156	33.8	7/17 ^{3/}	10/6	30	3.3	1.0	1.0
McNair 600	33.1	7/19 ^{3/}	10/4	32	3.1	1.3	1.0
Centennial	31.7	7/17 ^{3/}	10/8	32	2.6	1.5	1.0
Tracy	31.3	7/17 ^{3/}	10/3	31	3.4	2.0	1.0
Ransom	31.0	7/19 ^{3/}	10/15	32	4.3	1.2	1.0
Davis	30.4	7/23 ^{4/}	9/28	29	2.6	1.3	1.5
Coker 338	30.2	7/27 ^{3/}	10/22	36	4.2	1.5	1.0
Lee 74	28.6	7/23 ^{3/}	10/8	25	2.5	1.3	1.0
Essex	28.0	7/6 ^{3/}	9/13	19	1.7	1.1	1.6
Cobb	27.3	7/28 ^{4/}	10/25	40	4.8	1.7	1.3
Bragg	27.2	7/23 ^{3/}	10/13	37	4.5	1.8	1.0
Hutton	26.6	7/24 ^{3/}	10/17	35	4.2	2.2	1.0
Forrest	25.8	7/10 ^{3/}	9/20	23	2.1	1.1	1.0
Lancer	24.0	7/16 ^{3/}	10/1	28	3.0	1.2	1.1

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

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

^{3/}1975 through 1977 and 1979 bloom dates only.

^{4/}Average of 1976, 1977 and 1979 bloom dates.

Table 30. Four-Year Average for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Dates	Maturity ^{2/} Dates	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Four-year Average Planting Date June 5, 1976-1979							
Ransom	32.4	7/30	10/20	31	4.6	1.4	1.0
Coker 156	31.6	7/28	10/12	31	3.8	1.3	1.0
Centennial	29.7	7/27	10/13	33	3.8	1.5	1.0
Coker 338	29.1	8/4	10/29	36	4.1	2.2	1.0
Davis	29.0	7/31	10/8	31	3.3	1.4	1.4
Bragg	28.7	7/31	10/18	36	4.4	2.1	1.0
Tracy	28.4	7/27	10/9	31	3.4	2.3	1.0
Hutton	26.9	8/2	10/21	33	4.5	2.6	1.0
Forrest	26.2	7/23	9/27	26	2.8	1.3	1.0
Lancer	25.7	8/1	10/6	29	3.3	1.4	1.2
Cobb	24.7	8/5	10/30	38	5.6	1.9	1.0
Four-year Average Planting Date June 23, 1976-1979							
Coker 338	24.1	8/17	11/6	27	4.1	1.5	1.0
Bragg	22.9	8/13	10/25	27	3.9	1.5	1.0
Davis	21.7	8/14	10/22	23	2.0	1.2	1.2
Coker 156	21.2	8/11	10/22	22	2.4	1.0	1.0
Hutton	20.9	8/16	10/30	25	3.5	1.8	1.0
Cobb	20.7	8/18	11/2	31	4.9	1.3	1.1
Centennial	19.7	8/12	10/23	24	2.9	1.4	1.0
Forrest	19.1	8/9	10/14	21	2.1	1.3	1.0
Ransom	15.8	8/13	10/31	22	2.4	1.4	1.0

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

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

Table 31. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 17, 1975-1979 on Black Belt Substation, Marion Junction

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 156	34.3	7/17 ³	10/6	30	3.2	1.0	1.0
McNair 600	32.7	7/18 ³	10/4	32	3.3	1.3	1.0
Centennial	32.3	7/17 ³	10/8	33	3.1	1.5	1.0
Tracy	32.2	7/17 ³	10/3	32	3.6	2.1	1.0
Ransom	31.7	7/19 ³	10/16	32	4.7	1.3	1.0
Davis	30.8	7/23 ³	9/28	30	2.8	1.3	1.5
Lee 74	29.7	7/18	10/8	25	2.8	1.3	1.0
Essex	28.3	7/5	9/12	19	1.8	1.0	1.6
Bragg	28.2	7/23 ³	10/14	37	5.0	1.8	1.0
Hutton	27.6	7/24	10/18	35	4.3	2.2	1.0
Forrest	26.0	7/9	9/19	25	2.5	1.1	1.0
Lancer	25.4	7/16	10/1	29	3.1	1.3	1.1

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

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

³Average of 1975 through 1977 and 1979 bloom dates.

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

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
<hr/>							
Ransom	30.8	7/29	10/19	31	4.7	1.4	1.0
Coker 156	30.5	7/27	10/11	30	3.8	1.2	1.0
Centennial	29.4	7/26	10/13	33	3.9	1.6	1.0
Davis	28.3	7/30	10/7	32	3.6	1.5	1.4
Tracy	28.1	7/26	10/9	32	3.8	2.3	1.0
Coker 338	27.8	8/3	10/28	36	4.4	2.2	1.0
Bragg	27.5	7/31	10/18	35	4.8	1.9	1.0
Hutton	26.0	8/2	10/22	33	5.0	2.4	1.0
Forrest	24.9	7/22	9/27	26	3.0	1.3	1.0
<hr/>							
-----Five-year Average Planting Date June 5, 1975-1979-----							
Coker 338	24.2	8/15	11/4	28	4.7	1.5	1.0
Davis	23.1	8/13	10/20	25	2.5	1.5	1.2
Hutton	22.5	8/15	10/28	26	4.2	2.0	1.0
Bragg	22.3	8/12	10/24	27	4.3	1.5	1.0
Cobb	22.0	8/17	11/2	32	5.1	1.5	1.1
Centennial	22.0	8/11	10/22	26	3.3	1.5	1.0
Coker 156	21.7	8/9	10/20	23	2.6	1.0	1.0
Forrest	19.6	8/7	10/13	23	2.5	1.3	1.0
Ransom	17.1	8/12	10/29	23	3.0	1.3	1.0
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^{1/}Yields adjusted to 13% moisture and 60 pounds per bushel.

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

Table 33. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain, and Seed Size of Soybean Varieties Planted May 18, 1979 on Lower Coastal Plain Substation, Camden

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size g/100 seed
Coker 237	45.8 a	7/16	10/14	35	5.0	1.5	1.0	1	15.0
RA 604	42.4 ab	7/12	10/6	36	5.5	2.0	1.0	1	14.2
Braxton	42.1 abc	7/20	10/14	38	5.0	1.3	1.0	2	17.8
McNair 700	41.2 abcd	7/14	10/9	32	6.3	1.0	1.0	1	15.2
RA 701	41.0 abcd	7/17	10/13	38	6.0	2.0	1.0	1	13.5
RA 680	40.8 abcde	7/15	10/7	36	5.8	1.5	1.0	1	13.3
AP 70	40.5 abcde	7/22	10/13	44	6.3	1.8	1.0	1	12.4
Terra-Vig 708	40.2 abcdef	7/16	10/12	36	5.5	1.8	1.0	1	14.9
Centennial	39.5 bcdefg	7/15	10/8	40	5.8	1.8	1.0	2	12.9
RA 603	39.2 bcdefg	7/7	10/9	34	5.5	2.3	1.0	1	13.7
D&PL 5	38.9 bcdefg	7/15	10/10	37	4.0	2.0	1.0	1	12.8
McNair 600	38.8 bcdefg	7/17	10/11	34	4.8	1.5	1.0	1	13.9
D&PL 345	38.8 bcdefg	7/9	9/30	34	4.0	2.0	1.0	2	14.3
McNair 780	38.6 bcdefg	7/19	10/11	37	5.5	1.5	1.0	1	15.1
Coker 338	38.5 bcdefgh	7/22	11/1	40	4.5	1.8	1.0	1	15.5
Ransom	38.3 bcdefgh	7/15	10/13	34	6.3	1.5	1.0	1	13.9
Coker 488	38.2 bcdefgh	7/24	10/25	40	4.3	1.8	1.0	1	14.6
Coker 156	38.1 bcdefgh	7/15	10/6	36	5.5	1.5	1.3	1	11.5
McNair 710	37.9 bcdefgh	7/13	10/11	36	4.8	1.5	1.3	1	14.5
Essex	37.2 bcdefgh	7/6	9/23	22	3.0	1.0	2.0	4	14.6
Tracy	36.9 bcdefgh	7/13	10/5	34	5.3	2.3	1.0	1	15.8
Lee 74	36.8 bcdefgh	7/15	10/10	28	2.8	1.5	1.0	1	12.9
Bragg	36.5 bcdefgh	7/20	10/13	40	6.5	1.5	1.0	1	14.5
NK-100	36.2 bcdefgh	7/6	9/24	26	3.0	1.5	2.0	2	13.3
Dowling	36.0 bcdefgh	7/25	11/1	40	5.3	2.0	1.0	1	13.7
RA 700A	35.9 bcdefgh	7/27	10/11	46	7.0	2.0	1.0	1	12.6

Table 33 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain, and Seed Size of Soybean Varieties Planted May 18, 1979 on Lower Coastal Plain Substation, Camden.

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
V72-580	35.9 cdefgh	7/6	9/25	32	4.0	1.8	2.0	3	16.2
Ga Soy 17	35.7 cdefgh	7/21	10/11	40	6.3	1.8	1.0	1	12.6
Forrest	35.6 cdefgh	7/6	9/26	29	4.5	2.5	1.3	2	11.7
Wright	35.6 cdefgh	7/19	10/12	39	6.3	1.5	1.0	1	12.9
D74-7741	35.6 defgh	7/11	10/2	35	5.8	2.5	1.0	2	12.4
McNair 500	35.4 defgh	7/10	9/28	31	3.0	1.8	1.3	2	10.9
Govan	35.1 defgh	7/21	10/11	36	5.0	1.0	1.0	1	11.8
Coker 76-1012	34.7 defgh	7/17	10/13	33	3.5	1.3	1.0	1	14.8
Brooks	34.3 efg	7/23	10/12	41	6.8	2.5	1.0	1	12.0
Bedford	34.3 efg	7/9	9/29	36	4.8	2.5	1.3	3	11.9
Lancer	34.2 efg	7/18	10/3	37	5.0	2.3	1.3	2	14.0
Hutton	33.8 fgh	7/22	10/31	38	4.5	2.8	1.0	1	16.9
Coker 76-853	33.8 fgh	7/22	10/10	37	6.3	1.3	1.0	1	11.6
Davis	33.7 fgh	7/21	10/3	40	6.5	2.0	1.0	2	12.4
Tracy M	32.8 gh	7/8	10/4	33	4.3	2.3	1.0	2	15.0
Cobb	31.9 h	7/28	10/31	44	5.0	1.8	1.0	2	12.6

C.V.% = 10.3 L.S.D..05 = 5.3

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

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

3/Seed quality of all varieties was very good except Essex, McNair 500, N-K 100, and V72-580 which showed some seed shriveling due to weather.

Table 34 . Two-year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 19, 1978 and 1979 on Lower Coastal Plain Substation, Camden

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. ^{1st} Pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 237	30.8	7/28	10/14	32	5.0	1.4	1.0
Braxton	28.1	7/30	10/20	37	5.5	1.1	1.0
AP 70	26.9	8/2	10/18	41	6.8	1.4	1.0
RA 680	26.8	7/26	10/10	32	5.5	1.4	1.0
Centennial	26.7	7/26	10/12	34	4.9	1.8	1.0
McNair 600	26.5	7/27	10/11	30	4.5	1.6	1.0
Ransom	26.4	7/28	10/17	32	5.9	1.3	1.0
McNair 710	26.4	7/27	10/17	33	4.8	1.6	1.1
Coker 156	26.3	7/24	10/8	32	4.9	1.3	1.1
McNair 700	26.3	7/23	10/12	30	5.9	1.0	1.0
Terra-Vig 708	26.2	7/27	10/19	32	5.0	1.6	1.0
Essex	25.9	7/16	9/24	20	2.9	1.0	1.5
RA 700A	25.5	8/6	10/17	42	6.4	2.0	1.0
RA 603	25.5	7/17	10/12	30	4.8	1.8	1.0
Coker 488	25.3	8/3	10/28	39	5.3	1.5	1.0
Ga Soy 17	25.3	7/31	10/17	39	6.6	1.4	1.0
D&PL 5	25.1	7/26	10/12	32	4.0	2.0	1.0
Tracy	24.8	7/23	10/8	31	5.0	1.9	1.0
Lee 74	24.5	7/24	10/11	25	2.6	1.5	1.0
Bragg	24.5	7/31	10/19	36	6.1	1.6	1.0
Coker 338	24.5	8/1	11/1	37	5.1	1.8	1.0
D74-7741	24.4	7/20	10/6	31	4.8	2.0	1.0
Forrest	24.3	7/17	9/27	26	4.4	2.1	1.1
NK-100	24.0	7/16	9/25	24	3.5	1.5	1.5
McNair 500	23.9	7/20	9/28	27	3.5	1.6	1.1
Davis	23.3	7/30	10/6	33	5.5	1.9	1.0
Hutton	23.2	8/2	10/29	36	5.5	1.9	1.0
Lancer	22.9	7/28	10/7	32	4.9	1.8	1.1
McNair 770	22.9	7/22	10/10	32	3.9	1.5	1.0
Dowling	22.5	8/3	11/1	37	5.9	1.6	1.0
Govan	22.3	7/31	10/16	34	5.1	1.0	1.0
Cobb	20.1	8/6	11/1	40	5.5	1.5	1.1

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

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

Table 35. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 20, 1976 and 1978-79^{3/} on Lower Coastal Plain Substation, Camden

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
Coker 156	30.2	7/23	10/7	29	4.4	1.3
Bragg	30.1	7/30	10/18	35	5.8	1.8
Ransom	30.1	7/27	10/18	30	6.0	1.3
McNair 600	29.9	7/23	10/8	29	4.4	1.9
Coker 338	29.7	7/31	10/28	35	5.7	2.0
Centennial	29.5	7/24	10/11	22	4.3	1.8
Tracy	28.2	7/22	10/6	29	4.4	2.0
Lancer	27.9	7/27	10/4	30	4.6	1.6
Hutton	27.6	8/1	10/24	34	4.7	1.9
Lee 74	27.1	7/23	10/9	24	3.2	1.7
Cobb	27.0	8/5	10/27	38	5.0	1.8
Davis	26.9	7/29	10/5	31	5.0	1.9
Forrest	26.9	7/16	9/25	26	4.6	2.0
McNair 500	26.8	7/20	9/27	25	3.3	1.8
Essex	26.7	7/14	9/22	19	3.6	1.0

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

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

^{3/}There were no yields taken in 1977 due to lesser corn stalk borer and dry weather.

