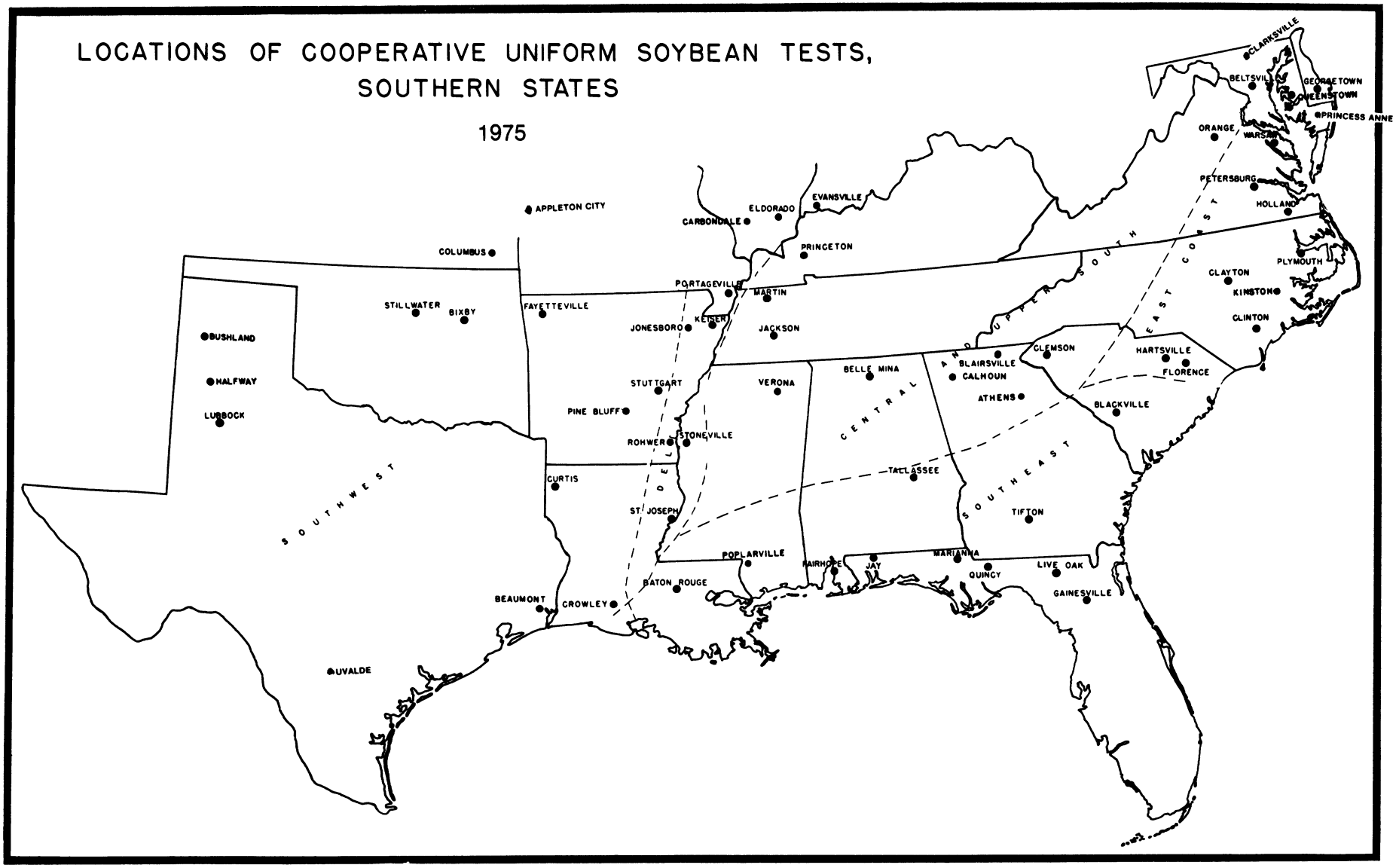
THE UNIFORM SOYBEAN TESTS
SOUTHERN STATES
1975

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
COOPERATING WITH
STATE AGRICULTURAL EXPERIMENT STATIONS
SOUTHERN REGION
STONEVILLE, MISSISSIPPI

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES

1975



THE UNIFORM SOYBEAN TESTS
SOUTHERN STATES
1975

Compiled by:

Edgar E. Hartwig and Kathryn W.Jamison
Delta Branch Experiment Station
Stoneville, Mississippi 38776

From data supplied by:

R. C. Leffel, Maryland
E. L. Wisk, Georgetown, Del.
G. D. Jones, Orange, Va.
H. M. Camper, Warsaw, Va.
G. F. Robinson, Petersburg, Va.
M. W. Alexander, Holland, Va.
C. A. Brim, North Carolina
P. A. Miller, North Carolina
J. B. Pitner, Florence, S.C.
H. L. Musen, Blackville, S.C.
J. D. Maxwell, Clemson, S.C.
J. J. Stanton, Jr, Hartsville, S.C.
H. R. Boerma, Athens, Ga.
C. D. Fisher, Blairsville, Ga.
W. H. Marchant, Tifton, Ga.
J. K. Boseck, Belle Mina, Ala.
J. E. Barrett, Fairhope, Ala.
Kuell Hinson, Gainesville, Fla.
Dan Gorbet, Marianna, Fla.
W. H. Chapman, Quincy, Fla.
H. A. Peacock, Jay, Fla.
D. L. Thurlow, Tallassee, Ala.
D. B. Egli, Kentucky
C. R. Tutt, Princeton, Ky.
J. R. Wilcox, Indiana
R. L. Bernard, Urbana, Ill.
D. R. Browning, Carbondale, Ill.
V. D. Luedders, Columbia, Mo.
Bob Hathock, Martin, Tenn.
J. R. Overton, Jackson, Tenn.
E. E. Hartwig, Stoneville, Miss.
Grover Shannon, Portageville, Mo.
C. E. Caviness, Arkansas
Donald Boquet, Keiser, Ark.
G. A. Berger, Jonesboro, Ark.
D. J. Albritton, Pine Bluff, Ark.
Curtis Williams, Baton Rouge, La.
L. W. Sloane, St. Joseph, La.
J. L. Rabb, Curtis, La.
L. J. Meyer, Columbus, Kan.
J. S. Kirby, Oklahoma
K. B. Porter, Bushland Texas
Douglas Owen, Halfway, Texas
R. D. Brigham, Lubbock, Texas
J. P. Craigmiles, Beaumont,Texas
R. A. Kinloch, Jay, Fla.

TABLE OF CONTENTS

Issued February 1976

COOPERATING AGENCIES AND PERSONNEL
For
Soybean Production Research
SOUTHERN REGION

Stoneville, Mississippi

Edgar E. Hartwig, Supervisory Research Agronomist
T. C. Kilen, Geneticist
B. L. Keeling, Pathologist
Calton J. Edwards, Jr., Agronomist, Res. Asst.
Kathryn W. Jamison, Statistical Clerk
Elizabeth Jackson, Laboratory Technician
J. Kenneth Buckner, Research Technician
Pat Butler, Research Technician

RALEIGH, NORTH CAROLINA

Charles A. Brim, Agronomist
John P. Ross, Pathologist
J. W. Burton, Research Geneticist
Sharon Usanis, Research Assistant
M. F. Young, Research Technician
Clifford Elledge, Research Technician

GAINESVILLE, FLORIDA

Kuell Hinson, Research Agronomist
Howard F. McGraw, Research Aid

ACKNOWLEDGMENT: Oil and protein determinations were made at Urbana, Illinois, under the supervision of Mr. Stephen J. Gibbons.

STATE COLLABORATORS IN THE SOUTHERN REGION

L. E. Ensminger
Alabama Agricultural Experiment Station
Auburn, Alabama

C. E. Caviness
Arkansas Agricultural Experiment Station
Fayetteville, Arkansas

H. A. Peacock
Agricultural Research Center
Jay, Florida

H. R. Boerma
Georgia Agricultural Experiment Station
Experiment, Georgia

Curtis Williams
Louisiana Agricultural Experiment Station
Baton Rouge, Louisiana

C. G. Shepherd
Mississippi Agricultural and Forestry Experiment Station
Delta Branch
Stoneville, Mississippi

C. A. Brim
North Carolina Agricultural Experiment Station
Raleigh, North Carolina

R. S. Matlock
Oklahoma Agricultural Experiment Station
Stillwater, Oklahoma

H. L. Musen
Edisto Experiment Station
Blackville, South Carolina

L. F. Seatz
Tennessee Agricultural Experiment Station
Knoxville, Tennessee

R. D. Brigham
Texas A&M University
Lubbock, Texas

T. J. Smith
Virginia Agricultural Experiment Station
Blacksburg, Virginia

INTRODUCTION

The soybean Production Research Program has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at three locations: Stoneville, Mississippi; Raleigh, North Carolina; and Gainesville, Florida. After promising new strains are developed at these breeding centers, or by any other cooperating agency, they are advanced to the preliminary and uniform regional tests, conducted in cooperation with research workers in the Southeastern States. This testing program enables the breeder to evaluate new strains under a wide variety of conditions, and permits new strains to be put into production in a minimum amount of time.

Ten uniform test groups have been established to evaluate the better strains developed in the breeding programs. The Groups 00 through IV are adapted in the northern part of the United States, and the Groups IV-S through VIII are grown in the southern part. Within their area of adaptation, there is a maturity range of 12 to 18 days within each maturity class. The best standard varieties available of each maturity class are used as check varieties with which to compare new strains as to seed yield, chemical composition, maturity, height, lodging, seed quality, and reaction to diseases. For the groups grown in the southern area, the major check varieties are: Kent, Essex, Mack, Forrest, Tracy, Pickett 71, Lee 74, Bragg, Hutton, and Cobb. At Stoneville, Mississippi, where all maturity classes will mature, the approximate maturity dates of these varieties, when planted during the first half of May are: Kent, September 8; Essex, September 25; Mack and Forrest, October 1; Tracy, October 13: Pickett 71 and Lee 74, October 16; Bragg, October 22; Hutton, November 1; and Cobb, November 6.

A wide range of soil and climatic conditions exist in the regions. As an aid in recognizing regional adaptation, the region has been subdivided into five rather broad areas which still represent a wide range of soil types. These are: (1) the East Coast, consisting of the Coastal Plain and Tidewater areas of the eastern shore of Maryland, Virginia, North Carolina, and the upper half of South Carolina; (2) the Southeast, consisting primarily of the Coastal Plain soils of the Gulf Coast area, but also including similar soil from South Carolina southward; (3) the Upper and Central South, including the Piedmont and loessal hill soils east of the Mississippi River; (4) the Delta area, composed of the alluvial soils along the Mississippi River from southern Missouri, southward; and (5) the Southwest, comprising Arkansas and Louisiana (outside the Delta), and Oklahoma and Texas. In the Southwest area, the potential soybean-growing areas would include the alluvial river soils, the gulf coast of Louisiana and Texas, and the high plains of Texas. In this area, several of the tests receive supplemental irrigation. A map is included to illustrate the five production areas.

