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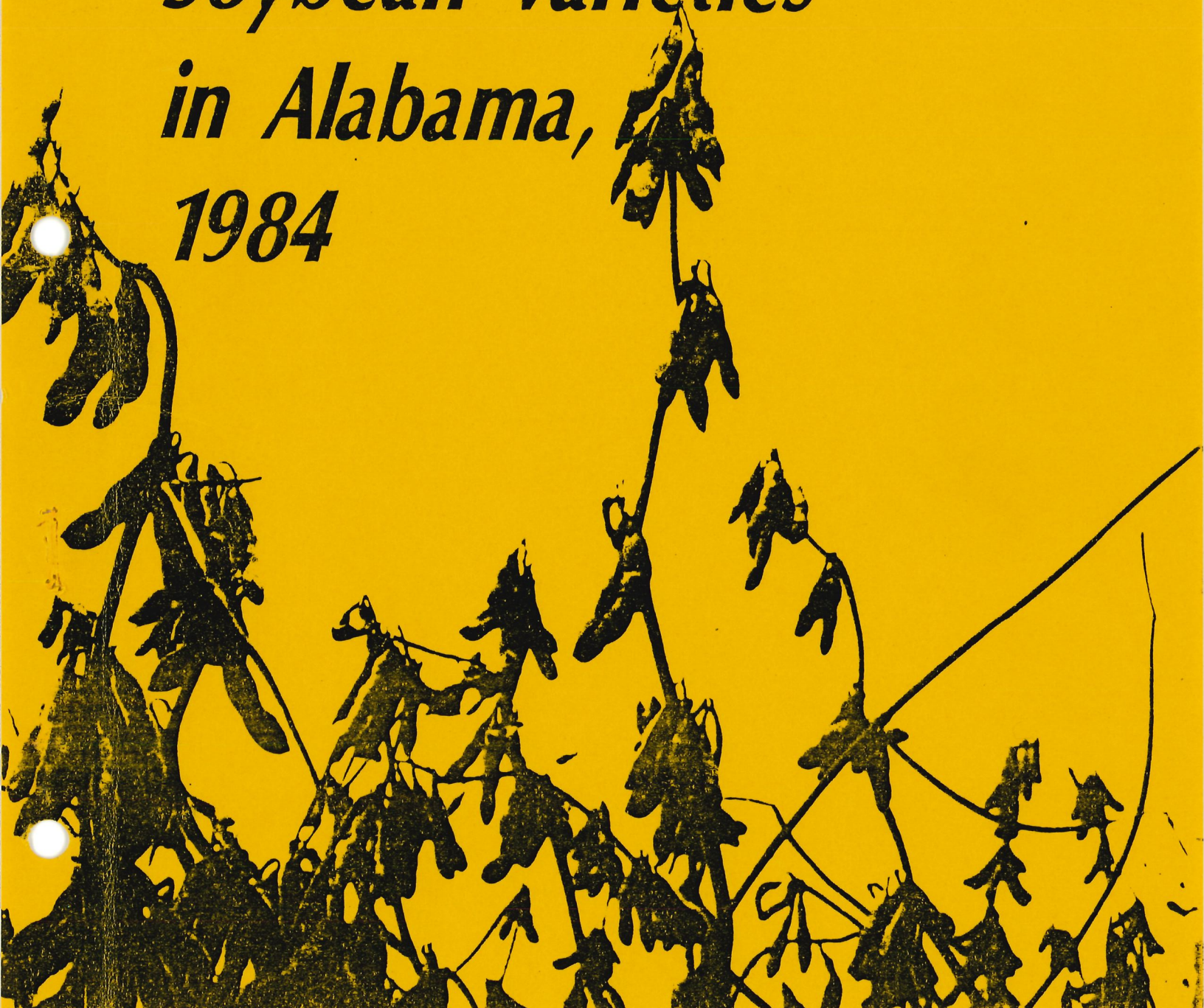
Performance of Soybean Varieties in Alabama, 1984



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PERFORMANCE OF SOYBEAN VARIETIES IN ALABAMA, 1984

W.C. Johnson and Darrell Williams[1]

INTRODUCTION

Soybean variety tests are conducted annually by the Alabama Agricultural Experiment Station. The 10 locations used represent the major soil and climatic regions of Alabama. These locations are divided into logical soybean growing regions. The regions and locations are:

Region	Location
Northern	Belle Mina, Crossville
Central	Camden, Prattville, Shorter
Southern	Brewton, Headland, Monroeville
Black Belt soils	Marion Junction
Baldwin-Mobile	Fairhope

A standard test is grown at each location. In addition, a date of planting test is grown in each region and preliminary tests are grown in the northern, central, and southern regions. The preliminary test contains experimental varieties and released varieties which are new to that particular region. These varieties will be placed in the standard test if their performance warrants.

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[1]Respectively, Professor and Research Associate of Agronomy and Soils.

EXPERIMENTAL PROCEDURES

The standard tests were designed as a randomized complete block with four replications. Plot size was four 36 inch rows 20 feet long. Sixteen feet of the middle two rows was harvested for yield. Seeding rate was 60 pounds per acre. The preliminary tests were planted in a lattice square design with three replications.

Data were collected on seed yield, moisture, lodging, shattering, plant height, and maturity date. Plot yields were adjusted to 13 percent moisture and converted to bushels (60 pounds) per acre. Lodging was scored on a scale of 1 to 5 as follows:

1 - almost all plants erect.

2 - either all plants leaning slightly (less than 45^{o}) or a few plants down.

3 - either all plants leaning moderately (approximately 45^{o}) or 25 to 50 percent of the plants down.

4 - either all plants leaning (more than 45^{o}) or 50 to 80 percent of the plants down.

5 - all plants down.

Shattering was rated 1 to 5 and was based on performance of the border row 14 days after maturity. A rating of 1 indicates no shattering and a rating of 5 is 20 percent or more shattering. Plant height was determined by measuring from the ground to the top of the plant at maturity. Maturity date was the day 95 percent of the pods were brown. Harvest was approximately 7 to 10 days later.

A soybean variety's reaction to stem canker disease has become an important consideration in selecting a variety to plant in certain regions of Alabama. Barbara Cosper, Research Associate in Agronomy

and Soils, observed and rated the variety test at Shorter and Marion Junction for stem canker reaction. This report is on page 35. Table 16 lists a summary of the past 3 years data and rates the relative resistance of the tested soybean varieties.

COMPARING VARIETIES

To aid in determining real yield differences, a statistical analysis of variance is performed on the data from each location. The L.S.D. (least significant difference) and C.V. (coefficient of variation) are given for each location's 1984 test, and the location's or region's 2-and 3-year averages. The difference in yield of two varieties must exceed the L.S.D. value for one variety to be considered superior to the others in yield in that particular test. The C.V. is a measure of the variability in an experiment. An increase in its value indicates an increase in the unexplained variability.

Since the performance of varieties varies with location and year, long-term averages from several locations are more reliable than 1-year performance. Three-year regional averages are considered a reliable evaluation of the relative performance of varieties.

A committee comprised of Department of Agronomy and Soils and Alabama Cooperative Extension Service personnel involved in soybean research reviewed the past 3 years of soybean variety test data to assemble the list of acceptable varieties on page 40.

The recommended varieties are not all equal in performance. Some are outstanding in one or more characteristics, while others may not be obviously outstanding, they might possess a satisfactory combination of all characteristics.

ACKNOWLEDGMENTS

Appreciation is expressed to the following station superintendents and their staffs. It is their quality work which makes this report a reliable source of information for farmers in their areas.

Black Belt Substation Marion Junction	L.A. Smith H.W. Grimes
Brewton and Monroeville Experiment Fields Brewton and Monroeville	J.R. Akridge
Gulf Coast Substation Fairhope	E.L. Carden Larry Wells
Lower Coastal Plain Substation Camden	J.A. Little D.P. Delaney
Prattville Experiment Field Prattville	D.P. Moore
Sand Mountain Substation Crossville	J.T. Eason M.E. Ruf
E.V. Smith Research Center Shorter	Barney Gordon
Tennessee Valley Substation Belle Mina	W.B. Webster V.H. Calvert, II
Wiregrass Substation Headland	J.G. Starling (retired) H.W. Ivey

Appreciation is also expressed to W.H. Hearn, C. Jacks, and Mrs. Sally Bagwell, Research Data Analysis, for the computation and analysis of the data in this report; Barbara Cosper, Research Associate of Agronomy and Soils, for her preparation of the stem canker report; John Henderson, Extension Agronomist-Soybeans, David Weaver, Assistant Professor of Agronomy and Soils, and Paul Backman, Professor, Botany, Plant Pathology, and Microbiology, for their research data and assistance in preparing the stem canker report.

Table 1. Entries and Sources for 1984

Source	Brand-variety
AgraTech Seeds, Inc. Ashburn, Georgia	AgraTech brand varieties
Alabama Crop Improvement Association Auburn, Alabama	Braxton Cobb Davis Essex Kirby Ransom Tracy M
Asgrow Seed Company Kalamazoo, Michigan	Asgrow brand varieties
Cetus Madison Corporation Middleton, Wisconsin	CMC brand varieties
Coker's Pedigreed Seed Company Hartsville, South Carolina	Coker brand varieties
Delta and Pine Land Company Scott, Mississippi	Deltapine brand varieties
Delta Branch Experiment Station Stoneville, Mississippi	Bedford
Edisto Experiment Station Blackville, South Carolina	Govan
FFR Cooperative Bells, Tennessee	FFR brand varieties
Georgia Seed Development Commission Athens, Georgia	Duocrop GaSoy 17 Hutton Wright
Helena Chemical Company Memphis, Tennessee	Sharpe, Shiloh, Spartan, Sumter, Stutts, Hyperformer, and Wilstar brand varieties
Jacob Hartz Seed Company, Inc. Stuttgart, Arkansas	Hartz brand varieties
Mississippi Foundation Seed Stocks Mississippi State, Mississippi	Forrest

(continued on following page)

Table 1. Entries and Sources for 1984

Source	Brand-variety
Missouri Crop Improvement Association Columbia, Missouri	Bradley, Pershing
North Carolina State University Raleigh, North Carolina	Johnston N77-114 (experimental)
Northrup King Co. Columbus, Mississippi	McNair brand varieties
Pioneer Hi-Bred International, Inc. Tipton, Indiana	Pioneer brand varities
Quality Seed and Fertilizer Thompson Station, Alabama	Centennial
Ring Around Products, Inc. Dallas, Texas	Ring Around brand varieties
Rio Farms Edcouch, Texas	Santa Rosa R
Riverside/Terra Memphis, Tennessee	Yield King brand varieties
Terral-Norris Seed Company, Inc. Lake Providence, Louisiana	Terra-Vig brand varieties
Texas Crop Improvement Association College Station, Texas	Dowling
University of Arkansas Fayetteville, Arkansas	Jeff
Virginia Crop Improvement Association Holley, Virginia	Bay