Table 36. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 14, 1979 on Prattville Experiment Field, Prattville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/}		Maturity ^{2/}		Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
		Date	Date									
RA 401	28.8 a	6/25	9/1	28	2.8	1.0	2.0	1	2	11.4		
Essex	21.4 a	7/2	9/7	19	3.8	1.0	3.0	2	1	9.1		
V 72-580(Bay)	20.1 ab	7/5	9/13	28	3.5	1.0	1.3	2	2	10.5		
Dowling	18.8 abc	7/24	10/24	40	5.8	1.0	1.0	1	1	13.2		
Ga Soy 17	18.5 abcd	7/20	10/19	38	7.8	1.3	1.0	1	1	12.7		
Forrest	17.8 bcde	7/4	9/13	27	4.8	1.0	1.0	2	2	7.8		
NK-100	17.4 bcdef	7/5	9/18	28	3.8	1.0	1.8	2	1	8.1		
Braxton	16.8 cdef	7/17	10/21	39	6.8	1.0	1.0	1	1	14.7		
D74-7741	16.8 cdefg	7/9	9/18	32	5.0	1.0	1.0	1	2	8.6		
Govan	16.3 cdefgh	7/18	10/21	38	6.0	1.0	1.0	1	1	11.1		
Bedford	16.3 cdefgh	7/7	9/14	34	6.3	1.1	1.0	2	1	7.7		
Wright	16.2 cdefghi	7/18	10/16	40	6.0	1.1	1.0	1	2	11.9		
NAPB 701	16.1 cdefghi	7/16	10/13	35	5.0	1.0	1.0	1	2	10.4		
Cobb	15.9 cdefghij	7/24	10/25	41	6.0	1.3	1.0	1	2	12.6		
RA 701	15.7 cdefghij	7/15	10/20	39	5.3	1.0	1.0	1	1	11.8		
Hutton	15.4 defghij	7/21	10/24	39	5.5	1.1	1.0	1	2	14.0		
AP 70	15.4 defghijk	7/23	10/18	45	7.0	1.3	1.0	1	1	11.9		
Bragg	15.3 defghijk	7/16	10/17	40	7.5	1.0	1.0	1	1	11.4		
Coker 338	15.3 defghijk	7/18	10/24	39	6.5	1.3	1.0	1	1	13.8		
Coker 488	15.3 defghijk	7/22	10/24	40	7.0	1.0	1.0	1	1	15.1		
Coker 76-853	14.5 1 efghijk	7/20	10/18	36	7.0	1.0	1.0	1	2	11.5		
D&PL 345	14.4 1 fghijk	7/7	9/18	29	3.0	1.0	1.0	2	2	8.9		
Tracy M	14.2 1 fghijk	7/9	10/1	33	3.5	1.1	1.0	1	2	11.1		
RA 603	14.2 1 fghijk	7/5	10/8	37	4.8	1.1	1.5	2	1	9.2		
McNair 780	14.0 1 fghijk	7/17	10/15	38	6.0	1.0	1.0	1	1	13.6		
Centennial	13.7 1m ghijk	7/9	10/11	36	4.8	1.0	1.0	1	1	12.2		
Lancer	13.5 1mn ghijk	7/12	9/25	33	4.5	1.0	1.0	2	2	9.1		
RA 700A	13.1 1mno hijk	7/23	10/19	45	7.8	1.3	1.0	1	1	14.3		
McNair	13.0 1mno hijk	7/9	10/11	37	6.0	1.0	1.0	2	2	11.9		

Table 36 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted May 14, 1979 on Prattville Experiment Field, Prattville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
McNair 500	12.9 hijklmno	7/9	9/15	29	3.3	1.0	1.0	2	2	7.6
D&PL 5	12.9 hijklmno	7/9	10/12	37	3.8	1.1	1.0	1	2	10.0
Brooks	12.9 hijklmnop	7/21	10/18	41	7.8	1.3	1.0	1	1	11.7
Terra-Vig 708	12.8 ijk1lmnop	7/10	10/9	36	5.0	1.0	1.0	1	2	10.3
RA 680	12.7 jk1lmnop	7/9	10/10	35	5.0	1.0	1.0	1	1	11.2
RA 604	12.2 k1lmnop	7/9	9/26	35	5.3	1.0	1.0	1	2	8.4
Tracy	12.1 k1lmnop	7/9	10/7	34	4.5	1.1	1.0	1	2	11.2
Ransom	12.1 lmnop	7/13	10/12	35	6.0	1.0	1.0	1	2	9.3
Terra-Vig 606	11.9 lmnop	7/14	10/1	37	5.5	1.0	1.0	1	1	7.8
Coker 156	11.8 lmnop	7/9	10/5	34	4.8	1.0	1.0	1	2	7.6
Davis	11.6 lmnop	7/15	9/25	35	5.0	1.3	1.0	2	2	7.8
Coker 76-1012	11.2 lmnop	7/16	10/11	33	5.3	1.0	1.0	1	1	10.4
NAPB 602	11.2 lmnop	7/17	9/20	36	4.8	1.1	1.0	2	1	8.4
NK-481	10.4 mnop	7/19	10/11	35	7.3	1.0	1.0	1	2	9.4
Lee 74	10.3 nop	7/10	10/10	27	3.5	1.0	1.0	2	2	8.8
NK-207	10.3 op	7/9	9/25	34	5.5	1.1	1.0	2	2	6.9
Coker 237	10.0 op	7/9	10/11	33	5.3	1.0	1.3	1	1	9.7
McNair 700	9.8 op	7/9	10/6	32	6.8	1.0	1.0	2	2	8.5
McNair 600	9.5 p	7/15	10/8	33	6.3	1.0	1.0	2	2	9.0

C.V. % = 13.9 L.S.D. .05 = 2.7

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

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

Table 37. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain, and Seed Size of Soybean Varieties Planted June 5, 1979 on Prattville Experiment Field, Prattville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st. pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Purple Stain ^{2/} 2	Seed Size ^{2/} g/100seed
Ga Soy 17	27.4 a	8/4	10/28	34	4.8	1.0	1.0	2	15.8
AP 70	26.6 ab	8/4	10/20	39	4.8	1.0	1.0	1	13.7
Dowling	25.1 abc	8/6	11/2	40	5.8	1.0	1.0	1	14.6
Cobb	24.6 abcd	8/7	11/4	40	5.8	1.0	1.0	1	14.5
McNair 710	24.4 abcde	8/3	10/23	36	4.8	1.0	1.0	1	16.5
Coker 488	24.2 abcde	8/6	10/29	38	6.3	1.0	1.0	2	16.6
Braxton	23.8 bcdef	8/3	10/27	35	5.8	1.0	1.0	1	17.3
Bragg	23.6 bcdef	8/3	10/23	36	5.8	1.1	1.0	2	14.7
Govan	23.0 cdefg	8/3	10/27	35	4.8	1.0	1.0	1	13.0
Brooks	22.9 cdefg	8/4	10/27	39	5.8	1.0	1.0	2	13.7
McNair 700	22.4 cdefgh	7/29	10/17	33	6.0	1.0	1.0	2	13.4
McNair 780	22.4 cdefgh	8/3	10/24	35	5.0	1.0	1.0	1	16.5
Coker 156	22.0 cdefghi	7/30	10/15	33	4.5	1.0	1.0	1	11.5
Coker 237	21.2 defghij	7/30	10/17	33	5.0	1.0	1.0	1	12.5
RA 700A	21.0 efgijk	8/6	10/28	41	6.0	1.0	1.0	1	15.2
Centennial	20.5 fghijk	7/31	10/16	37	5.3	1.0	1.0	2	12.6
Coker 338	20.0 ghijk	8/4	11/4	37	6.3	1.4	1.0	2	15.0
Ransom	19.5 ghijkl	7/31	10/22	33	5.8	1.0	1.0	1	14.2
Terra-Vig 708	19.2 hijkl	7/31	10/28	35	5.5	1.1	1.0	2	14.1
Hutton	18.8 ijk1	8/4	10/31	41	5.3	1.3	1.0	1	15.3
Lee 74	18.2 jkl	7/30	10/17	29	4.8	1.0	1.3	1	11.8
Davis	17.5 k1	7/31	10/13	31	4.0	1.0	1.8	2	10.6
Forrest	16.4 1	7/23	9/23	30	4.0	1.0	2.0	2	7.5

C.V.% = 9.8 L.S.D. .05 = 3.0

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 of this report.

3/Seed quality of all varieties was very good except for Forrest which rated good.

Table 38. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 15, 1978 and 1979 on Prattville Experiment Field, Prattville

Variety	Yield ¹ / Bu./a.	1st bloom ² / Dates	Maturity ² / Dates	Plant ht. ² / In.	Ht. 1st pod ² / In.	Lodging ² / Rating	Shattering ² / Rating
Essex	25.6	7/2	9/8	18	4.0	1.0	2.4
Forrest	22.4	7/5	9/13	28	4.9	1.0	1.4
D74-7741	20.5	7/8	9/19	30	5.6	1.4	1.3
NK-100	20.3	7/3	9/15	27	4.3	1.1	1.9
McNair 500	17.6	7/7	9/13	30	4.8	1.6	1.5
Lancer	16.9	7/11	9/22	31	5.6	1.0	1.3
Davis	16.0	7/15	9/24	35	5.8	1.8	1.5
Dowling	15.9	7/22	10/25	40	7.0	1.1	1.0
Braxton	15.3	7/17	10/21	38	6.5	1.0	1.0
Ga Soy 17	14.9	7/19	10/20	39	7.4	1.1	1.0
McNair 710	14.5	7/12	10/11	36	5.3	1.2	1.0
Coker 156	14.3	7/9	10/4	30	3.8	1.0	1.0
Tracy	14.1	7/7	10/4	34	4.1	1.3	1.3
Coker 338	14.1	7/19	10/24	38	6.8	1.3	1.0
Coker 488	14.0	7/21	10/24	39	7.5	1.0	1.0
Govan	13.8	7/17	10/16	35	5.8	1.0	1.0
RA 680	13.6	7/8	10/4	34	3.9	1.0	1.0
McNair 700	13.2	7/9	10/4	30	5.8	1.0	1.0
Hutton	12.8	7/19	10/22	38	5.9	1.4	1.0
Cobb	12.7	7/22	10/25	42	7.0	1.3	1.0
Centennial	12.7	7/10	10/10	35	5.0	1.0	1.0
AP 70	12.5	7/22	10/17	44	6.6	1.1	1.0
Lee 74	12.2	7/12	10/9	25	3.0	1.0	1.0
Terra-Vig 708	12.2	7/11	10/10	34	5.4	1.0	1.0
Ransom	12.0	7/13	10/11	34	6.3	1.1	1.1
Bragg	11.9	7/16	10/14	39	6.6	1.1	1.0
McNair 600	11.7	7/11	10/4	31	5.1	1.1	1.1
RA 700A	11.3	7/22	10/19	44	7.3	1.2	1.1
Coker 237	11.0	7/11	10/8	32	5.3	1.0	1.1
D&PL 5	10.4	7/10	10/10	34	3.8	1.1	1.0

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

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

Table 39. Three-Year Average for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 19, 1977-1979 on Prattville Experiment Field, Prattville

Variety	Yield ^{1/}	1st bloom ^{2/}	Maturity ^{2/}	Plant ht. ^{2/}	Ht. 1st pod ^{2/}	Lodging ^{2/}	Shattering ^{2/}
	Bu./a.	Date	Date	In.	In.	Rating	Rating
Essex	25.5	7/5	9/6	19	3.3	1.0	2.3
Forrest	22.6	7/7	9/11	27	4.5	1.0	1.3
Ga Soy 17	21.6	7/24	10/20	41	7.3	1.3	1.0
Coker 156	20.8	7/12	10/5	32	4.0	1.0	1.0
Lancer	20.5	7/14	9/23	31	5.5	1.0	1.4
Govan	20.2	7/20	10/19	38	5.9	1.1	1.0
Terra-Vig 708	19.5	7/15	10/10	35	5.3	1.1	1.0
Tracy	19.4	7/10	10/4	36	4.3	1.6	1.2
Davis	19.2	7/17	9/26	37	5.8	1.7	1.4
Bragg	19.2	7/19	10/16	41	6.8	1.3	1.0
Cobb	19.1	7/23	10/25	43	7.1	1.3	1.0
Coker 488	19.1	7/23	10/24	42	7.3	1.1	1.0
Lee 74	19.0	7/15	10/12	26	3.5	1.1	1.0
Coker 237	18.7	7/15	10/11	34	5.3	1.0	1.1
Coker 338	18.6	7/22	10/26	40	6.6	1.5	1.0
Centennial	18.5	7/11	10/11	33	4.9	1.2	1.0
AP 70	18.5	7/22	10/16	45	7.3	1.5	1.0
Ransom	18.4	7/16	10/13	36	6.2	1.2	1.0
Hutton	18.4	7/21	10/23	40	6.0	1.5	1.0
D&PL 5	18.4	7/14	10/12	36	4.2	1.4	1.0
RA 700A	17.7	7/24	10/20	44	7.2	1.5	1.0
McNair 600	17.6	7/14	10/5	34	5.0	1.4	1.0