On nearly all of the soils, other than the alluvial soils along the Mississippi River, fertilization is essential for satisfactory soybean production. In the Western area, irrigation is necessary for successful production. A table showing soil types, soil test information, and rate of fertilization is included.

The soil test information is based upon analyses run by laboratories within the states. Different methods are used for extraction and reporting by the various laboratories. An attempt is being made to report phosphorus and potash on a high, medium, and low basis, since pounds per acre may have different meanings in accordance with the methods used. In most cases, soil samples were taken after the soybeans were mature.

STRAIN IDENTIFICATION

The strains designated by number carry a letter prefix. This letter identifies where each strain was selected:

Co - Coker's Pedigreed Seed Co., Hartsville, S.C.
D - Delta Branch Experiment Station and ARS, USDA
F - Florida Agricultural Experiment Station and ARS, USDA
Ga - Georgia Agricultural Experiment Station
L - Illinois Agricultural Experiment Station and ARS, USDA
La - Louisiana Agricultural Experiment Station
Md - Maryland Agricultural Experiment Station and ARS, USDA
N - North Carolina Agricultural Experiment Station and ARS, USDA
R - Arkansas Agricultural Experiment Station
S - Missouri Agricultural Experiment Station and ARS, USDA
Ts - Texas Agricultural Experiment Station
UD - Delaware Agricultural Experiment Station
V - Virginia Agricultural Experiment Station

NOTE: A T in a Ga number indicates selection made at Tifton.

A second L in an L number indicates selection made in southern Illinois at Eldorado.

Location of soybean nurseries along with soil type, soil analysis, and fertilization

Location	IV	V	VI	VII	VIII	Soil type	P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
East Coast											
Clarksville, Md.	1					Chester silt loam				0-45-90	43.4 - A
Queenstown, Md.	1	1*				Mattapex silt loam	L	H	5.5	3-57-57	35.0 - E
Princess Anne, Md.	1	1	1			Othello silt					32.7 - E
Georgetown, Del.	1	1*				Norfolk loamy sand	H	H	6.1	40-40-40	50.1 - F
Warsaw, Va.	1	1*	1			Sassafras sandy loam	M	M	5.8	18-108-108	47.0 - E
Petersburg, Va.		1	1*			Marlboro f.s. loam	H	M	6.5	0-0-0	48.8 - F
Holland, Va.		1	1			Othello f.s. loam	VH	M+	6.0	0-0-0	53.5 - F
Plymouth, N.C.		1*	1*	1		Bladen f.s. loam	H	H	5.9	0-40-80	50.1 - G
Kinston, N.C.			1	1		Norfolk sandy loam				0-40-80	42.1 - L
Clinton, N.C.			1	1	1	Norfolk sandy loam				0-40-80	43.1 - G
Florence, S.C.			1	1	1	Dunbar sandy loam				0-0-0	48.6 - G
Hartsville, S.C.			1	1	1	NRrfolk sandy loam				18-54-108	52.5 - L
Southeast											
Blackville, S.C.(A)			1	1*	1	Varina loamy sand	VH	VH	5.8	0-38-75	37.9 - L
Blackville, S.C.(B)					1*	Varina loamy sand	H	M	6.1	0-38-75	30.0 - M
Tifton, Ga.			1	1	1	Tifton sandy loam	M	H	6.2	0-45-90	34.6 - K
Tallassee, Ala.				1*	1	Kahaba l.f.s	H	H	6.0	0-28-28	43.8 - K
Live Oak, Fla.				1	1*	Scranton fine sand				0-50-100	44.2 - K
Gainesville, Fla.				1	1*	Arredonda fine sand	H	M+	6.0	0-40-80	55.4 - K
Marianna, Fla.				1	1	Orangburg f.s.l.	H	H	5.8	25-50-75	43.1 - M
Quincy, Fla.			1	1	1*	Norfolk l.f.s.	H	H	5.7	0-70-70	38.2 - K
Jay, Fla.			1*	1*	1*	Orangeburg f.s.loam	H	H	6.2	0-128-64	42.6 - G
Fairhope, Ala.			1	1	1	Malbis f.s.l.	H	M	6.0	16-48-40	45.6 - K
Baton Rouge, La.			1	1*	1	Olivier silt loam	M	M	6.2	0-40-40	41.0 - K
Poplarville, Miss.				1	1	Ruston f.s.l.	M	M-	6.5	0-72-72	26.8 - K
Upper & Central South											
Orange, Va.	1	1				Davidson sandy loam			6.3	20-36-60	37.4 - E
Blairsville, Ga.	1	1				Dyke clay loam	VH	M	6.5	0-71-40	51.6 - E
Calhoun, Ga.		1	1	1		Leadvale silt loam	L	M	6.2	0-50-100	27.0 - F
Eldorado, Ill.	1					Harco silt loam	H	M	6.6	0-45-60	53.8 - A
Carbondale, Ill.	1					Stoy silt loam				0-50-150	55.5 - A
Princeton, Ky.	1	1				Crider silt loam	M	L	6.8	0-124-156	49.8 - F
Martin, Tenn.	1	1				Grenada silt loam	M	M	7.0	0-35-105	61.8 - F
Jackson, Tenn.		1	1			Grenada silt loam	M	H	6.3	0-0-0	58.4 - F
Belle Mina, Ala.		1	1*			Decatur clay loam	H	H	5.8	0-48-48	56.1 - G
Verona, Miss.		1	1			Tuscumbia silty clay	H+	M	7.9	0-80-80	29.1 - F
Athens, Ga.		1	1	1	1	Cecil sandy loam	VH	M	5.4	0-50-100	55.6 - G
Clemson, S.C.			1	1	1	Cecil sandy loam	VH	M+	6.3	0-28-28	37.3 - G

Location	IV	V	VI	VI	VIII	Soil type	P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
Delta											
Evansville, Ind.	1					Montgomery silty clay	M	H	5.7	12-36-72	66.5 - B
Portageville, Mo.(A)	1	1*	1*			Tiptonville silt loam	VH	VH	6.2	0-0-0	53.1 - G
Portageville, Mo.(B)	1	1	1			Portageville clay	VH	VH	6.3	0-0-0	42.0 - G
Keiser, Ark.	1	1*	1*			Sharkey clay	M	H	6.1	0-0-0	54.4 - F
Jonesboro, Ark.		1	1			Calloway silt loam	L	H	5.5	16-48-48	33.3 - F
Stoneville, Miss.(A)		1	1*	1*		Bosket f.s.l.	H	M+	6.7	0-0-0	53.5 - F
Stoneville, Miss.(B)	1	1*	1*	1*	1*	Sharkey clay	H	H	6.4	0-0-0	51.8 - G
Rohwer, Ark.			1	1		Perry clay	M	H	6.8	0-0-0	18.5 - G
St. Joseph, La.		1	1	1		Commerce silt loam	H	L	6.0	0-0-0	46.7 - G
West											
Columbus, Kan.	1	1				Cherokee silt loam	L	H	5.8	12-50-50	30.1 - F
Appleton City, Mo.	1	1				Parson silt loam	H	H		25-100-100	47.4 - F
Pine Bluff, Ark.		1	1	1		Calloway silt loam				0-100-188	36.1 - J
Stuttgart, Ark.		1	1	1		Crowley silt loam	VL	L	6.3	0-40-40	47.2 - F
Curtis, La.		1	1	1		Severn very f.s.l.	H	L	7.4	0-0-0	52.8 - G
Crowley, La.			1	1	1	Crowley S L				0-60-60	34.7 - G
Bixby, Okla.	1	1	1			Reinoch silt loam	VH	M	5.9	0-0-0	34.7 - F
Bushland, Texas	1					Pullman S.C.L.				0-0-0	34.4 - B
Halfway, Texas	1	1*	1			Pullman clay loam				0-0-0	39.4 - E
Lubbock, Texas	1	1	1			Amarillo loam	M	VH	8.1	0-0-0	47.7 - E
Beaumont, Texas			1	1*	1*	Morrey silt loam	M	M	5.6	12-48-48	51.4 - L
Uvalde, Texas				1	1	Uvalde S.L.C.	H	VH	7.2	0-0-0	27.5 - K
Clovis, N.M.	1									100-0-0	43.0 - B

[1]Fertilizer applied converted to pounds N, P_2O_5, K_2O. For example: 400# of 2-12-12 equals 8-48-48.

[2]Varieties: A = Kent; B = Columbus; C = Hill; D = Mack; E = Essex; F = Forrest; G = Tracy; J = Pickett 71; K = Bragg; L = Ransom; M = Hutton; N = Cobb

*Preliminary nursery also grown.

METHODS

The uniform nurseries were planted in 4-row plots with 3 replications. All seed was packeted at Stoneville, Mississippi, for planting 19-foot rows. In most cases a 16-foot section was harvested from each of the two center rows. Randomized block designs are used for groups. Row widths at the different locations vary from 30 to 40 inches. An attempt was made to follow the best cultural and management practices in conducting these strain comparisons.

The preliminary nurseries were planted in 4-row plots with 2 replications at each of 4 to 8 locations.

Planting Rate: All strains were packeted for planting at the rate of 9 seeds per foot.

Yields are taken by harvesting a 16-foot length from the mid-section of each plot. Actual seed weights are recorded after the seed of strains have a uniform moisture content. A bushel weight of 60 pounds is used in determining bushels per acre.

Shattering notes, where taken, are on the border rows, 14 days after maturity. The estimates are recorded on a scale of 1 to 5 as follows:

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

Chemical composition - percent oil and percent protein was determined from representative locations. Percentage composition of the seed is expressed on a moisture-free basis. All chemical analyses are made at Urbana, Illinois.

Seed size for each strain was determined from a composite sample from all replications at a location. Seed size is reported for the locations where seed was analyzed for chemical composition and is reported as weight in grams per 100 seeds.

Lodging notesare recorded on a scale of 1 to 5 according to the following criteria:

1 - almost all plants erect
2 - either all plants leaning slightly, or a few plants down
3 - either all plants leaning moderately, or 25 to 50% of the plants down
4 - either all plants leaning considerably, or 50 to 80% of plants down
5 - all plants down badly

Height is determined as the average length of plants in a plot from the ground to the top extremity at time of maturity.

Maturity is taken as the date when the pods are dry and most of the leaves have dropped. Under most conditions, the stems are also dry. Maturity in all summaries is expressed as days earlier (-) or later (+) than a standard or reference variety. Reference varieties used from the different uniform tests are as follows: Group IV, Kent; Group V, Essex; Group VI, Tracy; Group VII, Bragg; and Group VIII, Hutton.