Table 2. Cultural Practices for Soybean Variety Tests in 1984

Location	Type test	Date planted	Herbicides used	Fertilizer applied
Belle Mina	Standard	May 16	Basalin, Dyanap	200 lb. 0-46-0
	Preliminary	May 16	Treflan, Dyanap	2 tons lime/acre
Crossville	Standard	May 15	Surflan, Dyanap	200 lb. 0-24-24/acre
		June 18	Surflan, Dyanap	250 lb. 0-24-24/acre
Prattville	Standard	May 16	Treflan	None recommended by soil test
		June 22	Treflan	
Shorter	Standard	May 24	Sencor+ Prowl Basagran, Lorox + Dinitro	200 lb. 0-10-30/acre
Camden	Standard	June 14	Treflan, Sencor, Basagran	300 lb. 0-20-20/acre 15 lb. sulfur/acre
	Preliminary	Stand failure		
Headland	Standard	May 28	Balan, Dual	None recommended by soil test
Monroeville	Preliminary	May 31	Treflan	200 lb. 0-20-20
Brewton	Standard	June 1	Treflan, Vernam	150 lb. 0-0-60
		July 5	Treflan, Vernam	1 ton lime
Marion Junction	Standard (Sumter)	May 16	Treflan	250 lb. 0-20-20/acre
		June 27	Treflan	250 lb. 0-20-20/acre
	Standard (Vaiden)	May 16	Treflan	200 lb. 0-20-20/acre
		June 27	Treflan	200 lb. 0-20-20/acre
Fairhope	Standard	May 30	Treflan + Vernam	500 lb. 0-20-10/acre
		July 3	Dual + Paraquat	350 lb. 4-12-12/acre 2 tons lime/acre

TABLE 3. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE			REGIONAL AVERAGE							
	BELLE MINA	CROSSVILLE		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
		DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY											
A 5474	37.4	41.7	32.0	1.4	1.0	1.0	1.0	37	37	9-20	10-9
BAY	39.4	37.0	37.5	1.5	3.3	1.0	1.0	39	37	9-22	10-9
BEDFORD	41.6	40.1	25.5	3.3	3.3	1.0	1.0	45	43	9-26	10-13
COKER 355	41.4	37.8	24.7	2.9	2.5	1.0	1.0	38	37	10-2	10-7
COKER 425	37.9	55.1	37.1	1.0	1.0	1.5	1.0	28	29	9-21	9-28
COKER 485	39.9	40.1	29.0	1.9	1.3	1.0	1.0	37	36	9-26	10-9
DELTAPINE 105	42.3	43.8	36.3	2.9	4.0	1.0	1.0	40	37	9-27	10-11
DELTAPINE 345	39.3	35.7	28.6	2.0	1.5	1.3	1.0	40	38	9-26	10-11
ESSEX	46.1	54.2	37.5	1.1	2.8	1.3	1.0	30	30	9-19	10-2
FORREST	42.2	40.6	29.9	2.8	2.5	1.0	1.0	37	38	9-21	10-9
HARTZ 5171	33.6	42.2	33.1	3.3	3.8	1.0	1.0	42	35	9-26	10-11
HARTZ 5370	32.3	38.6	31.0	3.1	2.0	1.0	1.0	40	39	9-26	10-9
H78-168	35.5	44.3	31.4	2.8	2.0	1.0	1.0	39	41	9-26	10-11
N 77-114	45.5	49.1	37.0	1.8	3.0	1.0	1.0	32	34	9-21	10-5
PIONEER 9561	39.1	42.4	30.9	2.0	2.0	1.0	1.0	38	37	9-22	10-9
RA 480	35.4	38.4	29.0	2.3	2.3	1.3	1.0	45	39	9-17	9-25
RA 502	38.9	38.6	28.7	3.3	2.5	1.0	1.0	40	37	9-27	10-8
SHILOH	30.6	40.7	25.7	1.8	3.3	1.3	1.0	39	38	9-21	10-9
TERRA-VIG 505	34.3	37.1	27.4	3.3	4.5	1.0	1.0	41	39	9-24	10-6
WILSTAR 550	37.1	39.8	30.9	2.6	3.0	1.0	1.0	37	37	9-27	10-11
YIELD KING 593	36.5	34.3	25.4	3.6	1.8	1.0	1.0	39	39	9-30	10-16
MEDIUM											
A 6520	34.7	37.4	30.4	2.9	2.5	1.0	1.0	37	37	9-28	10-13
BRADLEY	34.1	35.3	30.5	4.4	4.3	1.0	1.0	40	38	9-29	10-13
CENTENNIAL	28.3	30.4	21.7	3.0	2.3	1.0	1.0	42	40	10-1	10-15
COKER 156	32.9	34.2	32.6	2.9	2.0	1.0	1.0	41	37	9-29	10-12
DAVIS	26.4	31.3	23.1	3.9	2.5	1.0	1.0	45	43	10-1	10-17
DELTAPINE 246	39.8	35.7	24.9	4.3	4.5	1.5	1.0	37	36	9-29	10-10
H79-7817	31.9	35.3	25.5	3.0	3.8	1.0	1.0	44	41	9-28	10-12
JEFF	30.4	41.0	26.8	3.5	4.3	1.0	1.0	43	40	9-30	10-14
RA 604	29.3	35.5	26.8	3.6	1.8	1.0	1.0	43	41	10-2	10-14
RA 606	33.4	38.0	29.1	4.3	3.8	1.3	1.0	44	40	9-30	10-16
SUMTER	30.6	27.4	23.6	3.5	2.5	1.0	1.0	45	41	9-29	10-16
S69-96	27.8	32.2	27.6	3.9	3.0	1.0	1.0	43	39	10-1	10-16
TERRA-VIG 606	35.6	34.4	25.9	3.4	1.3	1.0	1.0	42	38	9-30	10-14
TRACY M	32.9	37.2	28.7	2.9	2.3	1.8	1.0	40	38	9-29	10-14

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TABLE 3. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE			REGIONAL AVERAGE							
	BELLE MINA	CROSSVILLE		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
		DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE											
BRAXTON	31.1	33.4	32.0	3.1	1.0	1.0	1.0	43	42	10-3	10-19
COKER 237	30.2	29.6	25.5	4.0	3.0	1.0	1.0	43	40	10-2	10-14
COKER 317	24.1	26.0	22.9	3.4	2.3	1.0	1.0	43	40	10-5	10-19
HB-507-D1-7	25.8	28.8	25.9	2.9	3.3	1.0	1.0	43	39	10-2	10-15
TERRA-VIG 708	30.9	30.6	25.9	4.0	2.8	1.0	1.0	45	39	10-3	10-18
TEST MEANS	34.9	37.6	28.9	2.9	2.6	1.1	1.0	40	38		
L.S.D. (.05)	7.5	8.8	5.9								
C.V. (%)	15.3	16.7	14.6								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUP VII.

TABLE 4. PERFORMANCE OF SOYBEAN VARIETIES IN CENTRAL ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE				REGIONAL AVERAGE							
	CAMDEN	PRATTVILLE		SHORTER	LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
		DATE 1	DATE 2		DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY												
DELTAPINE 105	26.7	50.7	35.6	28.1	1.3	1.3	1.0	1.3	35	34	9-30	10-2
DELTAPINE 345	25.2	46.2	29.8	30.5	1.3	1.0	1.0	1.0	35	33	9-30	10-2
FORREST	21.0	47.7	30.6	26.2	1.2	1.0	1.2	1.0	30	31	9-27	9-30
HARTZ 5370	23.9	47.2	31.1	23.5	1.3	1.3	1.0	1.0	33	33	9-30	10-1
PIONEER 5482	23.4	52.5	33.7	16.4	1.3	1.0	1.2	1.0	28	28	9-24	9-29
RA 480	30.5	41.8	37.5	17.0	1.3	1.3	1.3	1.0	36	35	9-20	9-27
TERRA-VIG 505	25.4	47.2	29.3	19.2	1.3	1.3	1.0	1.3	33	32	9-27	9-30
WILSTAR 550	18.8	48.8	28.3	21.8	1.3	1.3	1.0	1.0	31	31	10-2	10-3
MEDIUM												
AGRATECH 67	26.7	42.5	24.1	25.7	1.8	2.0	1.0	1.0	37	35	10-6	10-7
CENTENNIAL	29.4	36.5	24.8	21.8	1.3	1.0	1.0	1.0	35	34	10-8	10-8
COKER 156	28.8	47.6	32.5	25.5	1.3	1.0	1.0	1.0	32	33	10-6	10-7
DAVIS	25.9	47.3	27.1	19.4	1.4	1.5	1.1	1.8	38	34	10-6	10-8
FFR 668	30.2	38.4	23.5	25.3	1.3	1.8	1.0	1.0	37	34	10-8	10-9
JEFF	30.4	40.1	22.9	22.9	1.6	2.3	1.0	1.3	38	34	10-7	10-8
RA 604	25.8	47.1	24.9	23.3	1.3	1.0	1.0	1.0	35	35	10-4	10-9
RA 680	32.0	35.9	26.1	21.2	1.3	1.8	1.0	1.0	37	34	10-8	10-7
S69-96	31.5	42.8	25.6	22.7	1.6	1.5	1.0	1.0	35	32	10-8	10-10
TERRA-VIG 606	27.7	42.9	31.5	22.9	1.4	1.0	1.0	1.0	38	32	10-5	10-7
TRACY M	29.0	40.4	28.4	23.6	1.3	1.8	1.2	1.5	32	31	10-3	10-6
YIELD KING 613	25.4	43.4	24.6	19.4	1.6	1.5	1.0	1.0	41	35	10-2	10-6

CONTINUED ON THE FOLLOWING PAGE

TABLE 4. PERFORMANCE OF SOYBEAN VARIETIES IN CENTRAL ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE				REGIONAL AVERAGE							
	CAM-	PRATTVILLE		SHOR-	LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DEN	DATE 1	DATE 2	TER	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE												
BRAXTON	24.2	36.5	28.8	19.6	1.7	1.3	1.0	1.0	38	34	10-14	10-12
COKER 237	29.5	37.8	25.6	20.5	1.3	1.0	1.0	1.0	36	33	10-9	10-9
COKER 317	26.7	31.0	21.9	19.2	1.5	1.8	1.0	1.0	39	34	10-12	10-11
COKER 368	26.7	33.4	22.6	18.1	1.7	1.0	1.0	1.0	40	39	10-17	10-17
COKER 488	27.2	29.5	20.9	24.2	1.3	1.0	1.0	1.0	39	42	10-17	10-17
DELTAPINE 497	35.4	38.2	25.1	21.4	1.5	1.0	1.0	1.0	41	39	10-14	10-12
DUOCROP	27.7	32.5	25.3	17.7	1.5	1.0	1.0	1.0	45	45	10-9	10-10
FOSTER	27.4	32.1	16.5	21.6	1.9	2.0	1.0	1.0	38	35	10-14	10-14
GASOY 17	26.4	38.3	23.3	29.2	1.9	1.3	1.0	1.0	39	37	10-11	10-11
GOVAN	29.9	34.7	24.5	21.4	1.3	1.0	1.0	1.0	33	35	10-12	10-10
HARTZ 7126	29.9	36.0	22.2	21.6	1.6	2.0	1.0	1.0	41	35	10-10	10-11
HB-507-01-7	25.9	36.3	25.1	22.0	1.4	1.0	1.0	1.0	31	34	10-9	10-10
HUTTON	24.4	30.9	18.7	17.2	1.8	1.8	1.0	1.0	38	35	10-16	10-15
KIRBY	22.7	27.9	18.3	18.5	1.3	1.5	1.0	1.0	37	37	10-17	10-17
MCNAIR 770	30.4	42.8	28.6	25.7	1.3	1.5	1.0	1.0	34	31	10-8	10-9
RA 801	25.2	35.6	19.5	22.7	1.5	1.8	1.0	1.0	39	35	10-14	10-14
RANSOM	26.2	35.6	25.3	20.9	1.3	1.0	1.0	1.0	34	36	10-10	10-10
S72-60	32.4	36.3	27.4	19.0	1.4	2.3	1.0	1.0	36	35	10-9	10-10
TERRA-VIG 708	29.9	43.6	28.5	21.2	1.2	1.5	1.0	1.0	33	36	10-11	10-12
WRIGHT	28.7	39.1	24.1	22.0	1.8	1.8	1.0	1.0	38	36	10-11	10-11
TEST MEANS	27.3	39.9	26.1	22.0	1.4	1.4	1.0	1.0	36	34		
L.S.D. (.05)	4.5	8.7	6.4	4.6								
C.V. (%)	11.9	15.6	17.5	14.9								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUPS VII AND VIII.