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

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

Table 40. Two and Three-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Prattville Experiment Field, Prattville

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
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-----Two-Year Average Planting Date June 15, 1978 and 1979-----

Ga Soy 17	26.0	10/28	33	4.6	1.1	1.0
Braxton	24.9	10/27	33	5.3	1.1	1.0
Dowling	24.7	11/2	35	5.0	1.1	1.0
Coker 488	24.3	10/28	34	5.9	1.3	1.1
AP 70	24.3	10/22	36	4.9	1.0	1.0
McNair 710	24.0	10/25	33	4.4	1.4	1.0
Cobb	23.5	11/2	38	5.0	1.5	1.1
Bragg	23.4	10/24	34	5.1	1.5	1.0
Govan	23.3	10/26	32	4.6	1.0	1.0
Coker 156	22.3	10/19	29	3.8	1.0	1.1
Centennial	21.6	10/18	34	5.1	1.0	1.1
Coker 237	21.5	10/19	30	4.8	1.0	1.4
Coker 338	21.4	11/2	35	5.5	1.6	1.0
Terra-Vig 708	21.3	10/29	33	4.8	1.3	1.0
RA 700A	21.2	10/29	37	5.1	1.2	1.0
Hutton	21.0	10/30	36	5.8	1.2	1.1
Davis	20.6	10/16	29	3.8	1.1	1.8
Ransom	20.3	10/25	30	5.1	1.0	1.1
Forrest	17.3	10/2	29	4.0	1.1	1.8

-----Three-Year Average Planting Date June 20, 1977-1979-----

Cobb	29.0	11/2	36	4.2	1.4	1.1
Bragg	27.7	10/25	33	4.3	1.5	1.0
Coker 338	27.4	11/2	34	4.8	1.6	1.0
Hutton	27.3	10/29	35	5.1	1.3	1.0
Ransom	25.0	10/27	29	4.3	1.1	1.0
Centennial	24.9	10/18	33	4.8	1.3	1.0
Davis	23.7	10/17	30	3.8	1.2	1.5
Forrest	19.0	10/6	27	3.5	1.3	1.5

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

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

Table 41. Four-Year Averages for Yield, Maturity Date, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted on Prattville Experiment Field, Prattville

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Dates	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
-----Four-year Average Early Planting Date May 20, 1976-1979-----						
Essex	28.4	9/11	19	3.6	1.0	2.3
Coker 156	26.4	10/8	32	3.6	1.1	1.0
Forrest	26.0	9/17	27	4.5	1.2	1.3
Lancer	25.8	9/26	30	4.8	1.0	1.4
Cobb	25.2	10/23	42	6.5	1.7	1.0
Ransom	25.2	10/14	35	5.9	1.5	1.0
Davis	25.1	9/28	34	4.8	1.8	1.4
Coker 338	25.1	10/23	39	5-9	1.7	1.0
Bragg	24.9	10/16	41	6.3	1.8	1.0
Lee 74	24.5	10/12	27	3.1	1.3	1.0
McNair 600	23.9	10/6	34	4.3	1.7	1.0
Hutton	23.7	10/21	39	5.3	2.1	1.0
Centennial	23.4	10/11	33	4.5	1.3	1.0
Tracy	22.9	10/5	35	3.6	1.7	1.2
-----Four-year Average Late Planting Date June 25, 1976-1979-----						
Cobb	30.9	10/31	36	4.0	1.7	1.1
Coker 338	29.9	10/30	34	4.4	1.9	1.0
Bragg	29.7	10/24	33	4.4	2.0	1.0
Hutton	29.4	10/27	34	4.6	1.8	1.0
Ransom	28.1	10/25	29	4.6	1.4	1.0
Centennial	27.4	10/17	33	4.6	1.4	1.0
Davis	25.3	10/16	29	3.4	1.3	1.5
Forrest	23.7	10/5	28	3.7	1.4	1.5

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

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

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

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
-----Five-Year Average Early Planting May 19, 1975-1979-----						
Essex	32.3	9/11	21	3.6	1.1	2.3
Forrest	28.4	9/17	28	5.1	1.6	1.3
Coker 156	28.2	10/7	33	4.3	1.4	1.0
Coker 338	28.1	10/24	39	5.8	1.9	1.0
Ransom	27.5	10/14	36	6.0	1.7	1.0
Davis	26.9	9/28	35	5.3	2.0	1.4
Hutton	26.5	10/22	39	5.3	2.5	1.0
Lancer	26.3	9/27	32	5.5	1.3	1.4
Bragg	26.2	10/16	41	6.7	2.2	1.0
Lee 74	26.1	10/12	28	3.7	1.6	1.0
McNair 600	25.8	10/7	34	4.8	2.0	1.0
Tracy	25.6	10/5	36	5.5	1.9	1.2
Centennial	25.2	10/11	35	5.1	1.6	1.0
-----Five-year Average Late Planting Date June 21, 1975-1979-----						
Cobb	31.7	10/31	36	3.9	1.9	1.1
Coker 338	30.0	10/29	34	4.1	2.0	1.0
Hutton	29.7	10/27	34	4.5	2.1	1.0
Bragg	29.6	10/23	34	4.3	2.2	1.0
Ransom	27.6	10/25	29	4.7	1.6	1.0
Centennial	27.2	10/17	33	4.8	1.8	1.0
Davis	25.5	10/16	30	3.5	1.8	1.5
Forrest	23.7	10/5	28	3.7	1.9	1.5

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

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

Southern Alabama

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

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

In 1979 soybean yields at Fairhope were 15 bu./a. less than the average yields from the 1978 test. This was due to damage from hurricane Frederic. The full season variety yields showed the greatest yield reduction for the two years.

Recent entries that have performed well for the past 3 years were Cokers 237 and 448 at Brewton, Coker 237, Ga Soy 17, and Terra-Vig 708 at Fairhope,

and Coker 488, Ga Soy 17, RA 700A, and Terra-Vig 708 at Monroeville. For the past 2 years Braxton and Dowling were high yielding lines at Brewton (early planting), Fairhope, and Monroeville.

Recent entries that performed well in southern Alabama in 1979 were McNair 700 and Tracy M. These entries were among the top three yielding entries in one or more of the four southern locations with McNair 700 yielding 45 bu./a. at Monroeville.

Table 43. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain, and Seed Size of Soybean Varieties Planted May 29, 1979 on Brewton Experiment Field, Brewton

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} in.	Ht. 1st pod ^{2/} in.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Purple stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
Coker 237	50.9 a	7/25	10/12	29	4.5	1.9	1.0	2	16.6
Wright	47.0 ab	7/25	10/11	33	4.3	2.6	1.0	1	15.1
Braxton	45.8 abc	7/25	10/12	33	4.8	1.9	1.0	1	18.2
Bragg	45.2 abcd	7/25	10/12	37	3.8	2.1	2.0	1	16.3
Dowling	42.4 bcde	8/2	10/27	38	4.5	3.8	1.0	1	15.6
RA 701	42.0 bcde	7/25	10/15	35	4.8	2.3	1.0	1	14.3
McNair 710	41.8 bcde	7/25	10/9	31	3.3	1.8	1.0	1	16.6
Coker 76-853	41.7 bcde	7/29	10/13	32	5.8	1.8	1.0	1	13.8
Hutton	41.2 bcde	7/29	10/22	35	5.0	3.8	1.0	2	16.5
AP 70	40.7 cdef	7/27	10/11	40	4.3	2.1	1.0	1	13.9
RA 680	40.0 cdef	7/22	10/5	34	6.8	2.0	1.0	1	13.5
RA 603	39.9 cdef	7/17	10/9	33	3.8	2.5	2.0	2	12.6
McNair 700	39.3 def	7/25	10/10	25	4.0	1.5	1.0	1	15.6
Coker 488	39.2 def	8/1	10/16	40	5.3	2.5	1.0	1	15.6
McNair 600	38.8 efg	7/25	10/11	31	4.0	2.3	1.0	1	15.9
Coker 156	38.3 efg	7/22	10/6	33	6.0	1.8	1.0	1	13.3
Centennial	37.7 efg	7/21	10/6	34	8.0	2.0	2.0	1	12.9
GA Soy 17	37.7 efg	7/29	10/10	35	3.8	2.4	1.0	1	14.3
Tracy	37.4 efg	7/21	10/4	31	5.3	2.3	2.0	1	14.8
Cobb	37.1 efg	8/3	10/27	41	4.0	2.9	1.0	1	14.6
Lee 74	36.9 efg	7/21	10/7	26	3.3	2.8	1.0	1	14.2
Ransom	34.7 fgh	7/25	10/13	31	4.0	2.4	2.0	1	16.4
Davis	32.9 gh	7/22	10/4	36	5.8	2.0	2.0	2	14.5
Forrest	31.0 h	7/16	9/21	26	4.3	1.8	3.0	3	12.5
Coker 338	30.8 h	7/28	10/22	38	4.5	2.6	1.0	1	17.2
Bedford	30.6 h	7/18	9/23	31	5.5	2.3	3.0	3	12.6
Terra-Vig 708	29.7 h	7/30	10/10	29	3.8	1.5	1.0	1	14.7

C.V.% = 12.5 L.S.D..05 = 6.7

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

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

3/Seed quality of all varieties was very good except RA 603.

Table 44. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain^{3/}, and Seed Size of Soybean Varieties. Planted June 27, 1979 on Brewton Experiment Field, Brewton

	<u>Yield^{1/}</u> Bu./a.	<u>1st bloom^{2/}</u> Date	<u>Maturity^{2/}</u> Date	<u>Plant ht.^{2/}</u> In.	<u>Ht. 1st pod^{2/}</u> In.	<u>Lodging^{2/}</u> Rating	<u>Shattering^{2/}</u> Rating	<u>Seed Size^{2/}</u> g /100 seed
Cobb	35.6 a	8/17	10/22	24	2.8	1.0	1	14.3
Centennial	26.1 b	8/10	10/9	19	2.0	1.1	1	13.9
Hutton	24.6 bc	8/15	10/20	17	2.0	1.0	2	17.2
Coker 488	23.5 bc	8/16	10/17	19	2.0	1.0	1	16.0
Dowling	23.3 bc	8/16	10/21	16	1.8	1.0	1	14.5
Davis	22.7 bc	8/13	10/10	18	2.0	1.1	1	16.4
Terra-Vig 708	22.5 bc	8/10	10/9	17	1.8	1.0	1	15.3
Coker 237	21.4 bc	8/10	10/11	14	2.3	1.0	1	17.6
Braxton	21.4 bc	8/14	10/16	15	2.0	1.0	1	17.5
RA 700A	20.8 bc	8/15	10/11	14	2.3	1.0	1	15.7
McNair 780	20.6 bc	8/13	10/14	18	2.5	1.0	1	16.5
Ransom	20.0 bc	8/13	10/14	18	2.3	1.1	1	17.6
Brooks	19.8 bcd	8/14	10/17	17	2.5	1.1	1	14.7
AP 70	18.8 bcd	8/14	10/15	15	2.0	1.0	1	14.7
McNair 700	17.8 bcd	8/9	10/12	15	2.5	1.0	1	16.9
Bragg	17.4 bcd	8/12	10/12	16	2.5	1.1	1	15.2
McNair 710	17.0 bcde	8/13	10/12	15	2.3	1.1	1	17.0
Ga Soy 17	16.8 bcde	8/14	10/10	14	2.0	1.0	1	15.3
Coker 338	16.3 bcde	8/15	10/18	17	2.5	1.0	1	16.1
Govan	15.3 cde	8/12	10/9	13	1.8	1.0	1	14.0
Forrest	14.6 cde	8/9	10/5	13	2.0	1.1	2	13.4
Coker 156	10.0 de	8/10	10/9	11	2.0	1.0	1	15.3
Tracy	7.5 e	8/12	10/6	12	2.0	1.0	1	17.6

C.V.% = 30.3 L.S.D. .05 = 8.3

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 ____ of this report.

3/Seed quality of all varieties was very good and Coker 156 and McNair 780 which had less than 3% purple stained seeds were the only varieties with purple stain.