Seed quality is rated from 1 to 5 according to the following scare:

1 - very good; 2 - good; 3 - fair; 4 - poor; and 5 - very poor

The factors considered in estimating seed quality are development of seed, wrinkling damage, and brightness. While the seed quality score indicates relative appearance of seed for the several varieties at one location, considerable difference can exist between factors responsible for the poorer grades in different locations.

Disease ratings are given on a scale of 1 to 5 as follows:

A. Foliar:

1 - immune to highly resistant

2 - lesions small and few in number

3 - lesions moderate in number and size

4 - lesions numerous and necrosis surround lesions

5 - leaves covered with lesions and much necrosis

B. Root and Stem:

1 - no plants killed

2 - 1 to 3% of plants killed

4 - 9 to 19% of plants killed

5 - over 20% of plants killed

In addition to percentage of plants killed, apparent plant vigor is considered in giving ratings for phytophthora rot.

C. Root knot ratings are based upon degree of galling development on roots. All ratings were made from a special planting on a heavily infested field in west Florida near the Jay station.

D. Purple stain or seedcoat mottling are determined as actual percentages at locations where the problem develops.

Statistical analyses - yield data are analyzed by analysis of variance. Differences necessary to indicate difference between strains (odds 19:1) are reported for each location and each area. Yield data from tests with extremely low yields or an extremely high co-efficient of variability are not included in calculating averages.

UNIFORM GROUP IV-S

1975

	Variety or strain	Parentage	Generation composited
1.	Kent	Lincoln X Ogden	F_7
2.	Columbus	C1069 X Clark	F_8
3.	Oksoy	Scott(6) X Blackhawk	F_6
4.	D66-5566	D49-2491(4) X Hawkeye	F_8
5.	D67-3297	Hill(2) X PI 171450	F_5
6.	V68-1242	PI 80837 X V63-76	F_3
7.	L71L-57	Wayne-*Rps* (L15) X Custer	
8.	L71L-77	Wayne-*Rps* (L15) X Custer	
9.	L71L-436	L12 X Custer	
10.	L71L-556	Cutler X Wayne-*Ir Rpm Rps*	
11.	Md70-1212	3rd cycle intercrosses of 8 lines	
12.	Md70-2605	3rd cycle intercrosses of 8 lines	

Background of strains used as parents:

C1069 is a selection from Lincoln X Ogden closely related to Kent.

D49-2491 is a sister line of Lee.

PI 171450 is a late-flowering strain of Group III maturity. It is considered a "summer type" at the 34° latitude level in Japan.

V63-76 is a selection from Hill X D53-354.

L12 is basically Clark with resistance to phytophthora rot, mildew, and light hilum.

Results of 22 IV-S nurseries are summarized in Tables 1 through 7. Table 1 gives a general summary of performance and characteristics of each of the strains. Two and three-year data are reported for seed yield, and oil and protein percentage of the seed.

Differences among strains for seed yield were significant at the 5% level of confidence at 16 locations. A combined analysis of variance for seed yield by production regions showed differences to be non-significant in the East Coast but significant in other areas.

Very little progress has been made toward developing superior strains for this range of maturity. C1068, which became Kent, was grown in Preliminary IV-S in 1956 and discarded after one year, because of shattering and poor seed quality. However, because of yield alone, a decision was made to release Kent on the basis of data from northern IV nurseries. In 1959, Kent was given seed quality scores of 3 or poorer in 68% of the nurseries. Kent has been the standard for the group since that time.

D66-5566 has been in Group IV-S 7 years. Seed yield and seed quality comparisons between Kent and D66-5566 for locations lying between 37° and 38° latitude are:

Location	Number years	Kent		D66-5566	
		Bu/A	Seed quality	Bu/A	Seed quality
Warsaw, Va.	7	37.9	2.8	39.7	1.8
Eldorado, Ill.	7	50.9	2.9	51.7	1.7
Carbondale, Ill.	7	46.2	2.8	46.6	1.6
Evansville, Ind.	6	44.1	2.0	44.4	1.6
Columbus, Kan.	7	26.4	2.1	31.6	1.8

Under ten situations where Kent received quality scores of 3 or poorer (avg. 3.6), D66-5566 received an average score of 2.0.

Three-year means for Columbus average below Kent for East Coast and Upper and Central locations. Oksoy means were slightly higher than Kent for East Coast and Delta. V68-1242, a very large seeded type, has averaged above Kent in the East Coast and has better seed quality.

Six strains were grown one year. L57L-57, -77, and -436 were selected for resistance to race 3 of the cyst nematode. L71L-436 yielded moderately well. L71L-556 yielded well in all areas but was weaker in seed quality than Kent. Md70-1212 also yielded moderately well.

Table 1 - General summary of performance for the strains in Uniform Group IV-S, 1975

	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
Seed Yield - 1975						
East Coast	38.0	39.1	42.3	43.1	38.8	44.4
Upper & Central South	47.3	44.8	43.7	49.7	47.2	51.0
Delta	48.6	48.6	51.6	46.6	49.6	43.0
West	35.5	34.3	33.1	36.0	33.6	30.9-
- 1974-75						
East Coast	38.4	37.8	41.8	41.7	39.0	43.0
Upper & Central South	45.0	41.3	41.6	44.5	40.5	45.0
Delta	42.1	41.7	42.4	41.2	42.1	39.5
West	37.1	37.3	35.2	39.6	36.8	35.8
- 1973-75						
East Coast	39.1	38.1	41.9	41.4	40.0	42.0
Upper & Central South	43.9	40.9	40.9	43.3	40.3	43.9
Delta	38.8	38.2	39.9	38.8	39.2	37.0
West	39.5	39.5	37.8	40.7	38.7	39.1
Oil Content-1975	21.3	20.1-	20.8	20.7	19.2-	20.2-
-1974-75	21.1	19.9	20.3	20.6	18.9	20.0
-1973-75	21.9	20.7	21.2	21.4	19.8	20.7
Protein Content-1975	41.3	42.4+	38.3-	42.7+	40.7	40.6
-1974-75	41.6	42.9	38.7	42.7	41.0	40.7
-1973-75	41.2	42.5	38.5	42.1	40.3	40.5
Seed size	17.4	15.5-	15.0-	14.9-	13.3-	20.0+
Maturity index	9-28	+6	+2	+1	+6	+5
Seed quality	2.8	2.1	2.6	2.1	2.2	2.0
Height	35	38	38	25	30	25
Bacterial pustule	S	S	R	R	R	S
Phytophthora rot	2.5	2.0	1.0	2.0	1.0	3.0
Shatter resistance	3.5	1.5	2.0	1.0	1.0	1.5
Percent mottled seed[1]	9.0	18.0	4.0	8.0	48.0	0.0
Percent purple seedcoat[2]	4.3	10.3	27.7	2.3	2.0	10.3
Flower color	P	P	P	P	W	P
Pubescence color	T	T	G	T	T	G
Pod wall	Br	Br	Br	T	T	T
Growth type	I	I	I	D	D	D

[1]Avg. Orange and Warsaw, Va. and Halfway, Texas

[2]Warsaw, Va.

Table 1 - (continued)

	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605
Seed Yield - 1975						
East Coast	39.4	39.4	37.8	43.4	41.1	39.3
Upper & Central South	43.9	42.4	43.9	50.3	48.4	44.9
Delta	46.8	45.4	51.7	51.8	43.7	46.3
West	29.7-	28.5-	31.9	34.8	38.2	38.6
- 1974-75						
East Coast						
Upper & Central South						
Delta						
West						
- 1973-75						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content-1975	21.8+	21.5	21.7	20.7	22.8+	21.5
-1974-75						
-1973-75						
Protein Content-1975	39.8-	38.4-	39.1-	42.7+	38.8-	41.3
-1974-75						
-1973-75						
Seed size	14.9-	14.9-	16.0-	18.2+	18.8+	17.3
Maturity index	-5	-3	-2	-2	0	+3
Seed quality	3.0	2.5	2.9	3.1	3.1	2.6
Height	39	38	38	36	37	40
Bacterial pustule	R	R	R	S	S	S
Phytophthora rot	2.5	1.0	1.0	1.0	2.0	2.0
Shatter resistance	4.0	4.0	2.0	2.0	2.0	3.0
Percent mottled seed[1]	4.0	9.0	4.0	6.0	10.0	2.0
Percent purple seedcoat[2]	3.7	2.7	8.7	8.7	9.7	11.3
Flower color	P	W	P	W&P	W	W
Pubescence color	G	T	G	T	T	T
Pod wall	T	Br	Br	Br	Br	Br
Growth type	I	I	I	I	I	I

Table 2 - Seed yield, in bushels per acre, for the strains in Uniform Group IV-S, 1975

Location	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242	L71L-57
			East Coast				
Clarksville, Md.	43.4	45.1	42.8	45.8	38.3-	48.1+	44.5
Queenstown, Md.	32.9	36.2	40.7+	41.3+	38.0+	42.2+	39.8+
Princess Anne, Md.	33.3	35.2	34.8	31.6	32.6	38.1	31.7
Georgetown, Del.	36.9	42.6	50.0	44.5	45.8	48.4	44.9
Warsaw, Va.	43.4	36.3-	43.2	49.2	39.3	45.1	36.0-
Mean	38.0	39.1	42.3	43.1	38.8	44.4	39.4
			Upper and Central South				
Orange, Va.	36.2	31.4	32.6	40.2+	34.8	35.8	34.3
Blairsville, Ga.	33.5	42.0+	38.3	40.6	48.7+	50.9+	33.5
Eldorado, Ill.	53.8	57.9	52.1	59.9+	56.9	61.3+	49.0
Carbondale, Ill.	55.5	50.3-	47.6-	53.9	50.3-	56.7	52.8
Princeton, Ky.	57.7	42.4-	47.7-	53.7	45.2-	50.4	50.1-
Mean	47.3	44.8	43.7	49.7	47.2	51.0	43.9
			Delta				
Evansville, Ind.	61.8	66.6	76.0	54.0	61.7	57.6	67.0
Portageville, Mo.(A)	49.1	46.4	50.9	45.8	45.5	47.0	45.0
Portageville, Mo.(B)	42.7	40.4	44.0	45.4	45.5	40.0	40.4
Martin, Tenn.	56.7	57.6	54.4	54.8	58.0	45.2	49.5
Keiser, Ark.	32.8	32.0	32.7	32.8	37.5	25.0	32.2
Stoneville, Miss.(B)*	14.5	12.6	22.9+	9.5	25.0+	6.7-	20.4
Mean	48.6	48.6	51.6	46.6	49.6	43.0	46.8
			West				
Columbus, Kan.	17.7	16.8	18.9	21.8	23.1+	17.3	12.0-
Appleton City, Mo.*	37.7	42.3	43.0	37.8	40.4	45.8+	30.6-
Bixby, Okla.	27.0	30.5	30.6	27.0	28.6	23.3	34.5+
Bushland, Texas	39.5	34.4	30.7-	33.7	25.2-	30.3-	29.5-
Halfway, Texas	38.5	40.2	40.1	38.0	37.5	35.1	36.9
Lubbock, Texas	46.2	45.8	42.5	50.6+	48.4	40.9-	40.6-
Clovis, N.M.*	38.6	44.8	34.7	43.0	34.6	34.6	30.9
Mean	35.5	34.3	33.1	36.0	33.6	30.9-	29.7-

*Not included in mean.
(+) - Strains yielding significantly more (odds 19:1 or greater) than Kent.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Kent.