TABLE 5. PERFORMANCE OF SOYBEAN VARIETIES IN SOUTHERN ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE			REGIONAL AVERAGE							
	BREWTON		HEAD-LAND	LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2		DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY											
AGRATECH 67	54.4	28.7	24.0	2.1	1.0	1.0	1.0	40	26	10-16	10-17
CENTENNIAL	57.3	33.5	18.4	1.8	1.0	1.0	1.0	39	28	10-10	10-13
COKER 156	50.3	21.3	25.4	1.5	1.0	1.0	1.0	36	23	10-12	10-11
DAVIS	55.2	42.8	25.6	2.4	1.0	1.0	1.0	40	26	10-10	10-12
DELTAPINE 105	53.7	31.9	29.6	1.5	1.0	1.0	1.0	35	24	10-9	10-7
DELTAPINE 345	47.8	18.0	28.1	1.9	1.0	1.0	1.0	37	22	10-6	10-11
DELTAPINE 506	49.8	25.1	21.3	2.3	1.0	1.0	1.0	40	26	10-13	10-11
FORREST	56.9	19.2	21.0	1.3	1.0	1.0	1.0	33	27	10-5	10-5
HARTZ 6383	51.2	23.2	21.6	2.4	1.0	1.0	1.0	37	26	10-7	10-14
JEFF	47.8	28.9	25.7	2.3	1.3	1.0	1.0	41	25	10-14	10-12
PA 606	51.8	27.6	27.2	2.1	1.0	1.0	1.0	39	26	10-17	10-16
PA 680	52.9	25.6	23.9	2.0	1.0	1.0	1.0	39	24	10-11	10-11
S69-96	52.3	34.5	25.1	2.0	1.0	1.0	1.0	39	24	10-13	10-16
TERRA-VIG 606	53.9	32.6	24.6	2.3	1.0	1.0	1.0	39	27	10-9	10-11
TRACY M	49.1	22.4	26.8	2.3	1.0	1.0	1.0	38	25	10-7	10-11
WILSTAR 550	46.2	19.6	25.3	1.8	1.0	1.0	1.0	36	24	10-7	10-6
MEDIUM											
A 7372	50.2	32.3	20.1	1.5	1.0	1.0	1.0	36	22	10-14	10-16
BRAXTON	49.5	26.0	18.1	1.3	1.0	1.0	1.0	37	24	10-19	10-19
COKER 317	47.3	30.2	15.6	1.6	1.3	1.0	1.0	39	25	10-14	10-14
DELTAPINE 417	55.8	39.3	19.7	1.6	1.0	1.0	1.0	40	24	10-16	10-16
DELTAPINE 497	56.0	24.1	17.7	1.0	1.0	1.0	1.0	40	22	10-15	10-18
DUOCROP	44.1	27.7	23.6	1.5	1.0	1.0	1.0	48	23	10-10	10-11
GASOY 17	52.3	34.0	19.7	2.0	1.0	1.0	1.0	42	22	10-18	10-15
GK 120	46.0	24.8	19.1	2.3	1.0	1.0	1.0	40	21	10-19	10-18
HARTZ 7126	51.6	24.9	21.9	1.6	1.0	1.0	1.0	42	24	10-21	10-18
MCNAIR 700	51.0	24.1	25.9	1.3	1.5	1.0	1.0	35	26	10-9	10-12
MCNAIR 770	47.2	26.2	25.7	1.6	1.3	1.0	1.0	35	25	10-17	10-18
RANSOM	48.9	35.7	19.4	1.5	1.0	1.0	1.0	37	22	10-18	10-16
S72-60	45.5	32.1	20.0	2.9	1.0	1.0	1.0	40	22	10-18	10-19
TERRA-VIG 708	45.2	30.8	20.1	1.5	1.0	1.0	1.0	41	25	10-18	10-15
WILSTAR 790	47.4	26.3	16.0	1.6	1.0	1.0	1.0	41	24	10-19	10-16
WRIGHT	47.3	26.0	16.5	2.5	1.0	1.0	1.0	40	22	10-17	10-17

CONTINUED ON THE FOLLOWING PAGE

TABLE 5. PERFORMANCE OF SOYBEAN VARIETIES IN SOUTHERN ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE			REGIONAL AVERAGE							
	BREWTON		HEAD-LAND	LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2		DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE											
COBB	48.9	43.5	14.5	2.3	1.0	1.0	1.0	44	22	10-22	10-25
COKER 368	50.7	34.5	14.5	1.9	1.0	1.0	1.0	40	27	10-16	10-21
DOWLING	49.4	32.8	19.1	1.6	1.0	1.0	1.0	39	22	10-19	10-27
FOSTER	42.2	35.8	16.2	2.3	1.0	1.0	1.0	41	26	10-19	10-24
HUTTON	48.7	37.0	20.0	2.1	1.0	1.0	1.0	38	26	10-22	10-23
JOHNSTON	47.8	34.2	19.5	2.1	1.0	1.0	1.0	35	24	10-23	10-23
KIRBY	48.8	25.2	12.9	1.4	1.3	1.0	1.0	36	28	10-16	10-22
RA 801	57.2	28.4	18.3	1.6	1.0	1.0	1.0	38	23	10-16	10-23
TEST MEANS	50.2	29.3	21.2	1.9	1.0	1.0	1.0	39	24		
L.S.D. (.05)	5.2	8.6	5.8								
C.V. (%)	7.4	20.9	19.7								

EARLY = MATURITY GROUPS V AND VI; MEDIUM = MATURITY GROUP VII; LATE = MATURITY GROUP VIII.

TABLE 6. PERFORMANCE OF SOYBEAN VARIETIES ON SUMTER SOIL, MARION JUNCTION, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE							
			LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY										
BAY	42.9	23.9	1.0	1.0	1.0	1.0	27	25	9-16	9-30
DELTAPINE 105	39.6	23.9	1.0	1.0	1.0	1.0	25	27	9-19	10-2
DELTAPINE 345	32.9	21.3	1.0	1.0	1.0	1.0	26	26	9-20	10-4
HARTZ 5370	38.2	24.8	1.0	1.0	1.0	1.0	27	27	9-21	10-2
PIONEER 5482	39.7	23.3	1.0	1.0	1.0	1.0	21	22	9-12	9-30
RA 480	37.1	18.5	2.0	1.0	1.0	1.0	35	25	9-11	9-30
TERRA-VIG 505	37.1	23.4	1.0	2.0	1.0	1.0	28	26	9-18	10-2
WILSTAR 550	36.3	25.2	1.0	1.0	1.0	1.0	24	25	9-19	10-2
MEDIUM										
A 6520	26.1	26.3	1.0	1.0	1.0	1.0	21	27	9-29	10-9
AGRATECH 67	35.1	30.9	1.3	1.8	1.0	1.0	39	41	10-2	10-12
CENTENNIAL	30.3	27.5	1.0	1.3	1.0	1.0	26	29	10-1	10-11
COKER 156	34.9	28.9	1.0	1.0	1.0	1.0	26	26	9-29	10-8
DAVIS	35.5	32.9	1.0	1.0	1.0	1.3	30	32	9-26	10-12
DELTAPINE 246	32.4	23.8	1.0	1.3	1.0	1.0	22	27	9-29	10-4
DELTAPINE 506	35.3	31.8	1.5	2.8	1.0	1.0	29	32	10-1	10-11
DELTAPINE 566	20.3	27.1	1.0	1.0	1.0	1.0	18	27	10-4	10-10
H79-7817	29.4	29.4	1.0	1.5	1.0	1.0	30	31	9-26	10-5
JEFF	31.8	21.6	1.3	2.0	1.0	1.0	28	27	10-1	10-12
RA 680	31.7	25.2	1.0	1.0	1.0	1.0	29	30	10-3	10-11
SUMTER	27.5	25.6	1.0	1.0	1.0	1.0	25	33	9-22	10-11
S69-96	32.7	31.2	1.0	1.8	1.0	1.0	29	30	10-2	10-14
TERRA-VIG 606	33.7	31.9	1.0	1.0	1.0	1.0	26	30	10-1	10-9
TRACY M	38.6	24.4	1.5	1.0	1.0	1.0	28	27	9-24	10-6

CONTINUED ON THE FOLLOWING PAGE

TABLE 6. PERFORMANCE OF SOYBEAN VARIETIES ON SUMTER SOIL, MARION JUNCTION, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE										
BRAXTON	32.1	22.8	1.0	1.0	1.0	1.0	34	25	10-8	10-15
COBB	23.7	18.7	2.0	1.0	1.0	1.0	43	31	10-13	10-22
COKER 317	27.3	23.4	2.0	1.0	1.0	1.0	33	29	10-5	10-14
COKER 488	32.0	21.3	1.5	1.0	1.0	1.0	38	28	10-12	10-21
DELTAPINE 417	29.2	21.8	1.3	1.0	1.0	1.0	37	28	10-7	10-15
DELTAPINE 497	28.5	20.4	1.0	1.0	1.0	1.0	32	23	10-7	10-15
DOWLING	34.1	21.1	1.5	1.0	1.0	1.0	36	24	10-12	10-25
DUOCROP	34.2	18.5	2.5	1.0	1.0	1.0	42	25	9-24	10-12
GASOY 17	29.3	24.5	1.3	1.0	1.0	1.0	35	27	10-4	10-15
GORDON	29.2	18.9	1.0	1.0	1.0	1.0	30	26	10-4	10-13
GOVAN	24.8	19.6	1.0	1.0	1.0	1.0	30	24	10-5	10-14
HARTZ 7126	29.2	22.4	1.3	1.0	1.0	1.0	29	30	10-4	10-14
HB-507-01-7	30.2	21.8	1.0	1.0	1.0	1.0	30	20	10-6	10-15
HUTTON	17.3	14.4	1.5	1.0	1.0	1.0	35	27	9-30	9-14
KIRBY	27.1	19.5	1.3	1.0	1.0	1.0	33	26	10-11	10-24
RANSOM	32.4	25.2	1.0	1.0	1.0	1.0	31	26	10-5	10-13
WRIGHT	30.5	27.0	1.5	1.5	1.0	1.0	31	29	10-5	10-14
TEST MEANS	31.8	24.1	1.2	1.2	1.0	1.0	30	27		
L.S.D. (.05)	6.5	5.6								
C.V. (%)	16.5	17.6								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUP VII AND VIII.