Table 45. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted May 30, 1978 and 1979 on Brewton Experiment Field, Brewton

Variety ^{1/}	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 237	40.4	7/25	10/10	24	3.1	1.4	1.1
Dowling	39.5	8/1	10/25	39	3.8	2.5	1.0
Braxton	39.4	7/26	10/14	31	3.5	1.6	1.0
Coker 488	36.9	7/31	10/17	34	3.9	1.8	1.0
Bragg	36.1	7/26	10/12	34	3.3	1.9	1.5
Hutton	35.7	7/29	10/20	32	4.1	2.5	1.0
McNair 770	35.6	7/25	10/7	26	3.5	1.6	1.0
McNair 710	35.1	7/26	10/9	27	3.1	1.4	1.0
AP 70	35.1	7/29	10/12	35	3.4	1.6	1.0
Cobb	35.0	8/3	10/25	38	3.6	2.1	1.0
Coker 156	34.7	7/23	10/5	26	4.1	1.5	1.0
Ga Soy 17	33.0	7/29	10/11	31	3.5	1.7	1.0
Tracy	32.2	7/21	10/5	28	3.8	1.6	1.9
Centennial	32.1	7/23	10/6	29	5.3	1.5	1.5
Coker 338	31.7	7/30	10/20	32	3.8	1.9	1.0
Ransom	31.5	7/27	10/12	26	3.6	1.7	1.5
Davis	31.1	7/23	10/6	29	4.0	1.5	1.5
Lee 74	30.7	7/23	10/7	22	2.6	1.9	1.3
Forrest	29.5	7/16	9/21	24	3.1	1.4	2.0
Terra-Vig 708	28.9	7/27	10/9	26	3.1	1.3	1.1

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

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

Table 46. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 25, 1978 and 1979 on Brewton Experiment Field, Brewton

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Cobb	32.8	8/20	10/25	23	2.9	1.4	1.6
Dowling	32.2	8/18	10/25	20	2.0	1.1	1.6
Coker 488	29.0	8/17	10/21	21	2.6	1.0	1.0
Hutton	27.5	8/17	10/22	19	2.8	1.0	1.5
Coker 237	26.5	8/12	10/16	15	2.1	1.0	1.1
Braxton	26.2	8/16	10/19	19	2.4	1.3	1.0
RA 700A	26.1	8/17	10/18	19	2.4	1.0	1.1
Davis	25.6	8/17	10/16	20	2.0	1.1	1.8
Govan	25.5	8/14	10/16	17	1.8	1.0	1.0
Centennial	25.3	8/14	10/13	19	2.0	1.1	1.0
Terra-Vig 708	25.2	8/13	10/15	18	2.1	1.0	1.5
Bragg	24.9	8/14	10/17	22	2.8	1.3	1.0
McNair 710	24.9	8/15	10/17	20	2.6	1.1	1.1
Coker 338	24.3	8/16	10/22	21	2.6	1.4	1.3
Ga Soy 17	23.8	8/15	10/16	17	2.4	1.0	1.0
Ransom	22.4	8/15	10/18	19	2.4	1.1	1.4
AP 70	22.1	8/16	10/18	15	2.0	1.0	1.0
Coker 156	18.9	8/11	10/14	13	1.9	1.0	1.0
Forrest	17.5	8/11	10/11	15	2.0	1.1	1.8
Tracy	15.5	8/11	10/12	17	2.0	1.9	2.1

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

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

Table 47. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted on Brewton Experiment Field, Brewton

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Dates	Maturity ^{2/} Dates	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
<hr/>							
Coker 237	47.7	7/24	10/12	27	3.0	1.0	0.8
Cobb	42.7	8/1	10/26	37	3.3	1.4	0.7
Hutton	42.6	7/28	10/18	33	3.8	1.7	0.7
Coker 488	42.3	7/30	10/18	35	3.3	1.2	0.7
AP 70	41.9	7/27	10/13	34	3.3	1.0	0.7
Bragg	41.7	7/25	10/13	34	3.1	1.3	1.0
Coker 156	41.2	7/21	10/6	27	3.7	1.0	0.7
Ga Soy 17	41.0	7/28	10/11	31	3.4	1.1	0.7
Ransom	38.4	7/25	10/14	28	3.2	1.1	1.0
Coker 338	38.1	7/28	10/20	33	3.4	1.4	0.8
Davis	37.8	7/22	10/6	30	4.0	1.0	1.1
Tracy	37.4	7/19	10/5	29	3.6	1.3	1.8
Centennial	37.4	7/21	10/6	31	4.6	1.0	1.0
Terra-Vig 708	37.1	7/25	10/10	28	2.8	0.8	0.8
Lee 74	35.9	7/22	10/7	23	2.6	1.3	0.8
Forrest	33.6	7/14	9/19	24	3.3	0.9	1.3
<hr/>							
-----Three-Year Average Early Planting Date June 1, 1977-1979-----							
Cobb	38.9	8/17	10/28	26	3.0	0.9	1.1
Coker 488	34.8	8/15	10/22	25	2.4	0.7	0.7
Hutton	34.4	8/14	10/21	23	2.7	0.7	1.0
Davis	32.6	8/14	10/16	23	2.0	0.7	1.2
Coker 338	32.1	8/14	10/23	23	2.5	1.0	0.8
Bragg	31.5	8/12	10/17	23	2.6	0.9	0.7
Ga Soy 17	31.4	8/13	10/16	20	2.3	0.7	0.7
Centennial	30.1	8/10	10/11	22	2.8	0.7	0.8
Ransom	29.9	8/12	10/19	22	2.4	0.7	0.9
Coker 156	26.7	8/9	10/13	17	2.2	0.7	0.8
Tracy	25.2	8/10	10/10	21	2.4	1.3	2.0
Forrest	23.1	8/8	10/6	19	2.6	0.8	1.2
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1/Yields adjusted to 13% moisture and 60 pounds per bushel.

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

Table 48. Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted on Brewton Experiment Field, Brewton

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
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-----Four-Year Average Early Planting Date June 2, 1976-1979-----

Cobb	44.4	8/3	10/28	38	3.2	1.4	0.7
Hutton	44.3	7/30	10/19	33	3.8	1.6	0.7
Bragg	42.8	7/27	10/14	35	3.3	1.2	1.0
Coker 156	41.6	7/23	10/7	27	3.1	1.0	0.7
Ransom	40.5	7/27	10/15	29	3.1	1.1	1.0
Coker 338	40.2	7/30	10/21	34	3.3	1.3	0.8
Davis	37.4	7/25	10/7	30	3.7	1.0	1.1
Tracy	37.3	7/21	10/8	30	2.9	1.2	1.8
Centennial	37.0	7/23	10/8	31	3.9	1.0	1.0
Lee 74	36.4	7/24	10/9	24	2.4	1.2	0.8
Forrest	34.3	7/17	9/20	25	3.2	0.9	1.3

-----Four-Year Average Late Planting Date June 26, 1976-1979-----

Cobb	41.3	8/16	10/30	30	3.6	1.3	1.1
Davis	39.6	8/13	10/17	26	2.4	0.8	1.2
Hutton	39.3	8/12	10/23	26	3.3	1.2	1.0
Coker 338	37.8	8/13	10/25	27	3.4	1.1	0.8
Bragg	37.0	8/11	10/19	27	2.9	1.2	0.7
Ransom	36.0	8/11	10/21	25	2.9	0.9	0.9
Centennial	35.6	8/9	10/12	26	3.0	1.0	0.8
Tracy	31.1	8/8	10/12	25	2.3	1.4	2.0
Forrest	29.8	8/6	10/5	23	3.3	1.3	1.2

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

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

Table 49. Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Brewton Experiment Field, Brewton

Variety	Yield ¹ / Bu./a.	1st bloom ² / Date	Maturity ² / Date	Plant ht. ² / In.	Ht. 1st pod ² / In.	Lodging ² / Rating	Shattering ² / Rating
<hr/> -----Five-Year Average Early Planting Date May 30, 1975-1979-----							
Hutton	45.7	7/30	10/20	31	3.9	1.8	0.7
Cobb	43.4	8/3	10/29	36	3.7	1.4	0.7
Bragg	42.0	7/26	10/15	33	3.6	1.3	1.0
Coker 338	41.7	7/30	10/22	31	3.4	1.4	0.8
Ransom	41.2	7/26	10/17	28	3.4	1.1	1.0
Coker 156	40.3	7/22	10/8	25	3.0	1.0	0.7
Centennial	39.1	7/22	10/9	30	3.8	1.1	1.0
Tracy	39.0	7/20	10/8	29	3.0	1.3	1.8
Davis	38.0	7/24	10/8	29	3.9	1.3	1.1
Lee 74	37.6	7/24	10/11	23	2.5	1.1	0.8
Forrest	35.4	7/26	9/23	24	3.4	0.9	1.3
<hr/> -----Five-Year Average Late Planting Date June 25, 1975-1979-----							
Cobb	40.5	8/17	10/31	30	4.0	1.3	1.1
Hutton	38.9	8/12	10/24	26	3.7	1.2	1.0
Davis	38.7	8/13	10/18	27	3.1	0.9	1.2
Coker 338	38.1	8/13	10/26	27	4.0	1.1	0.8
Bragg	36.9	8/11	10/20	28	3.3	1.1	0.7
Ransom	36.3	8/10	10/22	26	3.5	0.9	0.9
Tracy	32.3	8/7	10/13	25	2.8	1.3	2.0
Forrest	30.0	8/5	10/6	24	3.7	1.3	1.2

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

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

Table 50. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering^{3/}, Seed Quality^{4/}, Purple Stain, and Seed Size of Soybean Varieties Planted May 28, 1979 on Monroeville Experiment Station, Monroeville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g/100 seed
Terra-Vig 708	47.1 a	7/21	10/9	31	2.5	2.8	2	15.0
Coker 237	45.9 ab	7/21	10/10	30	3.0	1.5	1	13.6
McNair 700	45.1 abc	7/21	10/10	28	4.0	1.8	1	14.2
Ga Soy 17	44.1 abcd	7/27	10/9	34	2.8	3.8	1	13.5
Coker 76-1012	44.1 abcd	7/23	10/10	27	2.5	2.0	1	14.7
RA 700A	43.9 abcd	8/2	10/13	39	4.8	2.8	1	14.2
Dowling	42.8 abcde	7/30	10/23	34	3.0	3.0	2	14.0
NAPB 701	42.7 abcde	7/24	10/8	31	2.8	2.5	2	13.5
69 Coker 76-853	42.6 abcde	7/29	10/13	32	3.8	2.3	1	13.4
Ransom	42.3 abcde	7/21	10/15	29	3.8	2.0	1	15.5
Coker 488	42.3 bcde	7/30	10/14	39	3.5	2.3	2	15.2
McNair 710	41.6 bcde	7/23	10/11	31	3.5	2.8	1	15.2
Braxton	41.6 bcdef	7/23	10/14	33	3.8	1.8	1	16.9
Cobb	41.3 bcdef	7/30	10/23	38	3.5	2.8	1	13.6
McNair 600	41.2 bcdef	7/22	10/8	28	3.5	2.5	2	13.2
Hutton	41.1 bcdef	7/29	10/17	34	4.3	3.0	1	15.5
Bragg	40.4 cdefg	7/24	10/14	33	2.0	2.5	1	14.7
Coker 338	40.3 cdefg	7/27	10/17	33	3.8	2.3	2	14.8
Coker 156	39.9 defgh	7/20	10/7	25	2.5	1.5	1	12.2
Davis	37.8 efg	7/26	9/30	28	3.3	2.5	2	12.0
Brooks	37.2 fgh	7/28	10/14	40	4.0	3.3	1	12.5
RA 680	37.1 fgh	7/23	10/6	32	2.8	1.8	2	13.6
Tracy	36.2 gh	7/20	10/1	28	2.5	2.5	1	14.1
Centennial	35.3 h	7/22	10/8	33	4.3	1.8	1	12.8
Bedford	29.4 i	7/18	9/23	27	3.5	2.3	3	11.3
Lee 74	28.3 i	7/21	10/8	26	2.0	2.5	2	12.8
Forrest	28.1 i	7/16	9/21	23	2.8	1.5	2	10.8

C.V.% = 7.6 L.S.D._{.05} = 4.1

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

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

3/No data taken on shatter rating.

4/Seed quality of all varieties was very good except Bedford and Forrest which were good.

Table 51. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted May 27, 1978 and 1979 on Monroeville Experiment Field, Monroeville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
Terra-Vig 708	35.3	7/21	10/11	28	2.5	1.9
Coker 237	34.9	7/22	10/9	27	2.6	1.3
Dowling	34.9	7/29	10/25	33	2.4	2.0
Coker 488	34.8	7/29	10/19	35	3.0	1.6
Cobb	34.6	7/28	10/24	35	2.6	1.9
Ga Soy 17	34.1	7/26	10/16	33	2.6	2.5
RA 700A	33.2	7/31	10/19	38	3.5	2.1
Braxton	32.6	7/23	10/20	31	3.0	1.4
Hutton	32.2	7/27	10/22	32	3.1	2.1
Coker 338	32.2	7/26	10/20	30	3.1	1.6
Ransom	32.0	7/22	10/16	27	3.1	1.5
McNair 710	31.9	7/23	10/13	28	3.3	1.9
McNair 700	31.6	7/20	10/10	24	3.5	1.4
Bragg	30.7	7/23	10/17	32	2.4	1.9
Coker 156	30.7	7/20	10/5	23	2.5	1.3
Davis	28.0	7/23	9/28	26	2.6	2.1
Tracy	26.8	7/19	10/2	28	2.5	1.8
Centennial	26.6	7/21	10/9	31	3.5	1.4
Forrest	25.3	7/15	9/18	22	2.0	1.5
Lee 74	23.5	7/21	10/8	23	2.0	1.9
N-N Lee	9.3	7/22	10/8	20	2.5	1.3

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

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

Table 52. Three and Four-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, and Lodging of Soybean Varieties Planted on Monroeville Experiment Field, Monroeville

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
<hr/>						
-----Three-Year Average Planting Date May 28, 1977-1979-----						
Ga Soy 17	41.8	7/24	10/18	34	2.6	1.7
Terra-Vig 708	41.0	7/18	10/12	31	2.7	1.3
Ransom	40.6	7/20	10/18	30	2.8	1.0
RA 700A	40.5	7/28	10/20	38	3.1	1.4
Coker 488	40.1	7/25	10/21	38	2.4	1.1
Cobb	39.8	7/27	10/27	37	2.7	1.3
Hutton	39.7	7/25	10/23	34	2.8	1.4
Coker 156	39.1	7/17	10/8	26	2.7	0.8
Coker 338	38.4	7/24	10/22	34	2.8	1.1
Bragg	38.3	7/21	10/19	34	2.4	1.3
Davis	35.8	7/20	9/30	29	2.9	1.4
Tracy	34.4	7/18	10/4	30	2.5	1.2
Centennial	33.9	7/19	10/9	32	3.3	0.9
Forrest	31.6	7/14	9/19	24	2.4	1.0
Lee 74	31.1	7/18	10/10	25	2.2	1.3
<hr/>						
-----Four-Year Average Planting Date May 20, 1977-1979-----						
Hutton	40.1	7/20	10/23	34	2.6	1.6
Ransom	40.0	7/16	10/17	30	2.8	1.1
Cobb	39.9	7/25	10/28	37	2.7	1.4
Coker 338	39.8	7/20	10/22	33	2.8	1.3
Bragg	39.4	7/18	10/18	34	2.5	1.4
Coker 156	39.4	7/10	10/9	26	2.3	0.9
Davis	36.9	7/14	10/3	29	2.6	1.3
Centennial	34.7	7/14	10/10	33	2.9	1.1
Tracy	33.8	7/15	10/6	30	2.1	1.3
Forrest	32.7	7/14	9/23	25	2.6	1.0
Lee 74	31.2	7/14	10/10	24	1.9	1.2