Table 2 - (continued)

Location	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605	L.S.D. (.05)	C.V. (%)
			East Coast				
Clarksville, Md.	39.4	41.5	50.0+	46.6	40.7	4.6	6
Queenstown, Md.	37.3+	38.5+	43.0+	40.2+	34.4	4.3	7
Princess Anne, Md.	35.1	27.5	34.1	30.9	34.6	N.S.	13
Georgetown, Del.	44.7	42.7	44.6	46.5	44.4	N.S.	10
Warsaw, Va.	40.7	38.6	45.3	41.3	42.5	4.3	6
Mean	39.4	37.8	43.4	41.1	39.3	N.S.	
			Upper and Central South				
Orange, Va.	33.4	34.8	40.8+	39.2	34.6	3.8	6
Blairsville, Ga.	37.0	32.6	39.8	44.1+	41.8	7.3	7
Eldorado, Ill.	44.1-	49.2	53.4	49.2	50.7	6.0	7
Carbondale, Ill.	46.4-	52.7	61.1+	56.2	54.2	5.1	6
Princeton, Ky.	51.0	50.1	56.1	53.1	43.1	7.6	9
Mean	42.4	43.9	50.3	48.4	44.9	5.2	
			Delta				
Evansville, Ind.	57.6	73.1	69.1	51.3	55.1	N.S.	23
Portageville, Mo.(A)	44.6	48.2	48.1	44.6	44.6	N.S.	8
Portageville, Mo.(B)	43.0	46.1	51.1+	38.0-	40.6	4.4	6
Martin, Tenn.	53.6	54.7	58.3	47.4	57.3	N.S.	12
Keiser, Ark.	28.3	36.3	32.6	37.3	33.7	N.S.	14
Stoneville, Miss.(B)*	29.8+	24.2+	35.0+	18.7	19.3	6.8	20
Mean	45.4	51.7	51.8	43.7	46.3	5.5	
			West				
Columbus, Kan.	16.9	15.6	16.7	20.7	18.0	4.7	15
Appleton City, Mo.*	34.3	38.0	38.3	35.8	36.0	7.1	9
Bixby, Okla.	24.3	30.9	29.6	29.9	27.6	6.0	12
Bushland, Texas	29.4-	30.0-	36.6	38.8	39.7	6.1	11
Halfway, Texas	27.7-	39.6	41.1	46.4	47.5+	8.8	13
Lubbock, Texas	39.8-	42.5	45.0	47.1	49.0	4.4	6
Clovis, N.M.*	34.1	37.6	38.4	34.6	36.6	--	11
Mean	28.5-	31.9	34.8	38.2	38.6	4.5	

Table 3-Chemical composition and seed size for the strains in Uniform Group IV-S, 1975

Location	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
			Oil Percentage			
Queenstown, Md.	21.2	19.5	20.2	20.2	18.6	19.5
Warsaw, Va.	22.4	21.2	22.7	22.0	20.3	21.7
Carbondale, Ill.	20.7	19.4	20.2	19.9	18.7	20.6
Evansville, Ind.	21.4	20.4	20.8	21.0	19.6	19.8
Portageville, Mo.(A)	22.3	20.5	22.9	22.2	21.1	21.2
Bixby, Okla.	20.4	19.3	18.6	19.6	18.0	18.5
Halfway, Texas	20.8	20.6	20.3	20.0	18.2	20.2
Mean	21.3	20.1-	20.8	20.7	19.2-	20.2-
			Protein Percentage			
Queenstown, Md.	41.8	44.3	39.8	43.7	42.8	42.5
Warsaw, Va.	40.7	40.8	37.2	41.2	40.5	39.4
Carbondale, Ill.	43.0	43.9	40.1	45.0	41.5	40.1
Evansville, Ind.	41.5	41.8	38.7	43.7	40.4	41.1
Portageville, Mo.(A)	40.0	42.0	37.0	41.0	40.7	40.5
Bixby, Okla.	40.3	41.5	36.4	41.0	39.2	40.1
Halfway, Texas	41.6	42.5	38.7	43.3	40.1	40.7
Mean	41.3	42.4+	38.3-	42.7+	40.7	40.6
			Grams Per 100 Seeds			
Queenstown, Md.	17.5	15.3	16.0	16.1	15.6	19.3
Warsaw, Va.	15.0	13.0	13.6	13.7	11.8	18.6
Blairsville, Ga.	21.0	17.7	16.3	15.7	13.5	23.0
Carbondale, Ill.	19.4	16.8	16.5	16.3	14.6	19.6
Evansville, Ind.	15.9	16.5	14.2	14.5	13.1	20.4
Portageville, Mo.(A)	14.6	13.4	12.3	13.2	12.5	17.4
Bixby, Okla.	15.1	14.1	14.1	13.1	11.9	20.0
Halfway, Texas	20.7	17.2	17.0	16.5	13.5	22.0
Mean	17.4	15.5-	15.0-	14.9-	13.3-	20.0+

Table 3 - (continued)

Location	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605	L.S.D. (.05)
			Oil Percentage				
Queenstown, Md.	20.7	21.2	21.4	19.9	2.6	20.5	
Warsaw, Va.	23.7	23.4	23.6	21.5	24.8	23.2	
Carbondale, Ill.	20.8	20.6	20.7	20.6	21.8	21.4	
Evansville, Ind.	22.2	21.6	22.3	21.6	22.9	21.7	
Portageville,Mo.(A)	23.3	23.3	22.7	20.7	24.9	22.0	
Bixby, Okla.	20.5	19.3	19.7	19.6	20.5	20.0	
Halfway, Texas	21.3	21.1	21.3	21.1	21.9	21.4	
Mean	21.8+	21.5	21.7	20.7	22.8+	21.5	0.5
			Protein Percentage				
Queenstown, Md.	41.8	39.2	39.6	44.0	39.9	42.4	
Warsaw, Va.	38.1	36.5	37.3	42.1	37.9	39.1	
Carbondale, Ill.	43.0	41.1	41.6	45.6	40.4	42.8	
Evansville, Ind.	40.1	38.8	39.3	44.5	39.0	41.8	
Portageville, Mo.(A)	38.2	37.5	38.6	43.6	37.2	41.3	
Bixby, Okla.	38.2	37.9	38.2	41.3	37.9	40.3	
Halfway, Texas	39.4	38.1	39.4	38.1	39.3	41.6	
Mean	39.8-	38.4-	39.1-	42.7+	38.8-	41.3	0.9
			Grams Per 100 Seeds				
Queenstown, Md.	16.5	16.1	15.9	17.3	18.5	16.9	
Warsaw, Va.	12.8	13.1	13.9	16.2	16.2	16.1	
Blairsville, Ga.	16.1	16.8	17.0	21.0	21.1	20.4	
Carbondale, Ill.	16.4	15.7	16.6	21.1	19.9	18.1	
Evansville, Ind.	14.0	14.2	15.6	17.2	18.8	16.5	
Portageville,Mo.(A)	13.3	12.5	14.7	16.1	15.5	14.7	
Bixby, Okla.	12.9	13.1	14.9	16.0	17.5	15.5	
Halfway, Texas	17.2	17.3	19.0	21.1	22.6	20.1	
Mean	14.9-	14.9-	16.0-	18.2+	18.8+	17.3	0.8

Table 4 - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV-S, 1975

Location	Date planted	Kent matured	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
			East Coast				
Clarksville, Md.	6-11	10-18	+7	+2	+1	+12	+8
Queenstown, Md.	5-27	9-25	+13	+8	-1	+8	+11
Princess Anne, Md.	6-17	10-4	+8	+3	+1	+5	+5
Georgetown, Del.	5-27	9-27	+8	+6	0	+5	+9
Warsaw, Va.	5-19	9-19	+12	+6	+2	+11	+8
Mean		10-1	+10	+5	0	+8	+8
			Upper and Central South				
Orange, Va.	--	10-13	+2	0	0	0	0
Blairsville, Ga.	5-29	9-27	0	+2	0	+6	+1
Eldorado, Ill.	5-18	9-29	+7	+4	+2	+6	+7
Carbondale, Ill.	6-4	10-3	+6	+4	-1	+4	+5
Princeton, Ky.	5-20	9-25	+5	+4	+1	+5	+6
Mean		10-1	+4	+3	0	+4	+4
			Delta				
Portageville,Mo.(A)	5-5	9-13	+8	+6	-3	+3	+7
Portageville,Mo.(B)	5-19	9-29	+6	+1	-1	+1	+5
Martin, Tenn.	6-5	10-1	+2	0	0	+2	+2
Keiser, Ark.	5-20	9-17	+3	+1	+1	+4	+5
Stoneville,Miss.(B)	5-22	9-14	+9	-1	-2	0	+3
Mean		9-21	+6	+1	-1	+2	+4
			West				
Columbus, Kan.	5-28	9-29	+2	0	0	0	+7
Halfway, Texas	5-27	9-30	0	0	+5	+7	0
Lubbock, Texas	5-27	9-25	+4	-1	+10	+15	+10
Clovis, N.M.*	5-27	10-1	+5	-1	+10	+14	+5
Mean		9-29	+3	0	+6	+9	+6

*Not included in mean.