TABLE 7. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL, MARION JUNCTION, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY										
BAY	55.7	40.7	1.0	1.0	1.0	1.0	31	31	9-24	10-4
DELTAPINE 105	58.2	43.9	1.0	1.0	1.0	1.0	33	33	9-24	10-7
DELTAPINE 345	51.6	35.7	1.0	1.3	1.0	1.0	33	29	9-25	10-7
HARTZ 5370	47.3	42.4	1.0	1.3	1.0	1.0	31	32	9-26	10-7
PIONEER 5482	62.2	41.1	1.0	1.0	1.0	1.0	27	26	9-18	10-4
RA 480	52.6	35.3	1.5	1.0	1.0	1.0	45	33	9-14	10-4
TERRA-VIG 505	58.5	37.0	1.5	3.0	1.0	1.0	34	32	9-24	10-5
WILSTAR 550	52.7	40.8	1.0	1.3	1.0	1.0	27	30	9-27	10-8
MEDIUM										
A 6520	55.9	39.4	1.3	1.0	1.0	1.0	34	28	9-28	10-7
AGRATECH 67	53.3	42.7	3.0	2.3	1.0	1.0	39	39	10-1	10-13
CENTENNIAL	53.2	42.6	1.8	2.0	1.0	1.0	37	35	10-2	10-11
COKER 156	58.4	44.2	1.8	1.0	1.0	1.0	37	30	10-1	10-7
DAVIS	55.2	45.2	2.3	2.0	1.0	1.0	39	36	10-2	10-16
DELTAPINE 246	55.4	41.3	1.3	1.3	1.0	1.0	32	28	9-30	10-6
DELTAPINE 506	54.3	42.0	2.5	1.8	1.0	1.0	37	34	10-3	10-10
DELTAPINE 566	64.0	45.5	1.0	1.0	1.0	1.0	39	32	10-6	10-10
H79-7817	57.0	40.4	2.0	2.0	1.0	1.0	37	35	9-27	10-6
JEFF	50.1	41.3	3.0	3.3	1.0	1.0	35	35	10-1	10-13
RA 680	54.8	42.2	1.0	1.5	1.0	1.0	35	34	10-3	10-9
SUMTER	43.0	42.5	1.5	1.5	1.0	1.0	38	40	9-27	10-14
S69-96	48.2	44.2	2.5	2.8	1.0	1.0	35	33	10-1	10-14
TERRA-VIG 606	54.9	43.5	1.5	1.3	1.3	1.0	37	32	10-2	10-8
TRACY M	59.1	40.9	1.5	1.3	1.0	1.0	34	30	9-27	10-6

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TABLE I. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL, MARION JUNCTION, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE							
			LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE										
BRAXTON	57.4	40.7	1.8	1.3	1.0	1.0	42	32	10-11	10-16
COBB	44.3	40.4	3.0	1.5	1.0	1.0	40	41	10-19	10-27
COKER 317	48.7	39.3	2.5	2.3	1.0	1.0	41	36	10-7	10-15
COKER 488	52.2	41.0	1.8	2.3	1.0	1.0	44	39	10-15	10-19
DELTAPINE 417	57.5	46.8	2.3	1.3	1.0	1.0	43	37	10-9	10-17
DELTAPINE 497	60.5	46.2	1.5	1.0	1.0	1.0	48	34	10-10	10-17
DOWLING	52.5	45.2	3.3	1.5	1.0	1.0	39	35	10-20	10-26
DUOCROP	49.3	43.0	2.0	1.0	1.0	1.0	53	40	10-1	10-16
GASOY 17	51.4	45.6	3.5	1.8	1.0	1.0	40	38	10-5	10-15
GORDON	52.6	38.6	2.0	1.8	1.0	1.0	40	34	10-2	10-15
GOVAN	49.3	43.2	1.0	1.0	1.0	1.0	42	33	10-4	10-15
HARTZ 7126	56.6	43.6	2.8	2.0	1.0	1.0	37	39	10-9	10-16
HB-507-01-7	52.0	46.1	1.8	1.3	1.0	1.0	39	30	10-8	10-15
HUTTON	32.2	38.3	3.3	2.0	1.0	1.0	38	32	10-5	10-17
KIRBY	43.8	45.1	1.5	1.0	1.0	1.0	40	33	10-16	10-22
RANSOM	51.6	45.9	1.3	1.8	1.0	1.0	38	34	10-7	10-15
WRIGHT	52.8	43.4	3.0	3.3	1.0	1.0	40	37	10-8	10-15
TEST MEANS	53.0	42.2	1.9	1.6	1.0	1.0	38	34		
L.S.D. (.05)	9.0	3.9								
C.V. (%)	10.9	6.7								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUP VII AND VIII.

TABLE 8. PERFORMANCE OF SOYBEAN VARIETIES AT FAIRHOPE, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY										
AGRATECH 67	51.7	-	2.0	-	1.0	-	40	-	10-4	-
BEDFORD	51.8	-	1.0	-	1.0	-	42	-	9-25	-
CENTENNIAL	48.9	-	1.0	-	1.0	-	41	-	10-6	-
COKER 156	55.1	-	1.0	-	1.0	-	40	-	10-3	-
DAVIS	54.2	-	1.3	-	1.0	-	41	-	10-4	-
DELTAPINE 105	60.1	-	1.0	-	1.0	-	38	-	9-22	-
DELTAPINE 506	54.1	36.5	1.3	1.0	1.0	1.0	44	34	10-9	10-15
FORREST	51.5	-	1.0	-	1.0	-	37	-	9-23	-
HARTZ 6383	53.3	-	1.0	-	1.0	-	42	-	10-8	-
JEFF	54.3	-	1.0	-	1.0	-	40	-	10-6	-
SHILOH	50.0	-	1.0	-	1.0	-	36	-	9-25	-
S69-96	54.2	34.1	1.3	1.0	1.0	1.0	39	30	10-8	10-17
TRACY M	50.9	-	1.0	-	1.0	-	38	-	9-29	-
WILSTAR 550	52.6	-	1.0	-	1.0	-	36	-	9-28	-
MEDIUM										
A 7372	51.9	40.4	1.8	1.0	1.0	1.0	37	30	10-13	10-15
BRAXTON	54.7	38.1	1.0	1.0	1.0	1.0	45	30	10-15	10-19
COKER 317	50.0	-	1.0	-	1.0	-	47	-	10-15	-
DELTAPINE 417	53.9	-	1.5	-	1.0	-	42	-	10-14	-
DELTAPINE 497	51.9	36.6	1.0	1.0	1.0	1.0	49	29	10-16	10-19
DUOCROP	42.6	36.1	1.0	1.0	1.0	1.0	55	49	10-3	10-15
GASOY 17	53.0	-	1.8	-	1.0	-	42	-	10-13	-
GK 120	50.8	33.8	2.3	1.0	1.0	1.0	36	37	10-8	10-16
HARTZ 7126	53.2	-	2.0	-	1.0	-	42	-	10-14	-
MCNAIR 770	57.6	-	1.3	-	1.0	-	37	-	10-10	-
RANSOM	53.2	-	1.0	-	1.0	-	42	-	10-14	-
S72-60	54.1	39.2	2.3	1.0	1.0	1.0	37	33	10-10	10-16
TERRA-VIG 708	59.8	-	1.3	-	1.0	-	40	-	10-12	-
WILSTAR 790	46.9	33.4	1.0	1.0	1.0	1.0	45	32	10-22	10-31
WRIGHT	55.6	-	2.5	-	1.0	-	34	-	10-13	-

CONTINUED ON THE FOLLOWING PAGE

TABLE 8. PERFORMANCE OF SOYBEAN VARIETIES AT FAIRHOPE, ALABAMA, 1984

BRAND-VARIETY	YIELD PER ACRE		AVERAGE LODGING		AVERAGE SHATTERING		AVERAGE PLANT HEIGHT		AVERAGE MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE										
COBB	48.2	33.4	1.3	1.0	1.0	1.0	44	40	10-22	10-24
COKER 368	49.4	33.2	1.3	1.0	1.0	1.0	46	32	10-18	10-21
COKER 488	49.8	27.8	1.0	1.0	1.0	1.0	47	34	10-17	10-19
DOWLING	51.6	27.8	1.3	1.0	1.0	1.0	46	30	10-21	10-24
FOSTER	51.0	34.8	1.8	1.3	1.0	1.0	41	36	10-15	10-22
HUTTON	50.2	29.9	1.3	1.0	1.0	1.0	44	28	10-19	10-19
JOHNSTON	50.8	34.7	2.3	1.0	1.0	1.0	38	31	10-12	10-16
KIRBY	48.1	33.7	1.0	1.0	1.0	1.0	46	33	10-19	10-22
RA 801	45.2	37.5	2.3	1.0	1.0	1.0	38	32	10-14	10-18
SANTA ROSA R	35.9	32.8	3.5	2.0	1.0	1.0	48	46	10-26	11-1
TERRA-VIG 808	52.3	39.2	3.3	1.0	1.0	1.0	34	34	10-13	10-17
TEST MEANS	51.6	34.6	1.5	1.1	1.0	1.0	41	34		
L.S.D. (.05)	5.2	8.6								
C.V. (%)	8.2	10.0								

EARLY = MATURITY GROUPS V AND VI; MEDIUM = MATURITY GROUP VII; LATE = MATURITY GROUPS VIII AND IX..