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

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

Table 53. Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality³, Purple Stain⁴, and Seed Size of Soybean Varieties Planted June 7, 1979 on
Gulf Coast Substation, Fairhope

Variety	Yield ¹ / Bu./a.	1st bloom ² / Date	Maturity ² / Date	Plant ht. ² / In.	Ht. 1st pod ² / In.	Lodging ² / Rating	Shattering ² / Rating	Seed Size ² / g /100 seed
Coker 156	36.9 a	7/25	9/29	33	4.3	3.0	1.0	10.8
Coker 237	33.5 ab	7/26	10/5	36	8.5	3.0	1.3	10.9
Tracy M	33.5 ab	7/23	9/27	35	4.8	3.3	1.3	13.6
Terra-Vig 708	33.3 ab	7/26	10/8	38	5.5	3.0	1.3	10.9
McNair 700	33.3 abc	7/28	10/4	30	7.0	3.0	1.0	10.7
Ransom	32.5 abcd	7/28	10/6	34	6.8	3.0	1.3	9.9
D74-7741	32.1 bcde	7/23	9/26	33	4.5	3.3	1.3	10.9
Govan	32.0 bcdef	8/1	10/9	36	6.8	3.0	1.3	8.9
Davis	31.6 bcdefg	7/28	9/30	36	5.8	3.0	1.0	10.7
Tracy	31.4 bcdefg	7/21	9/29	36	2.8	3.0	1.3	13.2
McNair 600	31.4 bcdefg	7/27	10/3	34	5.0	3.5	1.5	11.3
Wright	31.2 bcdefgh	7/30	10/9	36	5.8	3.0	1.0	10.4
Braxton	30.8 bcdefgh	7/29	10/10	39	8.8	3.3	1.0	12.9
D&PL 5	30.6 bcdefgh	7/26	10/5	35	6.8	3.0	1.0	11.1
NAPB 701	30.6 bcdefgh	7/29	10/7	34	7.0	3.0	1.0	9.7
Bedford	30.4 bcdefghi	7/21	9/23	39	6.0	3.0	1.0	11.0
Lee 74	30.3 bcdefghi	7/26	10/3	26	4.3	3.0	1.0	10.5
Ga Soy 17	30.1 bcdefghi	7/29	10/9	42	7.3	3.5	1.0	10.8
RA 700A	29.7 bcdefghi	8/2	10/11	41	8.3	3.0	1.3	11.5
AP 70	29.7 bcdefghi	8/1	10/11	47	8.8	3.3	1.0	10.4
RA 701	29.7 bcdefghi	7/30	10/11	38	6.0	3.0	1.0	11.8
RA 603	29.7 bcdefghi	7/21	10/4	37	5.8	3.8	1.3	11.4
McNair 780	29.3 bcdefghij	7/29	10/8	38	4.0	3.0	1.0	11.3
McNair 710	28.9 bcdefghij	7/26	10/6	34	5.3	3.0	1.0	11.2
Coker 76-1012	28.9 bcdefghij	8/1	10/7	35	4.5	3.0	1.3	10.8

Table 53 (continued). Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, Shattering, Seed Quality^{3/}, Purple Stain^{3/}, and Seed Size of Soybean Varieties Planted June 7, 1979 on Gulf Coast Substation, Fairhope

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating	Seed Size ^{2/} g/100 seed
RA 680	28.9	bcd ^e fghij	7/26	9/29	37	6.3	3.0	1.5
Wilstar 790	28.6	bcd ^e fghij	7/29	10/13	39	7.0	3.0	1.0
Forrest	28.2	cdefghij	7/18	9/23	34	4.3	3.3	1.0
Coker 338	27.6	defghij	8/1	10/17	38	7.5	3.0	1.0
Centennial	27.6	defghijk	7/27	10/2	37	4.0	3.0	1.0
Bragg	27.2	efghijk	7/29	10/9	38	9.0	3.0	1.3
Coker 76-853	26.8	fghijk	7/31	10/10	39	9.3	3.3	1.0
Lancer	26.5	ghijk	7/29	9/26	39	4.8	3.3	1.0
Coker 488	26.1	hijk	8/3	10/14	44	5.8	3.0	1.3
Hutton	25.5	ijk	7/31	10/16	43	9.8	3.3	1.0
Dowling	24.6	jk	8/2	10/18	42	6.3	3.3	1.0
Brooks	23.1	k	8/1	10/10	45	8.5	3.3	1.5
Cobb	19.3	l	8/2	10/21	42	7.8	3.0	1.3
C.V.%=9.9		L.S.D..05 = 4.1						

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

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

3/Seed quality was very good except for Dowling which rated good and Bedford, RA 701 and Wilstar 790 which had less than 3% purple stained seeds were the only varieties with purple stain.

Table 54. Two-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 5, 1978 and 1979 on Gulf Coast Substation, Fairhope

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 156	42.7	7/28	10/8	35	5.5	2.0	1.0
Coker 237	41.6	7/29	10/12	35	7.4	2.0	1.1
Ransom	40.7	7/31	10/17	36	7.1	2.0	1.1
McNair 700	40.0	7/29	10/16	32	6.9	2.0	1.1
Terra-Vig 708	38.4	7/29	10/19	37	6.1	2.0	1.5
Davis	37.6	7/31	10/8	37	6.0	2.0	1.0
Ga Soy 17	37.5	8/1	10/15	41	6.8	2.3	1.0
McNair 770	37.5	7/28	10/10	34	6.4	2.0	1.1
Coker 488	36.8	8/5	10/20	43	6.5	2.0	1.3
Tracy	35.9	7/23	10/6	37	4.1	2.0	1.1
Coker 338	35.8	8/4	10/24	37	7.3	2.0	1.1
Braxton	35.8	8/1	10/21	38	7.4	2.1	1.4
Govan	35.7	8/2	10/15	38	7.3	2.0	1.1
AP 70	35.5	8/3	10/18	43	8.0	2.1	1.3
RA 700A	35.4	8/5	10/21	41	7.3	2.0	1.3
McNair 710	35.3	7/30	10/15	35	5.8	2.0	1.3
Dowling	35.2	8/5	10/27	40	6.5	2.1	1.0
Hutton	35.0	8/3	10/23	40	8.1	2.1	1.3
Lee 74	34.7	7/29	10/10	29	4.6	2.0	1.1
Bragg	34.4	7/30	10/16	37	7.8	2.0	1.3
Cobb	33.8	8/6	10/28	40	6.9	2.0	1.1
Centennial	33.7	7/29	10/8	38	6.1	2.0	1.0
Lancer	32.8	8/1	10/6	39	5.5	2.1	1.1
Forrest	31.1	7/21	10/2	32	4.9	2.1	1.1

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

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

Table 55. Three-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 4, 1977-1979 on Gulf Coast Substation, Fairhope

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Coker 237	44.5	7/27	10/13	33	6.4	1.7	1.1
Coker 156	43.9	7/25	10/18	30	4.6	1.7	1.0
Ransom	43.2	7/29	10/17	32	6.3	1.7	1.1
Terra-Vig 708	41.7	7/28	10/17	33	5.3	1.7	1.3
Ga Soy 17	41.0	7/29	10/16	37	6.1	1.8	1.0
AP 70	40.7	7/31	10/18	39	6.8	1.8	1.2
Coker 338	40.1	8/1	10/24	34	6.1	1.8	1.1
Davis	39.7	7/29	10/9	32	5.3	1.7	1.0
Tracy	39.7	7/22	10/8	34	4.1	1.7	1.1
Govan	39.7	7/30	10/16	34	6.2	1.7	1.1
Bragg	38.9	7/29	10/17	35	6.8	1.7	1.2
Hutton	37.7	8/1	10/22	37	7.1	1.8	1.2
Lee 74	37.6	7/26	10/11	27	4.3	1.7	1.1
Centennial	37.2	7/26	10/8	34	5.3	1.7	1.0
Coker 488	36.8	8/2	10/20	38	5.8	1.7	1.2
Cobb	36.1	8/3	10/29	37	6.0	1.7	1.1
Lancer	35.6	7/29	10/5	34	4.8	1.8	1.1
Forrest	33.8	7/19	9/29	28	4.0	1.8	1.1

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

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

Table 56. Four and Five-Year Averages for Yield, First Bloom and Maturity Dates, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted on Gulf Coast Substation, Fairhope

Variety	Yield ^{1/} Bu./a.	1st bloom ^{2/} Date	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
<hr/> -----Four-year Average Planting Date June 4, 1976-1979-----							
Coker 156	45.3	7/25	10/10	31	4.7	1.5	1.0
Ransom	44.0	7/29	10/17	33	6.4	1.6	1.1
Coker 338	42.1	8/1	10/24	36	6.6	1.8	1.1
Bragg	41.7	7/28	10/17	36	7.1	1.8	1.2
Hutton	40.8	7/31	10/22	37	7.3	1.9	1.2
Tracy	40.1	7/23	10/9	34	4.6	1.8	1.1
Cobb	39.8	8/3	10/28	39	6.7	1.8	1.1
Davis	39.6	7/29	10/8	33	5.6	1.6	1.0
Lee 74	39.3	7/26	10/12	29	5.0	1.6	1.1
Centennial	38.0	7/26	10/9	35	5.6	1.6	1.0
Forrest	36.0	7/19	9/29	29	4.5	1.8	1.1
Lancer	35.4	7/29	10/6	35	5.4	1.7	1.1
<hr/> -----Five-year Average Planting Date June 4, 1975-1979-----							
Coker 156	47.1	7/24	10/11	32	4.7	1.4	1.0
Ransom	46.3	7/27	10/16	33	6.2	1.6	1.1
Bragg	43.8	7/27	10/17	36	6.9	1.7	1.2
Hutton	43.2	7/30	10/22	37	7.1	1.9	1.2
Tracy	43.1	7/22	10/9	33	4.4	1.9	1.1
Coker 338	42.8	7/30	10/24	35	6.5	1.8	1.1
Davis	42.0	7/29	10/9	33	5.6	1.6	1.0
Lee 74	41.7	7/25	10/13	29	5.3	1.5	1.1
Cobb	40.7	8/1	10/29	39	6.8	1.9	1.1
Centennial	40.3	7/25	10/10	35	5.6	1.5	1.0
Forrest	39.4	7/18	9/30	30	4.8	1.6	1.1
Lancer	37.6	7/28	10/6	35	5.6	1.5	1.1

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

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

Table 57. Yield, Maturity Date, Plant and First Pod Heights, Lodging^{3/}, Shattering, Seed Quality, Purple Stain, and Seed Size of Soybean Varieties Planted June 12, 1979 on Wiregrass Substation, Headland

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Shattering ^{2/} Rating	Seed Quality ^{2/} Rating	Purple Stain ^{2/} Rating	Seed Size ^{2/} g /100 seed
Cobb	32.3 a	11/8	36	5.8	1.0	1	2	16.6
Dowling	30.7 ab	11/8	36	6.3	1.0	1	1	17.2
Ga Soy 17	29.4 abc	11/5	36	4.8	1.3	1	1	17.8
RA 701	29.1 abcd	11/1	35	5.5	1.3	1	1	17.3
McNair 700	28.2 abcde	11/5	29	4.3	1.3	1	1	17.4
Brooks	27.6 bcdef	11/1	39	5.3	1.0	1	1	16.0
Coker 76-1012	26.7 bcdef	10/25	29	4.3	1.0	1	2	18.0
Coker 488	26.4 bcdefg	11/5	37	7.3	1.0	1	1	19.4
AP 70	26.1 cdefg	10/25	39	5.5	1.3	1	1	15.3
McNair 710	26.0 cdefg	11/1	36	4.5	1.0	1	1	18.2
Braxton	26.0 cdefg	11/5	35	5.0	1.3	1	1	19.9
Coker 237	25.5 cdefg	11/1	30	4.8	1.0	1	2	15.0
NAPB 701	25.5 cdefgh	11/1	35	4.3	1.3	1	1	16.8
Hutton	25.4 cdefgh	11/5	37	8.0	1.3	1	1	18.3
Bragg	25.3 cdefgh	11/1	36	6.8	1.3	1	2	17.3
Ransom	25.0 cdefghi	11/10	34	5.8	1.0	1	2	17.6
Govan	24.5 defghi	11/5	36	5.0	1.0	1	1	13.9
Wright	24.3 defghij	11/1	36	5.8	1.3	1	1	15.4
RA 603	24.3 efghij	11/1	31	5.8	1.0	3	3	14.7
Coker 156	24.2 efghij	11/10	30	3.8	1.3	1	2	16.6
Davis	23.8 efghij	11/8	32	4.3	1.8	2	2	18.2
RA 700A	23.3 fghijk	11/1	37	4.8	1.0	1	1	16.5
Coker 338	22.8 fghijk	11/10	36	6.8	1.0	1	2	18.6
Centennial	21.8 ghijk	11/1	34	4.5	1.0	1	1	15.2
McNair 600	21.0 hijk	11/12	32	4.5	1.0	2	2	17.5
Lee 74	20.4 ijk	11/8	23	3.5	1.0	1	1	14.7
Forrest	19.7 jk	10/25	24	3.8	1.0	5	4	12.1
Tracy	19.0 k	11/5	28	4.5	2.3	2	1	17.4

C.V.% = 11.4 L.S.D..05 = 3.9

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

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

3/Coker 338 with a rating of 2.3 was the only variety that lodged.