Table 4 - (continued)

Location	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605
			East Coast			
Clarksville, Md.	-5	-4	0	0	0	+3
Queenstown, Md.	-7	-1	0	-4	+1	+8
Princess Anne, Md.	-4	-2	-3	-2	+1	+5
Georgetown, Del.	+1	0	0	+1	+5	+7
Warsaw, Va.	-4	+2	+2	-1	+3	+6
Mean	-4	-1	0	-1	+2	+6
			Upper and Central South			
Orange, Va.	-7	0	-7	-7	0	0
Blairsville, Ga.	-7	-5	-7	+1	0	0
Eldorado, Ill	-11	-6	-2	-1	-2	+3
Carbondale, Ill.	-4	-3	-3	-2	+1	+5
Princeton, Ky.	-4	-4	-2	+2	+1	+5
Mean	-2	-4	-4	-1	0	+3
			Delta			
Portageville,Mo.(A)	-10	-4	-2	-8	0	+3
Portageville,Mo.(B)	-11	-7	-5	-5	-1	+1
Martin, Tenn.	0	+2	0	+1	0	+2
Keiser, Ark.	-14	-3	-1	-2	+1	+3
Stoneville,Miss.(B)	-2	-3	-3	-3	0	0
Mean	-7	-3	-2	-3	0	+2
			West			
Columbus, Kan.	-8	-8	-3	-3	-1	+4
Halfway, Texas	-5	0	0	0	0	0
Lubbock, Texas	-8	+1	-2	-3	-2	-1
Clovis, N.M.*	-4	-4	-4	-2	-1	-2
Mean	-6	-3	-2	-2	-1	0

Table 5 - Plant height for the strains in Uniform Group IV-S, 1975

Location	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
			East Coast			
Clarksville, Md.	42	40	42	30	34	34
Queenstown, Md.	45	43	48	30	34	35
Princess Anne, Md.	30	32	37	28	30	27
Georgetown, Del.	44	45	47	32	37	35
Warsaw, Va.	45	47	47	30	41	32
Mean	41	41	44	30	35	33
			Upper and Central South			
Orange, Va.	41	42	44	28	35	30
Blairsville, Ga.	27	34	33	25	35	27
Eldorado, Ill.	43	49	49	29	37	32
Carbondale, Ill.	38	40	44	27	33	31
Princeton, Ky.	39	45	42	28	33	30
Mean	38	42	42	27	35	30
			Delta			
Evansville, Ind.	41	45	41	21	26	26
Portageville, Mo.(A)	35	44	39	17	25	17
Portageville, Mo.(B)	33	39	36	19	29	22
Martin, Tenn.	39	42	40	22	33	19
Keiser, Ark.	29	35	31	17	25	15
Stoneville, Miss.(B)	17	23	24	10	17	9
Mean	32	38	35	18	26	18
			West			
Columbus, Kan.	22	24	24	18	24	19
Appleton City, Mo.	27	33	32	34	29	26
Bixby, Okla.	30	28	35	20	24	19
Bushland, Texas	30	35	36	25	28	20
Halfway, Texas	33	40	41	25	33	25
Lubbock, Texas	34	36	36	22	26	22
Clovis, N.M.	31	36	37	39	33	30
Mean	30	33	34	26	28	23

Table 5 - (continued)

Location	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605
			East Coast			
Clarksville, Md.	45	43	47	43	43	45
Queenstown, Md.	49	48	50	45	47	51
Princess Anne, Md.	36	34	35	31	35	37
Georgetown, Del.	48	44	46	41	43	45
Warsaw, Va.	47	47	46	46	45	50
Mean	45	43	45	41	43	46
			Upper and Central South			
Orange, Va.	45	43	44	42	46	47
Blairsville, Ga.	34	32	29	29	31	31
Eldorado, Ill.	52	50	46	47	48	52
Carbondale, Ill.	46	41	43	39	42	44
Princeton, Ky.	44	46	43	39	43	43
Mean	44	42	41	39	42	43
			Delta			
Evansville, Ind.	41	41	45	42	42	44
Portageville, Mo.(A)	34	39	37	33	37	44
Portageville, Mo.(B)	36	38	35	38	35	40
Martin, Tenn.	46	45	40	43	41	46
Keiser, Ark.	32	32	33	31	36	36
Stoneville, Miss.(B)	22	26	23	29	21	24
Mean	35	37	36	36	35	39
			West			
Columbus, Kan.	25	27	25	23	28	26
Appleton City, Mo.	33	31	32	30	33	32
Bixby, Okla.	31	31	34	30	32	34
Bushland, Texas	37	36	36	31	29	31
Halfway, Texas	43	37	37	35	37	38
Lubbock, Texas	37	36	36	33	35	35
Clovis, N.M.	36	35	36	32	30	34
Mean	35	33	34	31	32	33

Table 6 - Lodging scores for the strains in Uniform Group IV-S, 1975

Location	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
			East Coast			
Clarksville, Md.	2.5	4.5	3.2	3.7	4.3	3.2
Queenstown, Md.	2.0	5.0	2.8	2.0	3.3	2.0
Princess Anne, Md.	1.5	1.8	2.2	2.3	3.2	1.5
Georgetown, Del.	2.0	3.0	2.0	2.3	2.5	2.0
Warsaw, Va.	1.3	3.8	2.3	1.6	2.1	1.6
			Upper and Central South			
Orange, Va.	1.3	3.3	2.3	1.3	4.0	1.0
Blairsville, Ga.	1.0	2.0	1.5	2.3	2.3	1.3
Eldorado, Ill.	2.0	3.0	3.6	3.3	3.8	2.3
Carbondale, Ill.	2.0	3.0	2.0	2.0	2.0	2.0
Princeton, Ky.	1.0	2.7	2.3	2.7	2.0	1.7
			Delta			
Evansville, Ind.	2.3	3.5	3.0	2.5	2.8	1.8
Portageville, Mo.(A)	1.2	2.5	1.3	1.5	1.7	1.0
Portageville, Mo.(B)	1.7	1.8	2.0	1.3	1.8	1.0
Martin, Tenn.	1.0	3.0	2.0	1.0	1.0	1.0
Keiser, Ark.	2.0	1.8	1.8	1.0	1.0	1.3
Stoneville, Miss.(B)	1.3	2.3	2.0	1.0	1.3	1.0
			West			
Columbus, Kan.	1.0	1.0	1.0	1.0	1.0	1.0
Appleton City, Mo.	1.3	1.7	1.8	2.0	2.9	1.0
Bixby, Okla.	1.0	1.3	1.3	1.3	1.0	1.0
Bushland, Texas	1.7	2.0	2.2	2.5	3.7	3.5
Halfway, Texas	1.7	1.7	2.3	1.0	1.3	1.0
Lubbock, Texas	1.7	2.0	2.0	1.0	2.5	1.0
Clovis, N.M.	1.0	1.3	1.7	3.0	3.0	2.0

Table 6 - (continued)

Location	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605
			East Coast			
Clarksville, Md.	4.0	3.7	3.8	4.0	3.3	3.5
Queenstown, Md.	3.0	3.0	2.5	3.3	3.2	2.8
Princess Anne, Md.	2.5	2.0	1.8	2.0	1.8	2.2
Georgetown, Del.	3.0	2.2	2.7	2.3	2.3	2.2
Warsaw, Va.	3.8	3.4	4.1	3.2	3.0	2.7
			Upper and Central South			
Orange, Va.	4.3	2.7	3.0	1.7	2.7	3.0
Blairsville, Ga.	1.8	1.7	1.5	1.8	2.0	1.8
Eldorado, Ill.	2.8	2.7	3.1	2.9	3.3	3.5
Carbondale, Ill.	3.0	2.0	2.0	2.0	2.0	3.0
Princeton, Ky.	2.0	2.0	2.3	2.0	2.7	3.7
			Delta			
Evansville, Ind.	3.2	3.2	3.0	3.3	3.0	3.3
Portageville, Mo.(A)	2.7	1.7	2.0	2.3	2.3	2.7
Portageville, Mo.(B)	2.7	1.7	3.0	2.7	2.0	2.2
Martin, Tenn.	2.0	1.0	1.0	1.0	3.0	2.0
Kesier, Ark.	2.3	1.7	2.3	1.8	2.0	2.5
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Columbus, Kan.	1.0	1.0	1.0	1.0	1.0	1.0
Appleton City, Mo.	1.7	1.6	1.4	1.8	2.1	1.7
Bixby, Okla.	2.0	1.7	2.0	1.3	1.7	1.3
Bushland, Texas	3.2	2.0	2.0	2.5	2.2	2.0
Halfway, Texas	2.0	1.3	1.7	2.0	1.3	1.3
Lubbock, Texas	3.0	1.7	2.7	2.5	2.0	2.0
Clovis, N.M.	1.3	1.7	1.0	1.3	1.3	1.0

Table 7 - Seed quality scores for the strains in Uniform Group IV-S, 1975

Location	Kent	Columbus	Oksoy	D66-5566	D67-3297	V68-1242
			East Coast			
Clarksville, Md.	2.5	2.0	2.0	2.0	2.0	1.5
Queenstown, Md.	3.5	2.5	3.0	3.5	3.0	2.0
Princess Anne, Md.	3.0	2.5	3.0	2.5	3.0	1.5
Georgetown, Del.	2.5	2.3	2.7	2.2	2.7	2.0
Warsaw, Va.	3.8	2.3	4.0	2.5	3.0	2.5
			Upper and Central South			
Orange, Va.	1.7	1.0	2.0	2.0	3.0	1.0
Blairsville, Ga.	3.2	2.0	3.2	1.8	1.5	1.8
Eldorado, Ill.	3.3	1.5	2.8	1.5	1.3	1.7
Carbondale, Ill.	2.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	3.0	4.0	2.3	2.0	2.0	4.7
			Delta			
Evansville, Ind.	1.5	1.5	2.0	1.5	1.5	1.5
Portageville, Mo.(A)	3.5	2.0	2.5	2.0	2.5	2.5
Portageville, Mo.(B)	3.0	2.0	3.0	2.5	2.5	1.5
Martin, Tenn.	2.5	1.5	4.0	2.0	3.0	2.5
Keiser, Ark.	1.7	1.3	1.0	1.0	1.0	1.0
Stoneville, Miss.(B)	2.7	2.7	2.7	2.0	2.0	2.0
			West			
Columbus, Kan.	2.7	2.5	2.9	2.7	2.7	2.7
Appleton City, Mo.	4.5	3.0	4.5	4.5	2.5	2.5
Bushland, Texas	2.0	2.0	1.5	1.5	2.5	3.0

Table 7 - (continued)

Location	L71L-57	L71L-77	L71L-436	L71L-556	Md70-1212	Md70-2605
			East Coast			
Clarksville, Md.	2.0	2.0	2.5	2.0	2.5	1.5
Queenstown, Md.	3.5	3.0	3.0	3.0	3.0	3.0
Princess Anne, Md.	4.2	3.0	3.0	3.0	3.0	2.0
Georgetown, Del.	2.8	2.5	2.8	2.8	2.8	2.7
Warsaw, Va.	3.5	3.5	4.5	4.0	3.5	3.8
			Upper and Central South			
Orange, Va.	4.3	2.0	4.3	4.3	3.0	1.0
Blairsville, Ga.	2.5	3.2	1.8	3.5	3.2	2.5
Eldorado, Ill.	2.8	2.3	3.2	3.3	3.5	3.3
Carbondale, Ill.	2.0	1.0	1.0	2.0	2.0	1.0
Princeton, Ky.	2.7	2.7	3.7	4.7	4.0	3.0
			Delta			
Evansville, Ind.	2.0	2.0	1.5	3.0	2.0	1.5
Portageville, Mo.(A)	3.0	2.5	3.0	3.0	4.0	2.5
Portageville, Mo.(B)	2.5	2.5	2.0	3.5	3.5	4.0
Martin, Tenn.	4.0	2.5	3.5	3.5	4.0	3.0
Keiser, Ark.	1.0	1.0	1.0	1.0	1.7	1.7
Stoneville, Miss.(B)	3.0	2.7	3.3	2.0	2.7	2.7
			West			
Columbus, Kan.	3.1	2.6	3.2	2.9	3.0	3.0
Appleton City, Mo.	4.5	4.5	4.5	4.5	4.5	4.5
Bushland, Texas	3.0	2.0	2.5	2.0	2.5	2.5

UNIFORM GROUP V

1975

	Variety or strain	Parentage	Generation composited
1.	Essex	Lee X S5-7075	F_6
2.	Forrest	Dyer X Bragg	F_5
3.	D70-3115	D64-4636 X tawny pubescence Pickett 71 type	F_5
4.	R70-332	(Davis X Lee 68) X R60-66	F_5
5.	D71-6860	D64-4636 X D64-3937	F_5
6.	D72-8814	D64-3253(2) X D65-3168	F_5
7.	N72-7	D64-3253 X D65-3168	F_5
8.	N72-40	D64-3253 X D65-3168	F_5
9.	N72-55	D64-3253 X D65-3168	F_5
10.	R71-626	(Davis X Lee 68) X R60-66	F_4
11.	V72-128	PI 96983 X V66-318	
12.	V72-580	York X R62-550	

Background of strains used as parents:

S5-7075 is a selection from N48-1248 X Perry which was grown in Uniform Group VI. N48-1248 has the same parentage as Hood.