TABLE 9. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
A 5474	39.6	32.0	29.2 12	29.8	33.3 9	35.1	1.8	1.7	1.0	1.0	36	33	9-20	10-11
BAY	38.2	37.5	–	–	–	–	–	–	–	–	–	–	–	–
BEDFORD	40.9	25.5	30.1 6	26.2	34.7 5	31.0	3.0	2.9	1.0	1.0	41	35	9-27	10-14
COKER 355	39.6	24.7	29.7 9	27.1	32.3	31.2	2.3	2.8	1.1	1.0	36	32	9-30	10-11
COKER 425	46.5	37.1	–	–	–	–	–	–	–	–	–	–	–	–
COKER 485	40.0	29.0	–	–	–	–	–	–	–	–	–	–	–	–
DELTAPINE 105	43.1	36.3	34.6 2	33.8	40.1 1	38.3	2.6	3.1	1.0	1.0	39	33	9-29	10-14
DELTAPINE 345	37.5	28.6	29.4 10	30.1	33.5 7	34.7	2.0	2.3	1.1	1.0	38	34	9-28	10-12
ESSEX	50.1	37.5	35.4 1	32.3	38.5 2	38.2	1.2	1.6	1.5	1.0	28	26	9-18	10-8
FORREST	41.4	29.9	31.3 3	30.2	35.5 3	35.5	2.3	2.5	1.1	1.0	35	34	9-24	10-12
HARTZ 5171	37.9	33.1	30.5 4	33.2	32.8 10	35.6	2.6	3.3	1.0	1.0	40	34	10-1	10-18
HARTZ 5370	35.5	31.0	29.4 10	31.4	34.2 9	34.2	2.6	2.3	1.4	1.0	39	34	9-29	10-11
H78-168	39.9	31.4	–	–	–	–	–	–	–	–	–	–	–	–
N 77-114	47.3	37.0	–	–	–	–	–	–	–	–	–	–	–	–
PIONEER 9561	40.7	30.9	–	–	–	–	–	–	–	–	–	–	–	–
RA 480	36.9	29.0	27.2	28.7	31.5	34.2	1.9	1.9	1.2	1.0	39	31	9-16	10-4
RA 502	38.7	29.7	30.4 5	31.0	35.2 4	33.0	2.5	2.8	1.0	1.0	39	34	9-28	10-11
SHILOH	35.7	25.7	28.0	27.2	31.6	31.0	1.8	2.8	1.1	1.0	37	33	9-29	10-10
TERRA-VIG 505	36.7	27.4	29.9 7	27.6	31.6	34.5	2.9	3.3	1.3	1.0	39	33	9-29	10-13
WILSTAR 550	38.5	30.9	29.9 7	31.1	34.7 6	34.5	2.5	2.6	1.0	1.0	36	32	9-28	10-13
YIELD KING 593	35.4	25.4	–	–	–	–	–	–	–	–	–	–	–	–
MEDIUM														
A 6520	36.1	30.4	29.4	31.6	32.3 3	34.7	2.4	2.3	1.0	1.0	35	30	10-6	10-18
BRADLEY	34.7 7	30.5	–	–	–	–	–	–	–	–	–	–	–	–
CENTENNIAL	29.3	21.7	26.0	28.3	28.4 10	30.9	2.5	2.1	1.0	1.0	39	34	10-8	10-20
COKER 156	33.5 9	32.6	29.8	33.3	32.9 1	35.9	2.1	1.6	1.0	1.1	37	31	10-6	10-18
DAVIS	28.9	23.1	24.0	30.0	28.1	32.4	3.0	2.2	1.0	1.0	38	35	10-6	10-21
DELTAPINE 246	37.7 4	24.9	28.7	29.0	31.3 7	30.2	2.9	3.8	1.2	1.0	34	32	10-4	10-16
H79-7817	33.6 8	25.5	–	–	–	–	–	–	–	–	–	–	–	–
JEFF	35.7 3	26.8	29.0	30.8	32.2 4	33.7	2.8	3.2	1.0	1.0	40	35	10-7	10-20
RA 604	32.4	26.8	27.8	31.7	31.7 5	33.9	2.6	1.9	1.0	1.0	39	33	10-5	10-19
RA 606	35.7 3	29.1	28.6	31.7	31.2 8	33.6	3.7	3.6	1.2	1.2	37	35	10-5	10-20
SUMTER	29.0	23.6	25.3	27.4	27.9	32.2	2.9	2.0	1.2	1.0	42	36	10-4	10-18
S69-96	30.0 10	27.6	27.9	32.2	29.3 9	35.2	2.9	2.7	1.0	1.0	39	35	10-9	10-23
TERRA-VIG 606	35.0 6	25.9	28.6	27.7	31.7 5	33.6	2.5	1.8	1.0	1.0	39	33	10-7	10-20
TRACY M	35.0 6	28.7	28.8	29.6	33.7 2	32.5	2.4	2.3	1.3	1.0	36	32	10-6	10-19

CONTINUED ON THE FOLLOWING PAGE

TABLE 9. PERFORMANCE OF SOYBEAN VARIETIES IN NORTHERN ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
BRAXTON	32.3	32.0	27.6	35.3	30.5	34.3	2.3	1.3	1.0	1.0	39	35	10-11	10-24
COKER 237	29.9	25.5	26.8	32.4	28.4	33.7	2.3	1.7	1.0	1.0	37	31	10-10	10-22
COKER 317	25.1	22.9	23.4	28.5	26.9	31.9	2.7	2.4	1.0	1.0	40	34	10-11	10-24
HB-507-01-7	27.3	25.9	25.2	30.6	27.7	31.3	2.5	2.2	1.5	1.0	38	32	10-9	10-22
TERRA-VIG 708	30.8	25.9	-	-	-	-	-	-	-	-	-	-	-	-
TEST MEANS	36.3	28.9	28.7	30.3	32.1	33.7	2.5	2.4	1.1	1.0	38	33		
L.S.D. (.05)	8.2	4.6	6.6	4.2	6.7	5.2								
C.V. (%)	14.8	14.6	8.9	7.5	9.5	6.0								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUP VII.

TABLE 10. PERFORMANCE OF SOYBEAN VARIETIES IN CENTRAL ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
DELTAPINE 105	35.2	35.6	29.3	31.7	28.3	28.1	1.2	1.3	1.1	1.3	32	32	9-22	10-1
DELTAPINE 345	34.0	29.8	26.7	26.8	26.1	24.3	1.2	1.3	1.0	1.0	31	32	9-24	10-2
FORREST	31.6	30.6	25.6	27.5	27.2	25.2	1.1	1.2	1.1	1.0	29	29	9-20	10-1
HARTZ 5370	31.5	31.1	26.8	27.9	27.5	-	1.2	-	1.0	-	31	-	9-26	-
PIONEER 5492	30.7	33.7	-	-	-	-	-	-	-	-	-	-	-	-
RA 480	29.8	37.5	21.1	31.1	22.3	27.6	1.2	1.5	1.5	1.1	35	33	9-17	9-26
TERRA-VIG 505	30.6	28.3	25.8	25.2	26.7	-	1.3	-	1.0	-	31	-	9-25	-
WILSTAR 550	29.8	28.3	23.9	27.9	21.8	-	1.2	-	1.1	-	28	-	9-26	-
MEDIUM														
AGRATECH 67	31.6	24.1	29.3	27.1	28.8	25.4	1.8	1.3	1.0	1.0	34	34	10-8	10-12
CENTENNIAL	29.3	24.8	27.8	23.2	25.9	20.6	1.1	1.0	1.0	1.1	33	33	10-9	10-13
COKER 156	34.0	32.5	31.2	29.9	28.4	27.3	1.1	1.1	1.0	1.0	31	30	10-6	10-10
DAVIS	30.9	27.1	27.5	26.4	26.8	24.0	1.6	1.5	1.2	1.5	36	32	10-2	10-9
FFR 668	31.3	23.5	-	-	-	-	-	-	-	-	-	-	-	-
JEFF	31.1	22.9	24.4	25.2	23.9	-	1.3	-	1.2	-	35	-	10-7	-
PA 604	32.1	24.9	23.7	26.7	23.3	24.3	1.2	1.3	1.0	1.0	33	33	9-30	10-8
PA 680	29.7	26.1	27.9	25.5	24.6	22.9	1.1	1.4	1.1	1.0	34	34	10-8	10-12
S69-96	32.3	25.6	28.3	25.5	30.0	-	1.4	-	1.0	-	32	-	10-8	-
TERRA-VIG 606	31.2	31.5	28.2	28.9	25.2	26.5	1.2	1.0	1.0	1.1	34	31	10-6	10-12
TRACY M	31.0	28.4	27.7	25.8	27.3	25.5	1.2	1.3	1.1	1.3	31	30	10-4	10-9
YIELD KING 613	29.4	24.6	-	-	-	-	-	-	-	-	-	-	-	-

CONTINUED ON THE FOLLOWING PAGE

TABLE 10. PERFORMANCE OF SOYBEAN VARIETIES IN CENTRAL ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
BRAXTON	26.8	28.8	30.4	31.5	27.0	27.0	1.3	1.2	1.0	1.0	36	33	10-14	10-17
COKER 237	29.3	25.6	25.9	28.7	25.0	26.3	1.1	1.0	1.0	1.0	32	29	10-9	10-14
COKER 317	25.6	21.9	25.6	23.7	22.5	20.4	1.3	1.6	1.1	1.0	36	33	10-14	10-16
COKER 368	26.0	22.6	26.4	25.0	24.2	-	1.3	-	1.0	-	37	-	10-19	-
COKER 488	26.9	20.9	28.1	23.5	24.4	20.2	1.2	1.3	1.0	1.0	38	39	10-17	10-20
DELTAPINE 497	31.6	25.1	31.6	29.2	29.0	25.6	1.3	1.2	1.0	1.0	39	36	10-14	10-15
DUOCROP	25.9	25.3	22.3	24.6	21.2	-	1.5	-	1.1	-	43	-	10-4	-
FOSTER	27.0	16.5	25.8	21.6	22.6	19.6	1.5	1.9	1.0	1.0	36	35	10-13	10-17
GASOY 17	31.3	23.3	29.6	29.7	26.7	25.4	1.7	1.3	1.0	1.0	38	35	10-12	10-16
GOVAN	28.7	24.5	27.6	25.6	25.6	-	1.2	-	1.0	-	33	-	10-12	-
HARTZ 7126	29.2	22.2	27.8	25.3	29.1	-	1.4	-	1.0	-	37	-	10-11	-
HB-507-D1-7	28.1	25.1	27.9	28.3	27.5	23.8	1.3	1.1	1.0	1.0	31	31	10-12	10-15
HUTTON	24.2	18.7	19.7	23.5	18.7	19.9	1.4	1.8	1.0	1.0	35	35	10-15	10-19
KIRBY	23.0	18.3	24.0	24.1	21.6	-	1.2	-	1.0	-	37	-	10-18	-
MCNAIR 770	33.0	28.6	30.3	27.8	28.4	24.4	1.2	1.3	1.1	1.0	32	31	10-12	10-13
RA 801	27.8	19.5	22.0	24.2	-	-	-	-	-	-	-	-	-	-
RANSOM	27.6	25.3	27.1	27.7	25.3	25.3	1.2	1.3	1.0	1.0	33	33	10-10	10-13
S72-60	29.2	27.4	-	-	-	-	-	-	-	-	-	-	-	-
TERRA-VIG 708	31.5	28.5	26.1	28.3	25.4	23.6	1.2	1.3	1.0	1.0	32	34	10-10	10-16
WRIGHT	29.9	24.1	29.3	27.3	26.0	23.3	1.6	1.5	1.0	1.0	36	34	10-11	10-15
TEST MEANS	29.7	26.1	26.7	26.7	25.6	24.3	1.3	1.3	1.0	1.1	34	33		
L.S.D. (.05)	13.6	3.7	10.7	3.7	9.8	4.2								
C.V. (%)	9.0	17.5	10.4	9.3	9.7	10.2								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUPS VII AND VIII.