Table 58. Two-Year Average For Yield, Maturity Date, Plant and First Pod Heights, Lodging, and Shattering of Soybean Varieties Planted June 4, 1978 and 1979 on Wiregrass Substation, Headland

Variety	Yield ^{1/} Bu./a.	Maturity ^{2/} Date	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Ga Soy 17	31.0	10/30	33	3.1	1.0	1.1
Dowling	30.0	11/3	33	3.9	1.0	1.0
Cobb	29.0	11/3	34	3.6	1.0	1.0
McNair 700	28.9	10/27	27	2.8	1.0	1.1
Bragg	28.5	10/25	34	4.3	1.0	1.1
McNair 710	28.5	10/24	32	2.8	1.0	1.0
Coker 237	28.0	10/21	29	3.3	1.0	1.0
Coker 488	27.8	10/30	33	4.6	1.0	1.0
AP 70	27.6	10/25	35	3.5	1.0	1.1
Ransom	27.0	10/30	30	3.6	1.0	1.0
Hutton	26.4	10/31	34	4.5	1.0	1.1
Coker 338	26.2	11/3	33	4.3	1.6	1.0
RA 700A	25.8	10/30	38	3.3	1.0	1.0
Coker 156	25.0	10/26	26	2.4	1.0	1.1
Govan	24.9	10/29	31	3.3	1.0	1.0
Davis	24.5	10/25	29	2.8	1.0	1.4
Centennial	23.9	10/19	31	2.9	1.0	1.0
Forrest	23.6	10/17	22	2.4	1.0	1.0
Lee 74	22.4	10/25	21	2.3	1.0	1.0
Tracy	22.3	10/23	30	2.9	1.0	1.6

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

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

Table 59. Three-Year Average for Yield, Plant and First Pod Heights, Lodging and Shattering of Soybean Varieties Planted May 28, 1976 and 1978-1979^{3/} on Wiregrass Substation, Headland

Variety	Yield ^{1/} Bu./a.	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating	Shattering ^{2/} Rating
Bragg	34.0	34	5	1.3	1.1
Ransom	32.6	30	4	1.0	1.0
Cobb	32.1	36	4	1.6	1.0
Coker 156	31.2	27	2	1.0	1.1
Hutton	30.1	33	4	1.3	1.1
Coker 338	30.0	33	4	1.6	1.0
Davis	29.9	30	3	1.1	1.3
Centennial	28.9	31	3	1.0	1.0
Lee 74	28.5	24	2	1.1	1.0
Tracy	27.5	29	3	1.1	1.4
Forrest	25.0	23	3	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 4 of this report.

3/The 1977 variety data was not included because of damage to stand by the lesser cornstalk borer.

Table 60. Four and Five Year Averages for Yield, Plant and First Pod Heights and Lodging of Soybean Varieties Planted on Wiregrass Substation^{3/}, Headland

Variety	Yield ^{1/} Bu./a.	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging ^{2/} Rating
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-----Four-Year Average Planting Date May 25, 1975 & 1976 and 1978 & 1979-----

Ransom	33.5	29	3	1.1
Coker 156	33.2	27	2	1.1
Bragg	33.0	35	5	1.9
Davis	31.1	31	3	1.9
Cobb	31.0	35	3	2.3
Hutton	30.5	34	4	1.8
Centennial	30.4	32		1.4
Lee 74	29.2	23	3	1.2
Coker 338	29.0	34	3	2.0
Tracy	27.3	30	2	1.2
Forrest	27.3	24	3	1.1

-----Five-Year Average Planting Date May 24, 1974-76 and 1978-79-----

Ransom	35.2	32	4	1.3
Bragg	34.2	34	5	1.8
Davis	34.2	33	3	1.9
Tracy	33.2	30	3	1.6
Hutton	32.7	35	4	1.9
Cobb	32.0	36	3	2.4
Coker 338	31.8	34	4	2.1
Lee 74	31.3	23	2	1.2
Forrest	30.2	25	3	1.2

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

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

^{3/}The 1977 variety data was not included because of damage to stand by the lesser cornstalk borer.

Soybean Yields on Cyst Nematode Infested Fields

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

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

In 1979 two field tests using from 11 to 12 soybean varieties were placed on two fields on which the soybean cyst nematode had been found. One test was planted June 15, 1979 on the Moody farm near Stevenson in Jackson county and another test was planted June 16, 1979 on the Engle Farm near Summerdale in Baldwin County. The tests contain 5 and 4 replications of each variety at each location respectively, and plots were four rows with 30 or 36-inch row wide spacing, respectively, and 23 feet long. The varieties used are listed in tables 61 and 62. The varieties that have resistance to the Race 3 cyst nematode are Centennial, RA 604, RA 680, and D74-7741 (Group VI maturity) and Bedford and Forrest (Group V maturity). Bedford is also resistant to Race 4 of the cyst nematode. The yields were good from the Jackson County location showing a good response to cyst resistance, table 61. However, the very low yields of the cyst resistant varieties in the Baldwin County field, table 62, were due to a severe problem of peanut root-knot nematode Meloidogyne arenaria. The variety Centennial is not resistant to this root-knot nematode. Bedford and Forrest have fair resistance to this root-knot nematode but are not well adapted to southern Alabama.

Table 61. Yield, Plant and 1st Pod Height, and Lodging Rating of Soybean Varieties Grown on Cyst Nematode Field in Jackson County When Planted May 22, 1979

Variety	Yield ^{1/} Bu./a.	Plant ht. ^{2/} In.	Ht. 1st pod ^{2/} In.	Lodging rating ^{2/}
RA 604	47.6 a	36	7.4	2.4
RA 620	45.8 a	36	7.4	2.2
Forrest	45.0 a	31	6.8	3.0
Centennial	44.1 a	38	8.4	2.0
Bedford	43.9 a	37	8.0	2.6
Coker 156	36.5 b	31	6.6	1.8
Davis	36.4 b	33	7.2	2.4
Braxton	31.0 bc	34	8.8	1.6
Essex	30.2 c	26	6.8	1.8
Bragg	28.3 c	35	8.8	1.8
Hutton	25.7 c	34	10.4	2.4
L.S.D. .05	6.3			

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

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

Table 62. One and Two-Year Averages for Yield and Plant Height and One-Year Average Height to First Pod and Maturity Date for Varieties Grown on Cyst Infested Field in Baldwin County, Planted June 12, 1978 and 1979

Variety	Yield ^{1/}		Plant ht. ^{2/}		Ht. 1st pod ^{2/}		Lodging rating ^{2/}
	Bu./a. 1979	Bu./a. 1978-79	In. 1979	In. 1978-79	In. 1979	1979	
Bedford	19.7 a	16.4	35	31	5.0	2.3	
Centennial	16.6 ab	15.6	31	33	5.0	1.4	
Forrest	13.6 b	12.5	29	27	4.5	1.6	
Braxton	9.1 c	5.6	35	32	6.0	1.1	
Davis	8.3 c	7.3	31	30	6.3	1.4	
Hutton	3.8 d	3.6	30	30	7.3	1.1	
Bragg	3.0 d	3.8	32	33	5.5	1.3	
Ransom	2.3 d	4.4	28	28	6.3	1.0	
D74-7741	13.6 b		29		4.0	2.3	
RA 701	9.8 c		30		6.3	1.8	
Coker 156	8.3 c		28		3.5	1.0	
RA 603	7.6 c		32		4.7	1.8	

L.S.D. .05 3.5

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 4 of this report.

Soybean Protein and Oil Percentage^{1/}

Soybean protein and oil contents were determined on samples taken from the 1977 and 1978 variety by planting date studies in northern, central, and southern Alabama. These are shown in tables 84 through 93. Protein and oil content of soybeans grown at Crossville, Alabama were 43 and 22% respectively, at the early May planting dates and decreased to 41 and 20%, respectively, by late June dates in 1977. The corresponding protein and oil contents in 1978 were 44.1 and 19.6% respectively for early May planted soybeans and 42.1 and 19.9% for late June plantings. This decrease in protein contents with delayed plantings was similar at Winfield 44.6 to 41.8%, Marion Junction 43.9 to 42.7% and Prattville 45.2 to 40.2%. However, the average protein content was similar at Brewton with 41.8 and 42.2 for early and late plantings respectively. With the exception of the early planting date at Crossville and the three planting dates on the Marion Junction all locations and planting dates had similar protein and oil content in 1977. The high protein content at the early plantings in northern and central Alabama locations in 1978 was from locations where severe drought stress occurred during the late pod fill stage of development. The protein content in the southern locations was higher in 1978 than 1977, but the difference was not as great as the northern location.

^{1/}Protein and oil determinations were done by USDA, SEA, AR, Horticultural and Special Crops Laboratory, Northern Regional Research Center, Pretoria, Ill.

Table 63. Oil^{1/} Content of Soybean Varieties that were Grown in North Alabama near Belle Mina, Crossville, and Winfield in 1978

Variety	Tennessee Valley Substation Planted		Sand Mountain Substation Planted						Upper Coastal Plain Substation Planted				Northern Alabama											
	May 11	1978	May 12	1978	May 7	77-78	May 29	1978	May 30	77-78	June 19	1978	June 24	77-78	May 17	1978	May 13	77-78	June 15	1978	June 12	77-78	Average	
RA 401 (IV-S)	21.2	19.1	---	---	---	---	---	---	---	---	---	19.5	---	---	---	---	---	---	---	---	---	19.9	19.9	
Bedford	19.7	19.6	---	---	---	---	---	---	---	---	---	19.3	---	---	---	---	---	---	---	---	---	19.5	19.5	
Coker 136	19.5	18.1	19.1	20.2	20.7	20.0	20.1	20.1	20.1	20.1	20.1	19.2	20.5	19.8	20.7	20.7	20.7	20.7	20.7	20.7	20.7	19.5	19.5	
D&PL 345	17.8	18.3	---	---	---	---	---	---	---	---	---	17.6	---	---	---	---	---	---	---	---	---	17.9	17.9	
Essex	19.8	19.7	20.5	20.7	---	20.5	21.2	19.2	21.6	19.8	19.8	19.2	21.6	19.8	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.0	20.0	
FFR 557	18.1	19.4	21.1	20.4	---	---	---	---	---	---	---	17.7	19.1	---	---	---	---	---	---	---	---	18.9	18.9	
Forrest	18.3	18.7	19.2	19.3	21.3	20.3	20.8	20.8	20.8	20.8	20.8	18.6	19.4	20.7	21.2	21.2	21.2	21.2	21.2	21.2	21.2	19.3	19.3	
Mack	19.9	19.3	20.2	---	---	---	---	---	---	---	---	18.8	19.8	---	---	---	---	---	---	---	---	---	19.3	19.3
McNair 500	18.4	18.5	18.7	19.0	20.3	19.6	19.6	19.6	19.6	19.6	19.6	18.0	19.0	19.0	20.1	20.1	20.1	20.1	20.1	20.1	20.1	18.8	18.8	
V72-580	20.8	21.8	---	---	---	---	---	---	---	---	---	19.6	---	---	---	---	---	---	---	---	---	20.7	20.7	
NK Blend 100	19.5	20.2	20.6	20.5	---	---	---	---	---	---	---	19.1	20.8	---	---	---	---	---	---	---	---	19.8	19.8	
RA (c) 56	18.5	19.7	---	---	---	---	---	---	---	---	---	17.7	---	---	---	---	---	---	---	---	---	18.6	18.6	
RA 501 A	20.8	19.6	20.1	19.7	---	20.3	---	---	20.3	---	20.3	20.2	22.6	21.4	---	---	---	---	---	---	---	20.3	20.3	
RA 526	19.3	19.3	20.8	20.1	---	21.0	---	---	21.0	---	21.0	18.1	20.3	20.7	---	---	---	---	---	---	---	19.8	19.8	
Centennial	19.0	18.9	19.2	19.3	19.7	19.3	19.3	19.3	19.3	19.3	19.3	17.7	19.0	18.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	18.7	18.7	
Coker 156	20.4	21.4	22.0	22.1	22.0	21.2	21.1	21.1	21.1	21.1	21.1	19.3	20.8	20.2	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	
D&PL 5	18.9	19.5	19.6	19.9	---	19.4	---	18.1	19.3	19.3	19.3	18.1	19.3	19.5	---	---	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Davis	19.3	20.2	23.1	20.8	20.5	20.2	20.1	20.1	20.1	20.1	20.1	18.4	20.7	21.1	21.4	21.4	21.4	21.4	21.4	21.4	21.4	20.0	20.0	
FFR 666	19.3	19.8	20.0	19.2	19.8	---	---	---	---	---	---	17.5	19.8	---	---	---	---	---	---	---	---	19.0	19.0	
FFR 6253	19.8	19.4	---	---	---	---	---	---	---	---	---	18.2	---	---	---	---	---	---	---	---	---	19.1	19.1	
Green Soy 64	20.0	19.9	20.7	---	---	---	---	---	---	---	---	18.1	19.6	---	---	---	---	---	---	---	---	19.3	19.3	
Lancer	21.2	19.8	23.9	20.3	21.2	---	---	---	---	---	---	19.5	21.5	19.4	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.0	
Lee 74	19.1	19.0	19.9	20.2	20.1	20.1	20.1	20.1	20.1	20.1	20.1	18.2	20.4	19.3	20.4	20.4	20.4	20.4	20.4	20.4	20.4	19.3	19.3	
McNair 600	19.4	20.8	21.0	20.2	21.0	20.5	20.5	20.5	20.5	20.5	20.5	19.3	21.0	19.6	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.0	20.0	
McNair 3181	19.1	19.4	---	---	---	---	---	---	---	---	---	18.3	---	---	---	---	---	---	---	---	---	18.9	18.9	
D 74-7741	20.5	19.9	---	---	---	---	---	---	---	---	---	19.3	---	---	---	---	---	---	---	---	---	9.9	9.9	
RA (c) 9	19.4	18.9	---	---	---	---	---	---	---	---	---	17.6	---	---	---	---	---	---	---	---	---	18.6	18.6	
RA 603	19.2	20.3	20.1	---	---	---	---	---	---	---	---	18.2	18.9	---	---	---	---	---	---	---	---	19.2	19.2	
Tracy	18.1	18.9	18.9	18.6	18.4	18.6	18.4	18.4	18.4	18.4	18.4	16.8	18.4	19.1	19.3	19.3	19.3	19.3	19.3	19.3	19.3	18.4	18.4	