D64-4636 is a selection from Hill X D58-3311. D58-3311 is a bacterial pustule resistant selection from Jackson(4) X D49-2491.

R60-66 is a selection from Dortchsoy 67 X Lee.

D64-3937 is a selection from Hill X D59-1619. D59-1619 is a selection from D51-5427 X D49-2491. D51-5427 is a selection from Ralsoy X Ogden.

D64-3253 is D49-2491 converted to earlier maturity with Hawkeye as a non-recurrent parent.

D65-3168 is a selection Hill X PI 96983 resistant to phytophthora rot, bacterial pustule, and soybean mosaic virus.

V66-318 is a selection from D53-184 X J22.

R62-550 is a selection from (R64-168 X Hill) X (Lee X Dortchsoy 110).

Thirty-two Uniform Group V nurseries were grown. Results are summarized in Tables 8 through 14. Table 8 gives a general summary of performance along with characteristics of each of the strains. Two- and three-year data are reported for seed yield and oil and protein percentage of the seed.

Differences among strains for seed yield were significant (odds 19:1 or greater) at 20 locations. The combined analysis of variance for seed yield by production regions showed differences among strains to be non-significant in the East Coast and West.

Separate plantings were made near the West Florida Research Center to evaluate strains for reaction to the root knot nematode *Meloidogyne incognita* and *M. areanaira*. Phytophthora rot ratings were made in the field at Stoneville.

Mean yields for Forrest were slightly higher than for Essex in all production regions. This is in contrast to 1974 results when Essex was higher in all areas. Forrest averages 6 days later than Essex. A freeze killed most varieties prior to maturity at many of the locations in 1974.

D70-3115, which like Forrest is resistant to race 3 of the soybean cyst nematode, has shown no yield advantage over Forrest. D70-3115 is resistant to phytophthora rot. R70-332 has a 2-year mean slightly above Forrest in the East Coast but slightly below the mean for Essex.

D71-6860 averaged lower in yield in all areas than Forrest or Essex. The four strains D72-8814, N72-7, N72-40, and N72-55 are resistant to soybean mosaic virus. Not any proved outstanding in productivity. Of the strains grown 1 year, only V72-580 appeared to have real good yield potential.

Table 8 - General summary of performance of the strains in Uniform Group V, 1975

	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814
Seed Yield - 1975						
East Coast	41.2	41.7	41.5	41.4	37.3	37.0
Upper & Central South	41.9	42.9	40.7	41.3	39.4	37.7-
Delta	46.4	47.8	46.3	45.4	42.4-	42.1-
West	34.9	35.2	35.1	33.7	33.1	32.1
- 1974-75						
East Coast	43.6	39.5	41.3	41.9		
Upper & Central South	40.8	38.8	37.7	37.7		
Delta	41.4	43.4	43.8	43.5		
West	36.8	37.8	37.1	37.8		
- 1973-75						
East Coast	43.4	39.3				
Upper & Central South	41.9	39.3				
Delta	42.3	44.3				
West	39.9	41.3				
Oil Content-1975	20.8	21.0	21.3+	21.6+	19.7-	19.2-
-1974-75	20.7	20.9	21.2	21.7		
-1973-75	21.4	21.7				
Protein Content-1975	41.3	38.7-	39.9-	39.4-	40.9	42.6+
-1974-75	42.0	39.3	40.5	39.8		
-1973-75	41.6	39.0				
Seed size	12.3	12.2	13.5+	12.6	11.7	14.0+
Seed quality	2.0	1.9	2.2	1.9	2.1	2.0
Maturity index	10-3	+6	+6	+4	+3	+2
Height	29	35	35	34	35	31
Bacterial pustule	R	R	R	R	R	R
Phytophthora rot	2.5	1.5	1.0	1.0	1.0	1.0
Shatter resistance	1.5	1.0	1.0	1.0	2.0	1.0
Soybean mosaic virus	S	S	S	S	S	R
Percent purple seedcoat[1]	0.3	3.0	5.0	6.3	1.7	1.0
M. incognita[2]	5.0	2.0	2.0	5.0	4.0	5.0
M. arenaria[2]	4.0	3.0	5.0	5.0	4.0	5.0
Cyst nematode (race 3)	S	R	R	S	S	S
Flower color	P	W	W	P	W	P
Pubescence color	G	T	T	G	G	T
Pod wall color	T	T	T	T	T	T

[1]Princess Anne, Md.

[2]Ratings made from field plantings near West Florida Research Center.

Table 8 - (continued)

	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580
Seed Yield - 1975						
East Coast	40.1	40.4	40.6	40.4	37.4	43.0
Upper & Central South	38.7-	40.1	40.6	40.4	39.8	44.4
Delta	41.9-	41.8-	44.0	43.7	42.4-	46.9
West	31.8	31.9	34.0	35.6	29.6	36.1
- 1974-75						
East Coast						
Upper & Central South						
Delta						
West						
- 1973-75						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content-1975	18.8-	18.8-	19.3-	19.8-	19.0-	22.0+
-1974-75						
-1973-75						
Protein Content-1975	42.1+	42.6+	41.4	41.5	42.7+	38.9-
-1974-75						
-1973-75						
Seed size	12.1	14.5+	13.7+	13.1+	14.3+	15.0+
Seed quality	2.1	1.9	1.8	1.9	2.0	1.9
Maturity index	-1	+3	+4	+1	+4	+4
Height	34	35	35	34	35	36
Bacterial pustule	R	R	R	R	R	R
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Shatter resistance	1.0	1.0	1.0	1.0	1.0	1.0
Soybean mosaic virus	R	R	R	S	S	S
Percent purple seedcoat[1]	5.0	1.7	1.3	2.3	0.7	2.0
M. incognita[2]	4.0	5.0	5.0	5.0	5.0	4.0
M. arenaria[2]	4.0	4.0	3.0	5.0	2.0	4.0
Cyst nematode (race 3)	S	S	S	S	S	S
Flower color	P	P	W	W	P	P
Pubescence color	T	G	G	G	G	G
Pod wall color	T	T	T	T	T	T

Table 9 - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1975

Location	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814	N72-7
			East Coast				
Queenstown, Md.	35.0	31.8	35.6	33.5	32.6	33.8	35.2
Pincess Anne, Md.	32.7	27.9	44.6+	41.4	30.0	37.8	42.8
Georgetown, Del.	49.1	50.1	51.7	50.3	46.5	46.3	47.4
Warsaw, Va.	47.0	35.3-	37.1-	41.4	30.8-	30.4-	38.6-
Petersburg, Va.	35.7	48.8+	34.2	32.0	40.8+	34.9	35.5
Holland, Va.	48.4	53.5	50.3	48.9	42.8	42.7	45.6
Plymouth, N.C.	40.9	44.6	37.0	42.6	37.2	32.8-	35.6
Jay, Fla.*	42.9	41.3	38.5	41.3	33.0-	39.3	38.1
Mean	41.2	41.7	41.5	41.4	37.3	37.0	40.1
			Upper and Central South				
Orange, Va.	37.4	36.7	31.1-	34.1	30.3-	32.1-	34.7
Blairsville, Ga.	51.6	46.8	34.8	46.1	41.2	39.8	46.6
Calhoun, Ga.	23.6	27.0	30.4+	27.1	25.7	20.5	21.7
Athens, Ga.	39.1	34.0	40.3	39.6	35.7	37.5	32.5
Belle Mina, Ala.	38.5	42.4	34.1	33.3	36.2	29.8	28.7
Princeton, Ky.	44.7	49.8	41.0	44.7	43.6	43.9	45.0
Martin, Tenn.	58.0	61.8	60.6	63.8	49.4-	49.7-	53.1
Jackson, Tenn.	57.9	58.4	53.4	52.2-	52.2-	51.8-	51.5-
Verona, Miss.	26.1	29.1	40.5+	30.7	39.8+	33.9+	34.5+
Mean	41.9	42.9	40.7	41.3	39.4	37.7-	38.7-
			Delta				
Portageville, Mo.(A)	43.6	46.1	47.4	47.5	36.4-	42.8	42.1
Portageville, Mo.(B)	54.4	48.1	49.5	50.8	47.1	47.5	44.9
Keiser, Ark.	43.2	57.4	48.5	45.7	51.7	50.4	49.0
Jonesboro, Ark.	28.8	33.3	27.8	25.6	25.0	23.4	23.7
Stoneville, Miss.(A)	45.0	53.3+	49.5	46.3	46.0	45.6	39.1-
Stoneville, Miss.(B)	54.3	55.1	51.5	50.2	49.8	48.6	46.8
St. Joseph, La.	53.9	44.8-	45.8-	47.0	43.1-	36.0-	48.6
Mean	46.4	47.8	46.3	45.4	42.4-	42.1-	41.9-
			West				
Appleton City, Mo.*	45.0	47.4	46.7	48.3	41.3	43.0	46.9
Columbus, Kan.	19.5	30.1+	26.9+	27.2+	26.1+	18.1	18.5
Stuttgart, Ark.	36.8	47.2+	47.2+	41.6	42.8+	37.7	33.7
Pine Bluff, Ark.	28.0	27.3	32.3	29.7	31.0	32.0	29.0
Curtis, La.	40.3	34.7	37.2	37.6	37.8	42.5	31.6
Bixby, Okla.	32.7	34.7	38.5	35.0	35.8	31.0	33.4
Halfway, Texas	39.4	27.1-	23.5-	23.6-	18.3-	27.5-	37.4
Lubbock, Texas	47.7	45.6	39.3-	41.7-	39.8-	35.9-	38.7-
Mean	34.9	35.2	35.1	33.7	33.1	32.1	31.8

*Not included in mean.
(+) - Strains yielding significantly more (odds 19:1 or greater) than Essex.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Essex.