TABLE 11. PERFORMANCE OF SOYBEAN VARIETIES IN SOUTHERN ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
AGRATECH 67	39.2	28.7	38.7	24.3	40.1	-	1.9	-	1.0	-	33	-	10-24	-
CENTENNIAL	37.9	33.5	37.7	27.4	38.4	29.6	1.4	1.0	1.0	1.0	35	24	10-16	10-13
COKER 156	37.8	21.3	38.9	14.1	41.0	17.0	1.2	1.0	1.0	1.0	31	18	10-22	10-9
DAVIS	40.4	42.8	39.2	33.3	41.5	35.7	1.7	1.2	1.0	1.2	34	24	10-13	10-10
DELTAPINE 105	41.7	31.9	38.0	24.8	38.5	28.8	1.3	1.0	1.0	1.0	33	22	10-12	10-3
DELTAPINE 345	38.0	18.0	34.6	16.0	-	-	-	-	-	-	-	-	-	-
DELTAPINE 506	35.6	25.1	33.9	21.3	34.9	-	1.9	-	1.0	-	34	-	10-24	-
FORREST	38.9	19.2	33.3	16.8	34.6	21.9	1.1	1.0	1.0	1.0	29	21	10-11	10-2
HARTZ 6383	36.4	23.2	-	-	-	-	-	-	-	-	-	-	-	-
JEFF	36.7	28.9	36.2	24.8	38.4	28.9	1.6	1.3	1.0	1.0	36	24	10-17	10-11
RA 606	39.5	27.6	37.3	22.6	38.4	-	1.8	-	1.0	-	33	-	10-25	-
RA 680	38.4	25.6	38.5	24.1	38.7	28.4	1.5	1.0	1.0	1.0	36	23	10-8	10-11
S69-96	38.7	34.5	-	-	-	-	-	-	-	-	-	-	-	-
TERRA-VIG 606	39.3	32.6	37.1	22.6	38.7	27.9	1.5	1.0	1.1	1.0	34	23	10-16	10-10
TRACY M	37.9	22.4	35.7	21.0	35.7	23.3	1.6	1.1	1.0	1.4	33	23	10-12	10-7
WILSTAR 550	35.7	19.6	-	-	-	-	-	-	-	-	-	-	-	-
MEDIUM														
A 7372	35.2	32.3	36.0	29.0	39.5	32.5	1.2	1.0	1.0	1.0	31	21	10-20	10-16
BRAXTON	33.8	26.0	38.0	24.5	40.5	29.7	1.3	1.0	1.0	1.0	36	24	10-22	10-19
COKER 317	31.5	30.2	33.4	25.8	36.5	25.2	1.7	1.3	1.0	1.0	36	25	10-20	10-14
DELTAPINE 417	37.7	39.3	38.6	28.9	40.9	34.0	1.5	1.0	1.0	1.0	37	25	10-21	10-16
DELTAPINE 497	36.9	24.1	-	-	-	-	-	-	-	-	-	-	-	-
DIOCPOP	33.9	27.7	31.2	25.6	33.7	26.7	1.8	1.0	1.0	1.0	46	26	10-6	10-9
GASOY 17	36.0	34.0	39.1	29.7	41.5	32.2	2.0	1.0	1.0	1.0	36	23	10-21	10-14
GK 120	32.5	24.8	36.0	22.1	37.9	-	1.8	-	1.0	-	34	-	10-26	-
HARTZ 7126	36.7	24.9	36.6	23.3	37.6	23.2	1.8	1.0	1.0	1.0	37	23	10-16	10-17
MCNAIR 700	38.5	24.1	40.5	23.7	42.6	26.5	1.1	1.2	1.0	1.0	31	22	10-9	10-13
MCNAIR 770	36.4	26.2	37.3	26.2	39.4	-	1.6	-	1.0	-	32	-	10-26	-
RANSOM	34.1	35.7	36.3	28.3	37.6	30.3	1.3	1.0	1.0	1.0	34	21	10-22	10-16
S72-60	32.8	32.1	36.3	28.6	38.0	-	2.4	-	1.0	-	35	-	10-25	-
TERRA-VIG 708	32.7	30.8	33.6	26.6	37.0	29.4	1.3	1.0	1.0	1.0	36	24	10-20	10-16
WILSTAR 790	31.7	26.3	35.0	25.5	37.2	26.8	1.5	1.0	1.0	1.0	36	23	10-23	10-18
WRIGHT	31.9	26.0	35.4	23.9	37.9	29.3	2.0	1.0	1.0	1.0	35	23	10-20	10-15

CONTINUED ON THE FOLLOWING PAGE

TABLE 11. PERFORMANCE OF SOYBEAN VARIETIES IN SOUTHERN ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
COBB	31.7	43.5	37.3	40.7	43.9	39.8	2.0	1.3	1.0	1.0	39	25	10-28	10-26
COKER 368	32.6	34.5	36.0	30.4	38.6	33.3	1.6	1.1	1.0	1.0	38	24	10-17	10-20
DOWLING	34.2	32.8	38.0	30.3	39.9	–	1.8	–	1.0	–	37	–	10-27	–
FOSTER	29.2	35.8	36.0	28.3	39.1	33.3	2.1	1.3	1.0	1.0	36	24	10-23	10-22
HUTTON	34.3	37.0	–	–	–	–	–	–	–	–	–	–	–	–
JOHNSTON	33.6	34.2	38.3	26.9	–	–	–	–	–	–	–	–	–	–
KIRBY	30.8	25.2	34.5	23.2	34.2	31.2	1.3	1.3	1.0	1.0	36	26	10-19	10-23
PA 801	37.8	28.4	35.5	25.3	–	–	–	–	–	–	–	–	–	–
TEST MEANS	35.7	29.3	36.5	25.4	38.5	29.0	1.6	1.1	1.0	1.0	35	23		
L.S.D. (.05)	23.3	8.9	17.8	7.7	14.0	7.9								
C.V. (%)	8.4	20.9	5.6	19.0	6.2	16.5								

EARLY = MATURITY GROUPS V AND VI; MEDIUM = MATURITY GROUP VII; LATE = MATURITY GROUP VIII.

TABLE 12. PERFORMANCE OF SOYBEAN VARIETIES ON SUMTER SOIL, MARION JUNCTION, ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
BAY	42.9	23.9	33.7	17.1	31.7	–	1.0	–	1.2	–	24	–	9-14	–
DELTAPINE 105	39.6	23.9	31.7	17.5	30.5	–	1.2	–	1.0	–	23	–	9-18	–
DELTAPINE 345	32.9	21.3	28.2	16.8	26.5	–	1.1	–	1.0	–	25	–	9-21	–
HARTZ 5370	38.2	24.8	–	–	–	–	–	–	–	–	–	–	–	–
PIONEER 5482	39.7	23.3	–	–	–	–	–	–	–	–	–	–	–	–
PA 480	37.1	18.5	29.8	12.7	31.1	–	2.1	–	1.2	–	31	–	9-11	–
TERRA-VIG 505	37.1	23.4	30.0	16.9	27.9	–	1.0	–	1.0	–	24	–	9-20	–
WILSTAR 550	36.3	25.2	–	–	–	–	–	–	–	–	–	–	–	–
MEDIUM														
A 6520	26.1	26.3	22.2	17.8	–	–	–	–	–	–	–	–	–	–
AGRATECH 67	35.1	30.9	27.4	20.7	–	–	–	–	–	–	–	–	–	–
CENTENNIAL	30.3	27.5	24.1	18.3	22.1	–	1.0	–	1.0	–	26	–	10-6	–
COKER 156	34.9	28.9	27.3	20.5	26.6	–	1.0	–	1.0	–	24	–	10-4	–
DAVIS	35.5	32.9	31.1	23.5	30.8	–	1.8	–	1.0	–	31	–	10-1	–
DELTAPINE 246	32.4	23.8	–	–	–	–	–	–	–	–	–	–	–	–
DELTAPINE 506	35.3	31.8	30.1	22.0	27.5	–	1.4	–	1.0	–	29	–	10-5	–
DELTAPINE 566	20.3	27.1	–	–	–	–	–	–	–	–	–	–	–	–
H79-7817	29.4	29.4	–	–	–	–	–	–	–	–	–	–	–	–
JEFF	31.8	21.6	22.1	17.1	19.7	–	1.2	–	1.0	–	25	–	10-3	–
PA 680	31.7	25.2	24.7	18.8	23.6	–	1.0	–	1.0	–	27	–	10-6	–
SUMTER	27.5	25.6	–	–	–	–	–	–	–	–	–	–	–	–
S69-96	32.7	31.2	–	–	–	–	–	–	–	–	–	–	–	–
TERRA-VIG 606	33.7	31.9	28.2	23.0	24.0	–	1.0	–	1.0	–	26	–	10-5	–
TRACY M	38.6	24.4	28.5	17.7	29.5	–	1.2	–	1.0	–	25	–	10-7	–

CONTINUED ON THE FOLLOWING PAGE

TABLE 12. PERFORMANCE OF SOYBEAN VARIETIES ON SUMTER SOIL, MARION JUNCTION, ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGES							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
BRAXTON	32.1	22.8	32.9	19.4	31.2	-	1.0	-	1.0	-	33	-	10-13	-
COBB	23.7	18.7	23.1	19.0	20.4	-	1.9	-	1.0	-	38	-	10-14	-
COKER 317	27.3	23.4	22.7	17.1	20.8	-	1.7	-	1.0	-	31	-	10-9	-
COKER 488	32.0	21.3	25.4	17.4	23.2	-	1.3	-	1.0	-	34	-	10-15	-
DELTAPINE 417	29.2	21.8	-	-	-	-	-	-	-	-	-	-	-	-
DELTAPINE 497	28.5	20.4	23.9	16.3	23.3	-	1.0	-	1.0	-	31	-	10-13	-
DOWLING	34.1	21.1	-	-	-	-	-	-	-	-	-	-	-	-
DUOCROP	34.2	18.5	27.1	14.2	26.9	-	2.3	-	1.0	-	42	-	10-1	-
GASOY 17	29.3	24.5	25.9	16.7	22.5	-	1.2	-	1.0	-	34	-	10-8	-
GORDON	29.2	18.9	-	-	-	-	-	-	-	-	-	-	-	-
GOVAN	24.8	19.6	20.5	15.5	19.2	-	1.0	-	1.0	-	28	-	10-9	-
HARTZ 7126	29.2	22.4	22.3	13.7	22.6	-	1.1	-	1.0	-	28	-	10-8	-
HB-507-01-7	30.2	21.8	28.0	15.8	26.2	-	1.0	-	1.0	-	27	-	10-9	-
HUTTON	17.3	14.4	11.8	17.2	9.9	-	1.3	-	1.0	-	32	-	10-2	-
KIRBY	27.1	19.5	20.4	12.4	18.5	-	1.1	-	1.0	-	29	-	10-15	-
RANSOM	32.4	25.2	28.9	17.7	27.0	-	1.0	-	1.0	-	27	-	10-7	-
WRIGHT	30.5	27.0	28.8	19.1	26.0	-	1.2	-	1.0	-	30	-	10-10	-
TEST MEANS	31.8	24.1	26.2	17.6	24.8	-	1.3	-	1.0	-	29	-		
L.S.D. (.05)	6.5	5.6	6.0	5.6	5.7	-								
C.V. (%)	16.5	17.6	17.5	15.1	19.9	-								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUPS VII AND VIII.