Table 63. Oil¹/Content of Soybean Varieties that were Grown in North Alabama near Belle Mina, Crossville, and Winfield in 1978 (Continued)

Variety	Tennessee Valley Substation Planted		Sand Mountain Substation Planted						Upper Coastal Plain Substation Planted				Northern Alabama Average 1978
	May 11 1978	May 12 1978	May 7 77-78	May 29 1978	May 30 77-78	June 19 1978	June 24 77-78	May 17 1978	May 13 77-78	June 15 1978	June 12 77-78		
Bragg	19.4	20.2	20.7	19.0	19.2	20.1	19.5	17.7	18.8	19.7	19.7	19.4	
Braxton (F71-1180)	19.6	19.4	---	19.6	---	19.2	---	17.8	---	19.1	---	19.1	
Brooks	18.0	19.4	---	20.0	---	19.2	---	17.5	---	---	---	18.8	
GA. Soy 17	19.8	19.9	---	20.9	20.2	19.7	19.3	18.6	---	19.7	19.9	19.8	
Govan	---	---	---	19.1	---	19.7	---	---	---	18.6	---	19.1	
Ransom	20.6	21.1	21.6	21.7	21.5	20.6	---	19.8	---	20.3	21.4	20.7	
Hutton	18.7	18.0	19.3	18.5	18.0	18.9	17.9	17.0	18.1	18.5	17.9	18.3	

¹/Oil content listed as percent on dry weight basis.

Table 64. Protein¹/Content of Soybean Varieties that were Grown in North Alabama near Belle Mina, Crossville, and Winfield in 1978

Variety	Tennessee Valley Substation Planted		Sand Mountain Substation Planted						Upper Coastal Plain Substation Planted				Northern Alabama		2-Yr. Average
	May 11 1978	May 12 1978	May 5 77-78	May 29 1978	May 30 77-78	June 19 1978	June 24 77-78	May 17 1978	May 13 77-78	June 15 1978	June 12 77-78	1978	1978	1978	
RA 401 (IV-S)	39.3	43.5	---	---	---	---	---	42.7	---	---	---	41.8	41.8	41.8	---
Bedford	42.0	43.1	---	---	---	---	---	43.8	---	---	---	43.0	43.0	43.0	---
Coker 136	42.4	45.3	43.3	42.2	41.6	42.3	41.4	44.9	41.8	42.3	40.2	43.2	43.2	41.7	41.7
D&PL 345	44.7	46.5	---	---	---	---	---	48.3	---	---	---	46.5	46.5	46.5	---
Essex	42.9	46.4	44.8	44.6	44.0	44.0	43.6	45.0	43.4	43.4	41.4	44.4	44.4	43.4	43.4
FFR 557	45.0	45.6	45.2	42.8	---	---	---	46.3	44.0	---	---	44.9	44.9	44.9	---
Forrest	44.8	44.9	43.6	43.7	42.5	40.7	40.0	45.0	43.8	42.4	40.5	43.6	43.6	42.1	42.1
Mack	42.2	46.1	44.6	---	---	---	---	46.4	42.4	---	---	44.9	44.9	43.5	43.5
McNair 500	44.6	45.8	44.5	44.8	44.2	43.2	43.0	47.8	45.8	---	---	45.2	45.2	44.4	44.4
V 72-580	42.9	44.1	---	---	---	---	---	45.1	---	44.5	---	44.2	44.2	44.2	---
NK Blend 100	42.3	45.1	43.4	43.9	---	---	---	45.1	42.5	---	---	44.1	44.1	42.9	42.9
RA (c) 56	44.0	44.8	---	---	---	---	---	47.1	---	---	---	45.6	45.6	45.6	---
RA 501 A	41.8	45.8	---	44.7	---	41.9	---	45.4	---	41.6	---	43.5	43.5	43.5	---
RA 526	43.7	46.5	45.3	44.0	---	41.6	---	47.3	43.4	43.2	---	44.4	44.4	44.3	44.3
Centennial	43.9	46.0	44.5	43.5	42.3	42.7	41.7	40.9	41.0	40.5	39.8	42.9	42.9	41.9	41.9
Coker 156	42.4	41.7	41.7	39.8	40.1	40.6	40.3	41.9	40.6	41.1	39.8	41.3	41.3	40.5	40.5
D&PL 5	44.2	44.9	43.4	43.9	---	42.4	---	44.5	42.4	42.1	---	43.7	43.7	42.9	42.9
Davis	43.0	44.1	43.7	41.7	41.9	42.5	42.0	45.7	43.9	42.6	40.9	43.3	43.3	42.5	42.5
FFR 666	43.8	44.8	44.7	44.7	43.7	---	---	47.3	43.9	---	---	45.2	45.2	44.1	44.1
FFR 6253	41.5	45.0	---	---	---	---	---	43.2	---	---	---	43.2	43.2	43.2	---
Green Soy 64	43.0	44.4	43.6	---	---	---	---	45.0	43.0	---	---	44.1	44.1	43.3	43.3
Lancer	42.4	43.5	42.9	42.7	41.7	---	---	42.4	41.4	40.9	40.0	42.4	42.4	41.5	41.5
Lee 74	43.5	45.4	44.4	43.9	43.4	42.7	42.2	45.8	43.8	44.0	41.8	44.2	44.2	43.1	43.1
McNair 600	42.9	41.4	41.6	41.4	39.9	39.5	39.3	43.2	41.1	41.1	39.3	41.6	41.6	40.2	40.2
McNair 3181	42.7	44.2	---	---	---	---	---	44.4	---	---	---	43.8	43.8	43.8	---
D74-7741	40.9	43.8	---	---	---	---	---	44.9	---	---	---	43.2	43.2	43.2	---
RA (c) 9	43.5	46.4	---	---	---	---	---	42.5	---	---	---	44.1	44.1	44.1	---
RA 603	42.7	44.0	---	---	---	---	---	44.3	---	---	---	43.7	43.7	43.7	---
Tracy	44.3	44.9	---	44.5	44.3	43.8	43.7	45.9	44.4	43.4	42.0	44.5	43.8	43.8	43.8

Table 64. Protein¹/Content of Soybean Varieties that were Grown in North Alabama near Belle Mina, Crossville, and Winfield in 1978 (continued)

Variety	Tennessee Valley Substation Planted		Sand Mountain Substation Planted						Upper Coastal Plain Substation Planted						Northern Alabama 2-Yr. Average	
	May 11 1978		May 12 1978	May 5 77-78	May 29 1978	May 30 77-78	June 19 1978	June 24 77-78	May 17 1978	May 13 77-78	June 15 1978	June 12 77-78	1978	1978	1978	77-78
													1978	1978	1978	77-78
Bragg	43.2		44.4	43.1	44.0	42.6	41.6	41.0	44.7	42.8	41.2	40.1	43.2	41.9		
Braxton (F71-1180)	42.9		44.1	---	43.3	---	40.7	---	42.5	---	39.1	---	42.1	---		
Brooks	42.9		44.9	---	43.2	---	42.1	---	43.6	---	---	---	43.3	---		
Ga. Soy 17	40.8		42.8	---	40.4	42.0	40.2	40.1	41.5	---	38.4	38.1	40.7	40.0		
Govan	---		---	---	43.9	---	42.7	---	---	---	41.9	---	42.8	---		
Ransom	41.8		43.7	---	41.4	40.1	41.5	39.7	41.6	---	39.7	38.8	41.6	39.5		
Hutton	43.7		46.5	43.7	45.5	44.7	44.7	44.1	44.7	43.1	43.1	43.5	44.7	43.8		

1/Protein content listed as percent on dry weight basis.

Table 65. Oil¹/Content of Soybean Varieties that were Grown in Central Alabama near Marion Junction, Prattville, and Camden in 1978

Variety	Black Belt Substation Planted						Prattville Field Planted				Lower Coastal Plain Substation Planted			Central Alabama Average
	May 15 1978	May 18 77-78	June 5 1978	June 5 77-78	June 26 1978	June 27 77-78	May 16 1978	May 22 77-78	July 15 1978	July 3 77-78	May 19 1978		1978	
													1978	
Coker 136	20.2	20.1	19.8	20.2	20.9	20.2	19.8	20.8	20.5	21.4	20.4		20.3	
Essex	21.6	21.0	---	---	---	---	21.6	21.2	---	---	20.1		21.1	
FFR 557	19.0	---	---	---	---	---	18.4	---	---	---	19.2		18.9	
Forrest	21.3	21.0	18.8	19.6	22.6	20.7	20.2	20.5	20.0	21.5	20.1		20.5	
McNair 500	20.7	---	---	---	---	---	20.2	---	---	---	18.3		19.7	
NK Blend 100	21.4	---	---	---	---	---	20.8	---	---	---	20.6		20.9	
Centennial	19.3	19.1	20.5	19.6	19.3	18.6	18.0	20.3	21.4	21.2	19.4		19.7	
Coker 156	21.0	20.6	21.4	20.6	21.5	20.5	19.1	20.9	21.9	22.0	20.5		20.9	
D&PL 5	17.9	19.0	---	---	---	---	16.6	18.7	---	---	19.2		17.9	
Davis	21.4	20.7	19.5	19.7	---	---	19.2	20.6	21.6	21.7	19.9		16.9	
FFR 666	20.3	19.6	---	---	---	---	17.9	19.7	---	---	19.5		19.2	
FFR 6143	19.5	---	---	---	---	---	17.8	---	---	---	---		18.7	
FFR 6253	20.0	---	---	---	---	---	---	---	---	---	---		20.0	
Green Soy 64	19.6	19.7	20.5	20.0	20.4	19.4	17.7	19.4	---	---	19.9		19.6	
Lancer	20.6	20.2	20.4	20.2	---	---	19.4	22.2	---	---	20.2		20.2	
Lee 74	19.4	19.3	---	---	---	---	17.2	19.0	---	---	19.2		18.6	
McNair 600	21.0	20.7	---	---	---	---	19.3	20.5	---	---	20.7		20.3	
McNair 3167	18.9	---	---	---	---	---	---	---	---	---	19.3		19.1	
McNair 3181	19.8	---	---	---	---	---	17.6	---	---	---	---		18.7	
McNair 3182	---	---	---	---	---	---	16.8	---	---	---	20.7		18.8	
D 74-7741	---	---	---	---	---	---	20.4	---	---	---	20.3		20.4	
RA (c) 9	---	---	---	---	---	---	16.8	---	---	---	19.2		18.0	
RA 603	20.4	24.8	---	---	---	---	---	---	---	---	20.2		20.3	
Tracy	19.2	19.1	18.7	18.4	18.9	17.9	16.9	18.9	19.7	20.6	18.9		18.7	

Table 65. Oil¹/Content of Soybean Varieties that were Grown in Central Alabama near Marion Junction, Prattville, and Camden in 1978 (continued)

Variety	Black Belt Substation Planted						Prattville Field Planted				Lower Coastal Plain Substation Planted		Central Alabama
	May 15 1978	May 18 77-78	June 5 1978	June 5 77-78	June 26 1978	June 27 77-78	May 16 1978	May 22 77-78	July 15 1978	July 3 77-78	May 19 1978	Average 1978	
Agripro 70	19.7	19.3	19.6	---	19.0	---	17.5	19.1	21.3	---	20.3	19.6	
Bragg	19.4	19.4	20.4	20.1	20.6	19.7	17.3	19.0	21.1	21.1	20.5	19.9	
Braxton	20.2	---	20.7	---	19.1	---	18.1	---	20.2	---	20.5	19.8	
Coker 237	19.4	20.0	20.3	---	21.5	---	17.5	19.5	20.6	---	20.2	19.9	
FFR 668	19.4	---	19.8	---	---	---	18.8	---	---	---	19.7	19.4	
Ga. Soy 17	19.7	19.6	20.3	---	20.3	---	18.5	19.7	21.9	---	21.6	20.4	
Govan	19.2	18.6	20.3	---	19.7	---	17.2	18.7	20.1	---	19.4	19.3	
McNair 3129	20.2	---	21.5	---	19.4	---	18.2	---	20.8	---	20.3	20.1	
RA 700	20.2	---	20.7	---	20.1	---	19.0	---	21.0	---	20.0	20.2	
Ransom	20.5	20.3	21.5	20.8	21.3	20.0	17.8	20.0	23.1	23.2	21.5	21.0	
Terra Vig 708	20.6	20.2	21.1	---	21.2	---	18.8	20.5	20.9	---	20.6	20.5	
Cobb	20.5	20.0	20.9	19.8	20.0	19.6	17.3	19.7	21.1	21.1	20.5	20.1	
Coker 338	20.0	20.0	21.3	20.6	20.1	19.9	19.3	20.8	20.5	20.8	20.0	20.2	
Coker 488	20.6	20.3	20.7	---	19.8	---	18.8	20.5	21.5	---	20.8	20.4	
Dowling	20.0	---	20.5	---	19.7	---	18.8	---	20.0	---	19.5	19.8	
F 70-2060	19.7	---	---	---	---	---	18.4	---	---	---	20.0	19.4	
Hutton	19.6	19.1	21.0	19.8	19.5	18.8	17.4	19.0	19.6	20.0	20.1	19.5	
McNair 3183	19.1	---	---	---	---	---	17.3	---	---	---	19.5	18.6	

1/Oil content listed as percent on dry weight basis.