Table 9 - (continued)

Location	N72-40	N72-55	R71-626	V72-128	V72-580	L.S.D. (.05)	C.V. (%)
			East Coast				
Queenstown, Md.	34.6	34.4	32.3	30.7	34.3	N.S.	10
Princess Anne, Md.	29.8	37.4	32.2	29.8	37.1	10.8	18
Georgetown, Del.	49.0	46.9	43.9	42.4-	51.2	5.8	7
Warsaw, Va.	35.3-	38.7-	39.1-	35.4-	38.9-	6.0	9
Petersburg, Va.	41.5+	39.5	37.4	39.1	40.1	4.7	7
Holland, Va.	52.7	50.9	50.3	48.8	57.0+	7.1	9
Plymouth, N.C.	39.6	39.9	47.6	35.3	42.5	7.0	11
Jay, Fla.*	34.0-	35.8-	35.6-	31.3-	35.3-	7.0	11
Mean	40.4	40.6	40.4	37.4	43.0	N.S.	
			Upper and Central South				
Orange, Va.	33.0	35.8	32.3-	28.6-	34.3	4.5	8
Blairsville, Ga.	45.6	41.9	49.1	41.1	51.0	N.S.	14
Calhoun, Ga.	24.8	24.7	26.4	29.4+	30.1+	5.6	13
Athens, Ga.	38.2	37.2	34.3	38.4	40.3	N.S.	11
Belle Mina, Ala.	32.8	32.5	33.1	33.9	40.0	N.S.	17
Princeton, Ky.	46.1	42.6	43.0	41.5	46.7	N.S.	8
Martin, Tenn.	53.4	58.6	56.3	56.9	63.8	6.0	6
Jackson, Tenn.	50.3-	52.4-	52.4-	48.8-	57.3	4.7	5
Verona, Miss.	37.1+	39.2+	37.0+	40.0+	36.4+	6.1	10
Mean	40.1	40.6	40.4	39.8	44.4	3.2	
			Delta				
Portageville, Mo.(A)	41.2	41.0	40.8	36.7-	44.9	4.6	6
Portageville, Mo.(B)	46.4	51.1	51.0	48.6	51.6	N.S.	8
Keiser, Ark.	51.0	53.0	51.8	53.9	47.0	N.S.	8
Jonesboro, Ark.	21.0-	23.8	23.6	26.2	30.4	5.7	13
Stoneville, Miss.(A)	44.4	42.5	44.5	44.2	52.0+	5.9	8
Stoneville, Miss.(B)	48.1	51.6	48.8	53.1	50.7	N.S.	7
St. Joseph, La.	41.3-	45.6-	46.7	36.8-	45.0	8.1	11
Mean	41.8-	44.0	43.7	42.4-	46.9	3.1	
			West				
Appleton City, Mo.*	41.6	43.4	41.5	44.7	45.1	N.S.	7
Columbus, Kan.	20.1	25.4+	25.6+	20.2	24.8+	3.1	8
Stuttgart, Ark.	38.2	39.7	39.1	42.5+	38.1	5.2	8
Pine Bluff, Ark.	24.3	24.0	29.7	28.3	30.3	N.S.	12
Curtis, La.	36.8	42.5	41.3	27.8	39.3	N.S.	21
Bixby, Okla.	37.8	32.5	36.5	31.1	43.5+	6.5	11
Halfway, Texas	28.3-	37.1	38.3	22.9-	29.1-	8.7	18
Lubbock, Texas	37.0-	36.7-	38.9-	34.2-	47.8	4.2	6
Mean	31.9	34.0	35.6	29.6	36.1	N.S.	

Table 10 - Chemical composition and seed size for the strains in Uniform Group V, 1975

Location	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814
			Oil Percentage			
Queenstown, Md.	19.4	19.1	20.0	20.2	18.4	18.2
Warsaw, Va.	21.4	20.7	22.0	21.6	19.4	19.4
Calhoun, Ga.	23.0	24.7	24.2	24.3	22.0	21.4
Jackson, Tenn.	19.8	21.1	21.3	21.9	20.0	19.5
Portageville, Mo.(A)	20.3	20.3	21.5	20.6	19.0	18.5
Keiser, Ark.	21.2	21.6	21.8	23.3	20.6	20.2
Stoneville, Miss.(B)	21.2	22.5	22.1	22.2	20.7	20.5
Stuttgart, Ark.	21.0	20.1	20.9	21.1	20.0	18.9
Halfway, Texas	19.6	18.7	17.9	18.8	17.5	16.4
Mean	20.8	21.0	21.3+	21.6+	19.7-	19.2-
			Protein Percentage			
Queenstown, Md.	43.4	41.1	41.1	40.4	42.8	43.6
Warsaw, Va.	40.5	38.5	38.9	38.7	40.9	41.2
Calhoun, Ga.	37.5	34.6	35.7	35.3	36.1	39.6
Jackson, Tenn.	43.5	39.1	42.0	41.3	42.8	44.4
Portageville, Mo.(A)	42.4	40.3	40.6	41.2	42.9	43.3
Keiser, Ark.	40.7	38.4	39.9	38.1	40.3	42.4
Stoneville, Miss.(B)	40.0	37.7	39.1	38.9	40.7	41.6
Stuttgart, Ark.	42.7	41.9	42.6	41.8	42.0	44.4
Halfway, Texas	40.8	37.1	39.6	38.8	39.6	42.7
Mean	41.3	38.7-	39.9-	39.4-	40.9	42.6+
			Grams per 100 Seeds			
Queenstown, Md.	13.0	13.4	14.9	14.5	13.2	16.3
Warsaw, Va.	11.7	11.6	13.4	12.9	11.3	13.9
Calhoun, Ga.	11.2	10.6	11.3	11.0	10.6	13.3
Jackson, Tenn.	14.5	13.7	15.2	15.4	13.5	15.5
Portageville, Mo.(A)	12.4	11.5	13.1	12.0	11.6	12.7
Keiser, Ark.	12.4	12.3	12.6	12.5	11.5	14.0
Stoneville, Miss.(B)	13.2	13.0	14.8	11.8	11.0	13.8
Stuttgart, Ark.	10.0	11.3	12.3	10.7	11.0	12.7
Mean	12.3	12.2	13.5+	12.6	11.7	14.0+

Table 10 - (continued)

Location	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580	L.S.D. (.05)
			Oil Percentage				
Queenstown Md.	17.8	17.3	17.7	18.3	18.0	20.2	
Warsaw, Va.	19.1	18.9	19.3	19.6	18.9	20.6	
Calhoun, Ga.	20.4	20.7	22.4	22.6	21.0	25.3	
Jackson, Tenn.	18.7	19.1	19.0	19.1	18.6	22.4	
Portageville, Mo.(A)	17.6	17.7	18.4	18.6	18.1	21.0	
Keiser, Ark.	19.2	19.3	20.3	20.5	19.1	23.6	
Stoneville, Miss.(B)	20.4	20.0	20.1	21.0	19.9	23.5	
Stuttgart, Ark.	19.0	19.2	19.4	20.1	19.6	22.7	
Halfway, Texas	17.0	17.2	17.1	18.3	18.0	18.4	
Mean	18.8-	18.8-	19.3-	19.8-	19.0-	22.0+	0.5
			Protein Percentage				
Queenstown, Md.	42.9	44.8	43.0	43.3	43.7	41.3	
Warsaw, Va.	40.6	41.6	39.8	40.1	42.7	40.1	
Calhoun, Ga.	39.2	38.6	36.6	37.2	40.3	33.9	
Jackson, Tenn.	43.4	44.3	43.1	43.5	43.9	40.3	
Portageville, Mo.(A)	43.9	44.1	43.3	43.3	43.6	40.0	
Keiser, Ark.	41.6	42.3	40.7	41.1	42.5	37.0	
Stoneville, Miss.(B)	40.9	42.3	41.1	41.1	42.2	37.6	
Stuttgart, Ark.	44.4	43.5	44.3	42.9	43.9	39.8	
Halfway, Texas	41.7	42.0	41.1	40.8	41.1	40.4	
Mean	42.1+	42.6+	41.4	41.5	42.7+	38.9-	0.6
			Grams per per 100 Seeds				
Queenstown, Md.	14.6	16.6	15.2	14.9	15.9	15.2	
Warsaw, Va.	12.6	15.3	14.0	12.2	14.3	14.0	
Calhoun, Ga.	10.5	14.5	12.3	13.0	14.6	14.8	
Jackson, Tenn.	14.3	15.0	15.7	15.2	15.3	17.4	
Portageville, Mo.(A)	11.0	13.1	12.0	13.0	13.0	14.2	
Keiser, Ark.	12.5	15.5	14.5	12.7	13.7	16.6	
Stoneville, Miss.(B)	11.5	13.8	13.2	12.0	14.5	14.8	
Stuttgart, Ark.	10.0	12.3	12.3	11.7	12.7	13.3	
Mean	12.1	14.5+	13.7+	13.1+	14.3+	15.0+	0.7

Table 11 - Relative maturity, days earlier (-) or later (+) than Essex, for the strains in Uniform Group V, 1975

Location	Date planted	Essex matured	Forrest	D70-3115	D70-332	D71-6860
			East Coast			
Queenstown, Md.	5-27	10-10	+9	+7	+7	+7
Princess Anne, Md.	6-17	10-20	+12	+12	+12	+8
Georgetown, Del.	5-27	10-18	+6	+4	+6	+5
Warsaw, Va.	5-19	10-10	+7	+7	+7	+4
Petersburg, Va.	6-3	10-13	+8	+5	+2	+4
Holland, Va.	5-23	10-6	+8	+11	+8	+6
Plymouth, N.C.	5-14	10-16	0	+2	+2	-6
Jay, Fla.	5-23	10-9	-10	+6	0	0
Mean		10-13	+5	+7	+6	+4
			Upper and Central South			
Orange, Va.	6-5	10-23	0	-1	0	0
Blairsville, Ga.	5-29	10-12	+6	+4	+2	+5
Calhoun, Ga.	5-27	9-29	+7	+5	+4	+3
Athens, Ga.	5-12	9-11	+9	+13	+10	+8
Belle Mina, Ala.	5-1	9-16	+9	+3	-1	+2
Princeton, Ky.	5-20	10-4	+9	+5	+5	+4
Martin, Tenn.	6-5	10-16	+2	+9	+2	+9
Jackson, Tenn.	5-13	10-6	+6	+4	+3	+2
Verona, Miss.	5-28	9-30	+8	+5	+3	+3
Mean		10-3	+6	+5	+3	+4
			Delta			
Portageville, Mo.(A)	5-5	10-1	+5	+6	+6	+3
Portageville, Mo.(B)	5-19	10-9	+4	+5	+4	+4
Keiser, Ark.	5-20	10-5	+5	+3	+2	+1
Stoneville, Miss.(A)	5-20	9-22	+7	+6	+4	-1
Stoneville, Miss.(B)	5-22	9-27	+3	+4	0	-4
St. Joseph, La.	5-20	9-30	0	0	-6	-2
Mean		10-1	+4	+4	+2	0
			West			
Columbus, Kan.	5-28	10-6	+4	+4	+2	+1
Stuttgart, Ark.	5-20	9-25	+8	+6	+5	+1
Pine Bluff, Ark.	5-15	9-10	+12	+11	+11	+2
Curtis, La.	5-14	9-24	+4	+8	+3	+7
Lubbock, Texas	5-27	10-17	+6	+3	+5	+12
Mean		9-26	+7	+6	+5	+5