TABLE 13. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL, MARION JUNCTION, ALABAMA 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
BAY	55.7	40.7	54.9	36.9	47.7	36.8	1.0	1.0	1.1	1.0	28	28	9-24	10-5
DELTAPINE 105	58.2	43.9	58.3	40.2	53.9	39.2	1.2	1.3	1.0	1.0	30	29	9-27	10-8
DELTAPINE 345	51.6	35.7	49.9	31.2	44.0	30.4	1.0	1.5	1.0	1.0	29	26	9-29	10-8
HARTZ 5370	47.3	42.4	-	-	-	-	-	-	-	-	-	-	-	-
PIONEER 5482	62.2	41.1	-	-	-	-	-	-	-	-	-	-	-	-
RA 480	52.6	35.3	49.8	35.3	45.9	33.4	1.7	1.2	1.0	1.0	41	31	9-16	10-5
TERRA-VIG 505	58.5	37.0	57.8	32.6	51.2	31.4	1.3	2.2	1.0	1.0	29	29	9-27	10-7
WILSTAR 550	52.7	40.8	-	-	-	-	-	-	-	-	-	-	-	-
MEDIUM														
A 6520	55.9	39.4	53.5	35.7	-	-	-	-	-	-	-	-	-	-
AGRATECH 67	53.3	42.7	53.2	37.9	-	-	-	-	-	-	-	-	-	-
CENTENNIAL	53.2	42.6	53.3	40.3	47.0	39.5	1.7	1.8	1.0	1.0	35	31	10-8	10-17
COKER 156	58.4	44.2	57.7	39.4	52.9	38.0	1.3	1.1	1.0	1.0	34	27	10-7	10-15
DAVIS	55.2	45.2	52.9	40.6	48.3	38.1	2.2	1.6	1.0	1.0	36	29	10-7	10-18
DELTAPINE 246	55.4	41.3	-	-	-	-	-	-	-	-	-	-	-	-
DELTAPINE 506	54.3	42.0	52.5	38.3	45.9	36.9	1.9	1.8	1.0	1.0	35	31	10-9	10-18
DELTAPINE 566	64.0	45.5	-	-	-	-	-	-	-	-	-	-	-	-
H79-7817	57.0	40.4	-	-	-	-	-	-	-	-	-	-	-	-
JEFF	50.1	41.3	47.6	38.3	43.3	35.3	2.2	2.2	1.0	1.0	36	31	10-7	10-18
RA 690	54.8	42.2	53.4	39.7	49.2	37.1	1.1	1.4	1.0	1.0	34	31	10-8	10-16
SUMTER	43.0	42.5	-	-	-	-	-	-	-	-	-	-	-	-
S69-96	48.2	44.2	-	-	-	-	-	-	-	-	-	-	-	-
TERRA-VIG 606	54.9	43.5	57.1	39.0	51.3	36.5	1.2	1.2	1.1	1.0	35	29	10-7	10-15
TRACY M	59.1	40.9	56.1	37.6	53.5	36.4	1.4	1.3	1.0	1.0	31	28	10-3	10-12

CONTINUED ON THE FOLLOWING PAGE

TABLE 13. PERFORMANCE OF SOYBEAN VARIETIES ON VAIDEN SOIL, MARION JUNCTION, ALABAMA 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
BRAXTON	57.4	40.7	56.3	40.2	51.2	41.4	1.4	1.1	1.0	1.0	40	31	10-19	10-25
COBB	44.3	40.4	45.0	42.0	36.2	38.8	2.5	1.6	1.0	1.0	41	36	10-22	11-1
COKER 317	48.7	39.3	46.0	36.8	39.7	34.3	2.6	2.1	1.0	1.0	39	31	10-9	10-21
COKER 488	52.2	41.0	49.5	40.5	41.9	40.1	1.5	1.9	1.0	1.0	42	36	10-16	10-28
DELTAPINE 417	57.5	46.8	-	-	-	-	-	-	-	-	-	-		-
DELTAPINE 497	60.5	46.2	57.7	41.4	47.2	40.2	2.1	1.2	1.0	1.0	42	30	10-13	10-26
DOWLING	52.5	45.2	-	-	-	-	-	-	-	-	-	-		-
DUOCROP	49.3	43.0	45.2	37.2	39.6	34.6	2.2	1.2	1.0	1.0	50	37	10-6	10-22
GASOY 17	51.4	45.6	49.7	43.3	40.8	39.8	3.0	1.7	1.0	1.0	39	33	10-9	10-21
GORDON	52.6	38.6	-	-	-	-	-	-	-	-	-	-		-
GOVAN	49.3	43.2	49.0	41.6	40.8	38.8	1.3	1.4	1.0	1.0	38	31	10-10	10-20
HARTZ 7126	56.6	43.6	53.5	43.5	44.9	39.6	2.1	1.9	1.0	1.0	37	34	10-14	10-25
HB-507-D1-7	52.0	46.1	54.2	43.3	46.2	41.8	1.6	1.3	1.0	1.0	36	26	10-10	10-21
HUTTON	32.2	38.3	26.0	38.8	19.9	33.1	2.8	2.1	1.0	1.0	37	29	10-4	10-23
KIRBY	43.8	45.1	44.5	41.4	34.9	39.2	1.3	1.1	1.0	1.0	39	30	10-17	10-27
RANSOM	51.6	45.9	52.8	43.2	44.9	41.4	1.1	1.5	1.0	1.0	35	30	10-11	10-25
WRIGHT	52.9	43.4	53.6	42.6	45.2	39.8	2.6	2.5	1.0	1.0	38	32	10-12	10-23
TEST MEANS	53.0	42.2	51.4	39.3	44.7	37.5	1.8	1.6	1.0	1.0	36	31		
L.S.D. (.05)	9.0	3.9	7.8	9.7	7.1	9.7								
C.V. (%)	10.9	6.7	12.3	7.8	15.8	8.1								

EARLY = MATURITY GROUPS IV AND V; MEDIUM = MATURITY GROUP VI; LATE = MATURITY GROUPS VII AND VIII.

TABLE 14. PERFORMANCE OF SOYBEAN VARIETIES IN FAIRHOPE ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
EARLY														
AGRATECH 67	51.7	-	40.1	-	-	-	-	-	-	-	-	-	-	-
BEDFORD	51.8	-	40.7	-	41.9	-	1.0	-	1.0	-	35	-	9-30	-
CENTENNIAL	48.9	-	45.5	-	46.0	-	1.0	-	1.0	-	35	-	10-12	-
COKER 156	55.1	-	48.2	-	49.1	-	1.0	-	1.0	-	34	-	10-10	-
DAVIS	54.7	-	49.9	-	49.3	-	1.2	-	1.0	-	35	-	10-10	-
DELTAPINE 105	60.1	-	52.2	-	52.2	-	1.0	-	1.0	-	33	-	9-30	-
DELTAPINE 506	54.1	36.5	50.4	-	50.9	-	1.1	-	1.0	-	36	-	10-13	-
FORREST	51.5	-	38.2	-	39.1	-	1.0	-	1.0	-	29	-	9-27	-
HARTZ 6383	53.3	-	-	-	-	-	-	-	-	-	-	-	-	-
JEFF	54.3	-	49.7	-	49.5	-	1.2	-	1.0	-	36	-	10-11	-
SHILOH	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-
S69-96	54.2	34.1	52.2	-	53.2	-	1.2	-	1.0	-	35	-	10-14	-
TRACY M	50.9	-	46.8	-	46.0	-	1.1	-	1.0	-	33	-	10-5	-
WILSTAR 550	52.6	-	-	-	-	-	-	-	-	-	-	-	-	-
MEDIUM														
A 7372	51.9	40.4	50.4	33.2	-	-	-	-	-	-	-	-	-	-
BRAXTON	54.7	38.1	52.6	33.6	52.4	-	1.0	-	1.0	-	39	-	10-20	-
COKER 317	50.0	-	48.4	-	48.5	-	1.0	-	1.0	-	41	-	10-17	-
DELTAPINE 417	53.9	-	50.5	-	51.7	-	1.3	-	1.0	-	40	-	10-18	-
DELTAPINE 497	51.9	36.6	51.0	29.5	51.8	-	1.0	-	1.0	-	41	-	10-19	-
DUOCROP	42.6	36.1	40.4	35.1	41.9	-	1.3	-	1.4	-	52	-	10-10	-
GASOY 17	53.0	-	51.0	-	51.3	-	1.3	-	1.0	-	39	-	10-17	-
GK 120	50.9	33.8	47.6	28.8	48.4	-	1.4	-	1.0	-	34	-	10-13	-
HARTZ 7126	53.2	-	-	-	-	-	-	-	-	-	-	-	-	-
MCNAIR 770	57.6	-	54.5	-	52.7	-	1.1	-	1.0	-	34	-	10-14	-
RANSOM	53.2	-	50.3	-	50.0	-	1.0	-	1.0	-	35	-	10-17	-
S72-60	54.1	39.2	51.9	29.6	50.6	-	1.5	-	1.0	-	37	-	10-14	-
TERRA-VIG 708	59.8	-	51.9	-	51.0	-	1.1	-	1.0	-	35	-	10-15	-
WILSTAR 790	46.9	33.4	-	-	-	-	-	-	-	-	-	-	-	-
WRIGHT	55.6	-	53.3	-	52.3	-	1.6	-	1.0	-	35	-	10-17	-

CONTINUED ON THE FOLLOWING PAGE

TABLE 14. PERFORMANCE OF SOYBEAN VARIETIES IN FAIRHOPE ALABAMA, 3-YEAR SUMMARY

BRAND-VARIETY	YIELD PER ACRE						3-YEAR AVERAGE							
	1984		2-YR. AV.		3-YR. AV.		LODGING		SHATTERING		PLANT HEIGHT		MATURITY DATE	
	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2	DATE 1	DATE 2
	BU.	BU.	BU.	BU.	BU.	BU.	SCORE	SCORE	SCORE	SCORE	IN.	IN.		
LATE														
COBB	48.2	33.4	49.3	33.6	48.5	-	1.3	-	1.0	-	41	-	10-17	-
COKER 368	49.4	33.2	49.2	27.6	48.5	-	1.1	-	1.0	-	41	-	10-21	-
COKER 488	49.8	27.8	50.5	25.6	-	-	-	-	-	-	-	-	-	-
DOWLING	51.6	27.8	52.3	27.3	-	-	-	-	-	-	-	-	-	-
FOSTER	51.0	34.8	49.0	29.2	48.3	-	1.8	-	1.0	-	37	-	10-19	-
HUTTON	50.2	29.9	48.8	26.7	49.5	-	1.1	-	1.0	-	39	-	10-23	-
JOHNSTON	50.8	34.7	44.5	26.6	-	-	-	-	-	-	-	-	-	-
KIRBY	48.1	33.7	49.3	28.1	48.5	-	1.0	-	1.0	-	40	-	10-25	-
RA 801	45.2	37.5	47.6	31.8	-	-	-	-	-	-	-	-	-	-
SANTA ROSA R	35.9	32.8	44.3	35.0	-	-	-	-	-	-	-	-	-	-
TERRA-VIG 808	52.3	39.2	-	-	-	-	-	-	-	-	-	-	-	-
TEST MEANS	51.6	34.6	48.6	30.1	49.0	-	1.2	-	1.0	-	37	-		
L.S.D. (.05)	5.2	8.6	6.3	6.9	6.3	-								
C.V. (%)	8.2	10.0	8.2	10.6	7.1	-								

EARLY = MATURITY GROUPS V AND VI; MEDIUM = MATURITY GROUP VII; LATE = MATURITY GROUPS VIII AND IX.