Table 66. Protein¹/Content of Soybean Varieties that were Grown in Central Alabama near Marion Junction, Prattville, and Camden in 1978

Variety	Black Belt Substation Planted						Prattville Field Planted						Lower Coastal Plain Substation Planted		Central Alabama	2-Yr Average
	May 15 1978	May 18 77-78	June 5 1978	June 5 77-78	June 26 1978	June 27 77-78	May 16 1978	May 22 77-78	July 15 1978	July 3 77-78	May 19 1978		May 19 1978	Central Alabama Average	2-Yr Average	
Coker 136	44.4	43.6	44.3	43.8	41.4	42.8	42.8	41.1	41.0	39.7	42.7		42.8	42.2		
Essex	44.4	44.3	---	---	---	---	44.0	43.5	---	---	44.4		44.3	43.9		
FFR 557	45.9	---	---	---	---	---	44.6	---	---	---	44.0		44.8	---		
Forrest	43.3	42.9	45.0	43.8	38.5	41.4	41.3	41.3	41.5	40.5	42.7		42.1	41.98		
McNair 500	43.0	---	---	---	---	---	42.7	---	---	---	45.6		43.8	---		
NK Blend 100	43.4	---	---	---	---	---	42.1	---	---	---	43.3		42.9	---		
Centennial	46.0	45.4	43.3	44.5	45.3	45.6	45.9	43.5	40.7	41.0	45.2		44.4	44.0		
Coker 156	43.2	42.9	40.9	42.1	42.0	42.9	44.8	42.0	38.6	39.0	42.6		42.0	41.8		
D&PL 5	46.2	44.9	---	---	---	---	48.2	44.6	---	---	44.1		46.2	44.8		
Davis	42.4	43.1	43.3	43.4	---	---	44.9	42.9	38.9	39.3	44.1		35.6	43.1		
FFR 666	44.4	44.0	---	---	---	---	46.1	43.9	---	---	44.1		44.9	43.9		
FFR 6143	43.5	---	---	---	---	---	45.6	---	---	---	---		44.6	---		
FFR 6253	43.8	---	---	---	---	---	---	---	---	---	---		43.8	---		
Green Soy 64	44.3	44.1	41.9	42.5	43.1	43.5	46.7	43.0	---	---	43.8		44.0	43.3		
Lancer	43.2	43.4	42.8	42.7	---	---	44.5	41.3	---	---	43.1		43.4	42.5		
Lee 75	44.9	---	---	---	---	---	46.6	---	---	---	44.1		45.2	---		
McNair 600	41.9	41.9	---	---	---	---	43.6	41.0	---	---	42.0		42.5	41.4		
McNair 3167	46.6	---	---	---	---	---	---	---	---	---	44.4		45.5	---		
McNair 3181	42.5	---	---	---	---	---	44.5	---	---	---	---		43.5	---		
McNair 3182	---	---	---	---	---	---	46.1	---	---	---	42.4		44.3	---		
D 74-7741	---	---	---	---	---	---	43.5	---	---	---	41.9		42.7	---		
RA (c) 9	---	---	---	---	---	---	48.1	---	---	---	45.7		46.9	---		
RA 603	43.6	43.8	---	---	---	---	---	---	---	---	43.4		43.5	---		
Tracy	45.6	45.8	45.0	44.9	45.0	45.1	47.3	41.9	41.9	42.2	44.6		44.9	44.6		

Table 66. Protein¹/Content of Soybean Varieties that were Grown in Central Alabama near Marion Junction, Prattville, and Camden in 1978 (continued)

Variety	Black Belt Substation Planted						Prattville Field Planted						Lower Coastal Plain Substation Planted		Central Alabama	2-Yr Average
	May 15 1978	May 18 77-78	June 5 1978	June 5 77-78	June 26 1978	June 27 77-78	May 16 1978	May 16 77-78	May 22 1978	July 15 77-78	July 3 1978	May 19 1978		May 19 1978	Average 1978	2-Yr Average 77-78
Agripro 70	43.3	43.2	42.5	---	44.7	---	46.6	43.5	40.6	---	42.8		43.4		43.3	
Bragg	45.4	44.8	43.6	43.6	41.5	42.5	47.0	44.5	40.1	39.8		43.7		43.6	43.0	
Braxton	43.2	---	42.6	---	43.1	---	45.4	---	40.6	---	41.8		42.8			
Coker 237	43.8	42.4	42.6	---	41.3	---	45.9	43.0	39.5	---	42.2		42.6		42.7	
FFR 668	44.7	---	43.0	---	---	---	45.8	---	---	---	43.3		44.2			
Ga. Soy 17	43.6	42.8	40.9	---	42.4	---	44.3	41.7	37.9	---	40.7		41.6		42.2	
Govan	45.1	45.0	42.6	---	43.4	---	48.3	45.5	41.9	---	44.6		44.3			
McNair 3129	42.1	---	40.4	---	41.4	---	44.8	---	39.6	---	41.4		41.6			
RA 700	43.9	43.6	42.2	---	43.2	---	45.2	43.2	40.5	---	43.2		43.0		43.4	
Ransom	43.7	43.3	42.0	42.6	42.7	43.7	46.4	42.1	39.0	38.5	42.3		42.7		42.0	
Terra Vig 708	43.6	43.6	43.0	---	43.9	---	45.7	43.8	42.0	---	45.2		43.9		43.7	
Cobb	42.8	42.0	41.3	41.7	40.6	41.7	44.3	41.2	38.3	37.9	41.7		41.5		40.9	
Coker 338	44.6	44.0	43.8	43.7	44.0	43.6	43.4	42.6	42.3	41.2	45.1		43.9		43.0	
Coker 488	42.5	42.4	42.4	---	42.8	---	47.6	45.0	38.9	---	41.9		42.7		43.7	
Dowling	42.3	---	40.8	---	42.4	---	42.9	---	38.7	---	42.8		41.7			
F 70-2060	42.5	---	---	---	---	---	45.4	---	---	---	41.7		43.2			
Hutton	44.6	44.3	42.6	43.6	44.7	44.1	47.2	43.7	42.7	42.6	44.4		44.4		43.7	
McNair 3183	44.0	43.0	---	---	---	---	44.5	42.2	---	---	43.2		43.9		42.6	

¹/Protein content listed as percent on dry weight basis.

Table 67. Oil¹/Content of Soybean Varieties that are Grown in South Alabama near Fairhope, Brewton, Monroeville, and Headland in 1978

Variety	Gulf Coast Substation Planted		Brewton Field Planted			Monroeville Field Planted		Wiregrass Substation Planted		Southern Alabama
	June 3 1978	May 30 1978	June 2 1977-78	June 22 1978	June 29 1977-78	May 26 1978	May 28 77-78	June 6 1978		Average 1978
Coker 136	20.2	19.9	21.3	21.7	22.6	19.6	21.4	19.9		20.3
Forrest	20.7	19.6	21.0	20.2	21.5	19.1	20.6	20.1		19.9
Centennial	20.1	20.3	20.6	21.0	21.3	19.0	20.2	20.3		20.1
Coker 156	21.1	21.1	22.0	22.6	22.6	20.9	21.7	21.8		21.5
Davis	21.0	21.0	22.0	20.9	22.0	18.2	20.5	20.2		20.3
Green Soy 64	19.9	---	---	---	---	19.5	---	19.3		19.6
Lancer	22.3	21.5	24.3	---	---	19.0	22.6	21.5		21.1
Lee 74	20.8	19.7	20.2	---	---	18.8	19.9	19.6		19.7
Tracy	18.8	19.1	20.3	19.4	20.2	17.8	19.1	18.1		18.6
Agripro 70	19.9	20.1	20.4	20.7	---	19.3	19.7	19.6		19.9
Bragg	21.0	20.2	20.8	21.4	21.7	19.0	19.9	19.7		20.3
Braxton (F71-1180)	18.9	20.9	---	19.9	---	19.5	---	---		19.8
Coker 237	21.3	22.1	22.6	22.0	---	20.4	---	20.5		21.3
FFR 668	20.2	20.0	---	---	---	19.6	---	19.4		19.8
FFR 6143	20.5	20.1	---	---	---	---	---	21.1		20.6
Ga. Soy 17	21.2	21.4	22.1	21.9	22.4	20.5	21.0	20.9		21.2
Govan	19.6	19.4	20.0	20.7	---	19.5	20.1	19.4		19.7
McNair 3129	20.9	22.0	---	21.1	---	20.3	---	21.5		21.2
McNair 3167	20.6	20.8	---	---	---	---	---	19.6		20.3
McNair 3182	20.6	---	---	---	---	20.4	---	20.7		20.6
RA 700	20.8	21.2	21.8	20.9	---	19.4	21.8	20.8		20.6
Ransom	22.7	22.7	24.0	21.5	22.6	20.9	22.6	21.3		21.8
Terra Vig 708	21.5	20.6	21.6	20.6	---	20.3	21.3	20.9		20.8
Cobb	21.0	22.0	21.9	20.4	21.2	20.4	21.0	21.4		21.0
Coker 338	22.4	22.9	23.2	21.6	22.9	20.1	22.2	21.0		21.6
Coker 488	21.9	23.1	23.1	20.8	22.7	19.6	21.6	21.1		21.3
Dowling (TS-16)	20.1	20.5	---	20.4	---	19.4	---	20.0		20.1
F70-2060	20.5	21.5	---	20.9	---	20.8	---	---		20.9
Hutton	19.8	20.9	20.7	20.6	20.5	18.9	19.7	19.1		19.9
McNair 3183	20.3	20.0	---	---	---	19.2	20.2	20.5		20.0

¹Oil content listed as percent on dry weight basis.

Table 68. Protein¹/Content of Soybean Varieties that were Grown in South Alabama near Fairhope, Brewton, and Headland, 1978

Variety	Gulf Coast Substation Planted		Brewton Field Planted			Monroeville Field Planted			Wiregrass Substation Planted		Southern Alabama
	June 3 1978	May 30 1978	June 2 1977-78	June 22 1978	June 25 1977-78	May 26 1978	May 28 1977-78	June 6 1978	June 6 1978	Average 1978	
Coker 136	43.6	43.5	41.6	39.5	38.8	44.0	41.8	44.5		43.0	
Forrest	44.2	44.4	42.2	42.4	40.9	44.5	42.0	44.0		43.9	
Centennial	44.8	42.5	42.6	43.7	42.7	46.4	44.2	44.8		44.4	
Coker 156	42.3	42.5	41.0	40.8	40.1	42.8	40.8	41.7		42.0	
Davis	43.4	42.3	41.2	43.1	41.2	45.8	42.1	43.1		43.5	
Green Soy 64	44.6	---	---	---	---	44.9	---	45.0		44.8	
Lancer	40.6	40.9	38.8	---	---	43.5	40.0	42.5		41.9	
Lee 74	44.3	43.6	43.0	---	---	44.5	42.7	45.5		44.5	
Tracy	45.1	44.3	43.8	42.8	42.9	46.4	44.5	45.9		44.9	
Agripro 70	43.2	42.1	41.4	43.1	---	44.7	42.5	44.7		43.6	
Bragg	43.5	43.6	42.5	42.3	41.8	44.7	42.8	45.9		44.0	
Braxton (F71-1180)	43.8	41.6	---	43.1	---	44.9	---	---		43.4	
Coker 237	43.1	40.1	40.3	40.3	---	43.4	---	43.2		42.0	
FFR 668	44.2	42.2	---	---	---	44.2	---	45.1		43.9	
FFR 6143	42.6	40.8	---	---	---	---	---	42.8		42.1	
Ga. Soy 17	41.8	40.1	39.5	40.0	39.2	42.7	40.9	43.2		41.6	
Govan	44.8	43.4	42.7	43.3	---	44.6	43.2	45.1		44.2	
McNair 3129	40.9	39.2	---	40.1	---	42.7	---	41.0		40.8	
McNair 3167	45.2	43.2	---	---	---	---	---	45.4		44.6	
McNair 3182	42.8	---	---	---	---	42.4	---	44.3		43.2	
RA 700	43.0	41.1	40.6	42.6	---	44.0	41.9	44.1		43.0	
Ransom	42.6	40.3	39.8	43.4	41.7	43.9	41.6	44.4		42.9	
Terra Vig 708	43.6	42.8	42.1	44.2	---	44.9	43.2	44.5		44.0	
Cobb	42.1	40.3	39.6	41.1	39.9	39.6	39.3	42.0		41.0	
Coker 338	42.5	41.5	40.8	43.9	41.6	44.2	41.9	44.9		43.4	
Coker 488	41.6	39.0	38.9	41.3	39.9	42.4	40.5	43.3		41.5	
Dowling (TS-16)	43.0	40.5	---	40.9	---	41.6	---	42.7		41.7	
F 70-2060	42.8	39.4	---	41.7	---	41.3	---	---		41.3	
Hutton	45.4	43.3	42.9	44.9	43.7	45.0	43.8	46.2		45.0	
McNair 3183	42.1	41.4	---	---	---	43.2	---	42.0		42.2	

¹/Protein content listed as percent on dry weight basis.

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