TABLE 15. PERFORMANCE OF SOYBEAN VARIETIES IN PRELIMINARY TESTS

BRAND-VARIETY	YIELD PER ACRE	
	NORTHERN (BELLE MINA)	SOUTHERN (MONROEVILLE)
	BU.	BU.
GROUP IV		
MITCHELL 410	43.5	-
RA 481	42.5	-
RA 451	40.4	30.8
RA 452	43.7	-
CMC-F84	40.1	-
CMC-F83	42.0	-
CMC-F84/3	43.8	-
GROUP V		
STUTTS	42.6	34.3
WILSTAR 550	54.8	-
RA 580	31.9	33.1
RA 581	34.7	25.9
FORREST	44.8	33.4
A 5980	42.5	-
PIONEER 5482	48.3	-
PIONEER 9571	40.6	-
TERRA-VIG 553	42.9	-
TERRA-VIG 515	37.9	-
FFR 561	53.0	-
YIELD KING 503	42.0	-
YIELD KING 563	39.6	-
HARTZ 5252	43.2	-
HARTZ 5370	-	31.2
H 78-168	-	30.8
DELTAPINE 105	51.4	-
DELTAPINE 345	37.7	-
COKER 80-537	43.1	-
RAX 108	40.6	-
RAX 20-1A	35.4	-
RAX CODE 30	38.1	-
RAX 115	40.4	-

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TABLE 15. PERFORMANCE OF SOYBEAN VARIETIES IN PRELIMINARY TESTS

BRAND-VARIETY	YIELD PER ACRE NORTHERN (BELLE MINA)	YIELD PER ACRE SOUTHERN (MONROEVILLE)
	BU.	BU.
GROUP VI		
CENTENNIAL	26.2	27.8
BRADLEY	-	32.1
A 6520	-	33.7
A6242	40.7	35.7
A 6381	34.8	30.4
AGRATECH 67	29.1	-
CMC-884	-	23.3
CMC-883	-	18.7
CMC-883/84	-	20.8
S69-54	32.8	34.5
S69-84	38.2	30.3
TERRA-VIG 768	33.1	42.0
TERRA-VIG 790	30.4	25.2
FFR 668	27.8	29.1
FFR 669	27.0	25.6
YIELD KING 613	33.1	18.1
HARTZ 6383	35.4	-
H 79-8080	23.9	25.1
DELTPINE 506	34.6	-
DELTAPINE 246	-	31.7
N 75-2213	36.3	-
RA 604	31.1	31.9
RA RA680	26.7	-
DELTAPINE 566	28.3	33.5
SUMTER	-	27.6
SHILOH	-	32.2
SPARTAN	25.9	25.8
SHARPE	37.1	31.0
HB-468-DI-6	28.9	-
GROUP VII		
BRAXTON	29.5	28.1
DUOCROP	27.2	-
A 7372	26.8	-
S 72-60	30.9	-
MCNAIR 700	30.0	-
MCNAIR 770	27.7	-
TERRA-VIG 774	33.9	27.4
TERRA-VIG 798	27.9	21.6
HARTZ 7126	23.6	-
H 79-21046	29.4	29.6
H79-15331	26.3	25.0
COKER 237	-	30.3
RA 702	29.1	24.0
AU 82-2016	-	21.3
AU 82-2321	-	25.8
WILSTAR 790	22.2	-
GORDON	31.6	23.3
COKER 82-537	27.9	18.1

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TABLE 15. PERFORMANCE OF SOYBEAN VARIETIES IN PRELIMINARY TESTS

BRAND-VARIETY	YIELD PER ACRE	
	NORTHERN (BELLE MINA)	SOUTHERN (MONROEVILLE)
	BU.	BU.
GROUP VIII		
KIRBY	–	14.3
TERRA-VIG 808	–	24.7
H 76-672-1	–	19.4
H 79-20632	–	19.1
COKER 488	–	15.9
COKER 79-760	–	29.1
COKER 82-645	–	26.0
GROUP IX		
SANTA ROSA R	–	7.6
TEST MEANS	35.4	26.9
L.S.D. (0.05)	6.8	8.2
C.V. (%)	12.0	19.2

NORTHERN CHECK VARIETIES: CENTENNIAL AND FORREST
SOUTHERN CHECK VARIETIES: BRAXTON AND KIRBY

STEM CANKER DISEASE REACTIONS AT MARION JUNCTION AND SHORTER, ALABAMA

B.H. Cosper

Stem canker disease of soybeans, caused by the fungal organism Diaporthe phaselorum var. caulivora, was first detected in 1977 in isolated areas of the Black Belt region. Since then it has become widespread in at least 36 counties throughout Alabama.

Symptoms of the disease first appear as small, reddish-brown lesions usually located at the base of the petiole on the lower half of the main stem. As the disease progresses, the lesion elongates, becomes black and sunken surrounded by green plant tissue, and may girdle the stem, killing the plant. The leaf interveinal tissue typically becomes yellow while the veins remain green. Reddish-brown cankers on the stem and leaf yellowing between the veins are good indications of stem canker, but a definite diagnosis can be obtained by sending plant samples to the Plant Diagnostic Center, Extension Hall, Auburn University, AL 36849.

It is still unclear how stem canker is spread over long distances. Most pathologists believe that the fungus can be carried on seed, however this has not been proved and further research is needed before this can be confirmed. Once the disease is established, it is spread locally by wind blown rain and contaminated equipment. It is undesirable to save or purchase seed from fields known to be infested with stem canker. Since the disease organism survives in the soil on undecomposed soybean plant residue, hastening the decomposition process by shredding the stems at harvest and turning them under will encourage deterioration of the fungus. Crop rotation is always a good method to reduce soybean disease levels. When stem canker infestation

is severe, 2 years of rotation to a non-host crop such as corn or cotton is recommended. Moist conditions early in the growing season appear to favor stem canker development and severity, while any factors that stress the plant, particularly at the pod-filling stage, may enhance losses due to stem canker. Research at Auburn University indicates that the normal early pod-set and early pod-fill foliar fungicide sprays will not control stem canker, and that an early season fungicide application may be beneficial. However, more research is needed on fungicide timing and rates before this practice can be recommended.

The most effective method to control soybean stem canker is the use of resistant or tolerant varieties. For the past 3 years, numerous varieties were evaluated for their reaction to stem canker. These tests indicate there are a few varieties almost completely resistant to stem canker, while many other varieties range from moderately resistant to extremely susceptible. However, it has been shown that when severe levels of stem canker exist, only the most resistant varieties will not suffer excessive losses.

Procedures

During the past 3 years, stem canker disease ratings were made on entries in the soybean variety tests located at Marion Junction and Shorter. Stem canker severity was determined at the pod-filling stage using a subjective rating scale: 1,0-5% of plants dead or dying; 2, 6-10% of plants dead or dying; 3, 11-24% of plants dead or dying; 4, 25-50% of plants dead or dying; 5, greater than 50% of plants dead or dying. Using this information, varieties were divided into four groups, based on their reaction to stem canker during the past 3 years, table 16. Varieties

Table 16. Relative Resistance of Soybean Varieties to Stem Canker.[1]

Maturity group	V	VI	VII	VIII
Resistant varieties				
	Bay	Tracy-M	Braxton	Dowling
Moderately resistant varieties				
	Deltapine 105 Deltapine 345 Terra Vig 505 Wilstar 550	A 6520 Agratech 67 Centennial Coker 156 Davis RA 680	Agripro 70 Coker 317 Deltapine 497 GaSoy 17 HB-507-D1-07 Ransom Wright	Cobb Coker 368
Moderately susceptible varieties				
	Bedford Forrest Essex	Deltapine 506 Jeff Lee 74 S69-96	Duocrop Govan	Foster Kirby
Susceptible Varieties				
		RA 604	Bragg Coker 237 Wilstar 790 RA 702 Terra Vig 708	Hutton RA 801

[1] Based on 3 years of observation.

that consistently received a rating of 1 were classified as resistant. Those with a rating ranging from 2 to 3 were classified as moderately resistant, those with a rating ranging from 3 to 4 were classified as moderately susceptible, and varieties with ratings of 4 to 5 were classified as susceptible. Preliminary groupings of varieties with only one or two years' data are presented in table 17.

Results

Data from varietal evaluations indicate that significant levels of stem canker developed during 1982 and 1983. However, in 1984 only low levels of stem canker were detected, primarily due to dry weather throughout the early part of the growing season. Tracy M, Braxton, and Bay have the highest degree of resistance to stem canker, while other varieties range from moderately resistant to susceptible, table 16. Varieties in table 17 are grouped on preliminary observations and further research is needed before their disease reaction can be verified.

Planting a tolerant variety should reduce the possibility of severe stem canker damage, but this is no guarantee that stem canker will not be present. When low levels of stem canker occur, as in 1984, moderately resistant varieties may suffer little damage and outyield the more resistant varieties.. This is probably due to one variety being more adapted to a particular growing area than another. Additional information on stem canker and its control may be obtained from the Alabama Cooperative Extension Service.

Table 17. Preliminary Observations on the Resistance of Selected Soybean Varieties to Stem Canker [1]

Moderately resistant varieties					
Maturity group	IV	V	VI	VII	VIII
	RA480	Hartz 5370 Pioneer 5482	Terra Vig 606 Deltapine 566	Agripro 71 Deltapine 417 Hartz 7126	Coker 488
Moderately susceptible varieties					
Maturity group		VI	VII		
		Deltapine 246 Sumter	Gordon Gregg		

[1]Based on 1 or 2 years of observation.

RECOMMENDED SOYBEAN VARIETIES FOR 1984

The list of recommended varieties was prepared by the authors of this report, D.B. Weaver, Assistant Professor of Agronomy and Soils, and J.B. Henderson, Agronomist-Soybeans, Alabama Cooperative Extension Service,based on variety test performance for at least 3 years.

Northern Alabama

Early	Medium	Late
Bay	Asgrow A 6520	Braxton
Bedford	Centennial*	Ransom*
Deltapine 105	Coker 156	
Deltapine 345	Davis*	
Essex	Jeff	
Forrest	Tracy M	
Wilstar 550		

Central Alabama

Early	Medium	Late
Deltapine 105	AgraTech 67	Braxton
Deltapine 345*	Centennial*	Coker 488*
Hartz 5370	Coker 156	Deltapine 497
	Davis*	Hartz 7126
	S 69-96	McNair 770
	Tracy M	

Southern Alabama

Early	Medium	Late
Centennial	Asgrow A 7372	Cobb
Coker 156	Braxton	Coker 488*
Davis	Deltapine 417	Dowling
Deltapine 105	GaSoy 17	Foster*
Jeff	Ransom*	Kirby*
Ring Around 680	Wright*	
Tracy M*		

Black Belt soils

Early	Medium	Late
Bay	Centennial*	Braxton
Deltapine 105	Coker 156	Cobb*
Ring Around 480	Davis	Coker 488
	Ring Around 680	Deltapine 497
	Tracy M	Ransom
		Wright

(continued on following page)

Baldwin-Mobile

Early	Medium	Late
Bedford*	Braxton	Cobb
Centennial*	Deltapine 497	Coker 368
Davis	GaSoy 17	Kirby
Deltapine 105	McNair 770	
Coker 156	Wright	
Jeff		
S69-96		

*If present trends continue, this recommended variety will be removed from the recommended list next year in the region indicated.