Table 11 - (continued)

Location	D72-8814	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580
			East Coast				
Queenstown, Md.	+6	+4	+7	+9	+3	+7	+6
Princess Anne, Md.	+8	+2	+9	+12	+5	+10	+12
Georgetown, Del.	-1	-1	-1	-1	+2	+5	+1
Warsaw, Va.	+2	0	+6	+7	+5	+7	+4
Petersburg, Va.	0	+2	+2	+2	+2	+5	+4
Holland, Va.	+1	+2	+4	+9	+4	+8	+6
Plymouth, N.C.	-6	-6	0	0	+2	0	-4
Jay, Fla.	-9	-10	-8	0	-7	0	0
Mean	0	-1	+2	+5	+2	+5	+4
			Upper and Central South				
Orange, Va.	0	-3	0	0	0	0	0
Blairsville, Ga.	+4	0	+4	+2	+4	+4	+3
Calhoun, Ga.	+1	+2	+3	+5	+2	+4	+5
Athens, Ga.	+8	+1	+11	+13	0	+10	+13
Belle Mina, Ala.	-2	-4	-1	+4	+2	+7	+9
Princeton, Ky.	+6	+2	+4	+5	+3	+6	+8
Martin, Tenn.	+2	-1	+4	+4	-3	-1	-1
Jackson, Tenn.	+1	0	+1	+5	+2	+5	+3
Verona, Miss.	+7	+3	+3	+8	+3	+8	+8
Mean	+3	0	+3	+5	+1	+5	+5
			Delta				
Portageville, Mo.(A)	+4	-1	+2	+3	+2	+7	+5
Portageville, Mo.(B)	+3	-1	+4	+4	+2	+5	+4
Keiser, Ark.	+3	0	+2	+3	+1	+2	+2
Stoneville, Miss.(A)	+2	-3	+1	+3	+1	+3	+4
Stoneville, Miss.(B)	0	-2	-1	0	-2	+4	-1
St. Joseph, La.	-6	-7	-6	-6	-4	-6	0
Mean	+1	-2	0	+1	0	+3	+2
			West				
Columbus, Kan.	+5	+4	+6	+7	0	+7	+4
Stuttgart, Ark.	+2	0	+1	+5	+2	+4	+5
Pine Bluff, Ark.	+5	-4	+6	+13	+2	+12	+5
Curtis, La.	+4	-1	+3	+1	0	-1	+3
Lubbock, Texas	+3	0	+7	+5	+5	+3	+3
Mean	+4	0	+5	+6	+2	+5	+4

Table 12 - Plant height for the strains in Uniform Group V, 1975

Location	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814
			East Coast			
Queenstown, Md.	35	43	48	43	46	38
Princess Anne, Md.	30	37	32	33	31	33
Georgetown, Del.	39	46	43	42	43	40
Warsaw, Va.	39	43	45	43	44	41
Petersburg, Va.	29	37	35	33	33	33
Holland, Va.	37	43	45	41	41	37
Plymouth, N.C.	31	35	36	34	37	29
Jay, Fla.	23	28	30	28	25	27
Mean	33	39	39	37	38	35
			Upper and Central South			
Orange, Va.	34	34	43	41	41	38
Blairsville, Ga.	34	40	42	39	40	39
Calhoun, Ga.	26	34	35	30	35	30
Athens, Ga.	26	38	32	34	36	30
Belle Mina, Ala.	22	33	32	34	36	25
Princeton, Ky.	30	42	40	39	37	32
Martin, Tenn.	34	44	43	41	41	34
Jackson, Tenn.	32	43	39	39	38	37
Verona, Miss.	24	31	32	30	30	27
Mean	29	38	38	36	37	32
			Delta			
Portageville, Mo.(A)	30	35	34	37	37	30
Portageville, Mo.(B)	30	34	31	34	33	30
Keiser, Ark.	25	33	34	31	33	28
Jonesboro, Ark.	31	40	40	38	38	36
Stoneville, Miss.(A)	24	31	30	33	31	28
Stoneville, Miss.(B)	21	27	27	28	29	25
St. Joseph, La.	21	28	28	26	26	24
Mean	25	31	31	32	32	28
			West			
Appleton City, Mo.	29	36	33	33	33	30
Columbus, Kan	19	26	24	22	26	21
Stuttgart, Ark.	19	30	25	25	25	24
Pine Bluff, Ark.	45	41	44	41	40	43
Curtis La.	22	28	26	30	30	24
Bixby, Okla.	25	28	33	31	30	26
Lubbock, Texas	29	31	27	32	30	26
Mean	27	31	30	31	31	28

Table 12 - (continued)

Location	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580
			East Coast			
Queenstown, Md.	42	47	50	44	42	47
Princess Anne, Md.	38	35	39	30	35	37
Georgetown, Del.	45	49	45	41	45	45
Warsaw, Va.	44	45	43	40	42	45
Petersburg, Va.	36	37	33	33	37	40
Holland, Va.	40	45	43	44	43	44
Plymouth, N.C.	31	31	33	32	35	35
Jay, Fla.	29	32	28	32	30	32
Mean	38	40	39	37	39	41
			Upper and Central South			
Orange, Va.	41	40	36	37	43	36
Blairsville, Ga.	39	39	41	40	42	48
Calhoun, Ga.	33	33	35	30	36	37
Athens, Ga.	35	33	32	35	33	35
Belle Mina, Ala.	28	35	33	36	38	30
Princeton, Ky.	37	39	39	37	39	41
Martin, Tenn.	43	42	42	42	41	46
Jackson, Tenn.	37	38	37	37	39	41
Verona, Miss.	32	32	32	32	32	32
Mean	36	37	36	36	38	38
			Delta			
Portageville, Mo.(A)	35	38	34	36	32	38
Portageville, Mo.(B)	28	31	31	33	30	34
Keiser, Ark.	32	32	32	32	31	33
Jonesboro, Ark.	40	40	42	38	40	42
Stoneville, Miss.(A)	32	35	30	32	29	33
Stoneville, Miss.(B)	27	27	27	30	28	27
St. Joseph, La.	28	30	28	28	30	29
Mean	30	32	30	32	30	32
			West			
Appleton City, Mo.	35	35	36	31	33	34
Columbus, Kan.	24	24	25	22	22	24
Stuttgart, Ark.	27	28	27	27	28	25
Pine Bluff, Ark.	44	42	43	42	42	44
Curtis, La.	28	30	29	29	27	30
Bixby, Okla.	31	30	29	30	32	32
Lubbock, Texas	27	29	29	31	28	31
Mean	31	31	31	30	30	31

Table 13 - Lodging scores for the strains in Unifrom Group V, 1975

Location	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814
			East Coast			
Queenstown, Md.	3.0	3.8	4.2	3.5	4.8	3.5
Princess Anne, Md.	1.7	3.0	4.3	3.3	3.7	4.3
Georgetown, Del.	2.2	2.8	3.0	2.8	3.2	3.2
Warsaw, Va.	1.5	3.3	3.3	2.8	3.9	4.0
Petersburg, Va.	1.0	1.0	2.3	1.3	3.7	2.7
Holland, Va.	2.5	1.8	3.0	2.3	3.3	2.5
Plymouth, N.C.	2.3	2.7	2.0	2.0	2.7	4.0
Jay, Fla.	1.0	1.0	1.0	2.0	1.0	2.0
			Upper and Central South			
Orange, Va.	3.0	4.0	4.3	3.0	4.0	4.0
Blairsville, Ga.	2.2	2.5	3.3	2.3	3.3	3.2
Calhoun, Ga.	1.5	2.8	2.8	1.8	3.2	2.8
Athens, Ga.	1.0	1.7	1.8	1.8	2.5	3.5
Belle Mina, Ala.	1.0	1.5	1.7	1.5	3.3	1.7
Princeton, Ky.	2.0	3.0	2.7	2.3	3.0	3.3
Martin, Tenn.	2.0	2.0	2.0	2.0	3.0	3.0
Jackson, Tenn.	1.0	2.7	2.3	2.0	2.0	2.0
			Delta			
Portageville, Mo.(A)	1.5	1.7	2.0	1.8	2.3	1.8
Portageville, Mo.(B)	1.5	2.0	2.0	1.8	2.0	2.0
Keiser, Ark.	1.0	1.0	1.3	1.0	1.3	1.3
Jonesboro, Ark.	1.0	2.0	3.5	2.0	3.0	2.5
Stoneville, Miss.(A)	2.0	2.0	2.0	2.3	2.3	2.0
Stoneville, Miss.(B)	2.0	2.0	2.3	2.0	2.0	2.0
St. Joseph, La.	1.0	1.2	1.5	1.0	1.2	2.5
			West			
Appleton City, Mo.	1.3	2.7	2.7	2.1	2.0	3.1
Columbus, Kan.	1.0	1.3	1.0	1.0	1.0	1.0
Stuttgart, Ark.	1.0	1.0	1.3	1.0	1.0	1.5
Pine Bluff, Ark.	2.0	1.6	2.3	2.3	2.0	3.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	1.7	1.7	2.0	1.7	2.0	3.0
Lubbock, Texas	2.5	3.0	3.5	2.5	3.5	3.0

Table 13 - (continued)

Location	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580
			East Coast			
Queenstown, Md.	4.0	4.3	4.0	3.5	3.5	3.2
Princess Anne, Md.	3.0	4.7	2.7	2.7	2.7	2.3
Georgetown, Del.	3.0	3.0	3.3	2.8	3.3	2.5
Warsaw, Va.	3.8	4.0	3.7	2.6	2.9	2.6
Petersburg, Va.	3.3	3.7	1.3	1.3	2.3	1.0
Holland, Va.	3.7	3.3	2.8	2.8	1.8	1.8
Plymouth, N.C.	4.0	4.0	4.0	2.0	3.7	3.0
Jay, Fla.	1.0	3.0	3.0	2.0	4.0	1.0
			Upper and Central South			
Orange, Va.	3.3	3.3	4.3	3.0	3.3	3.7
Blairsville, Ga.	3.0	2.7	2.5	2.5	2.0	2.3
Calhoun, Ga.	2.8	3.2	2.2	2.0	2.3	2.8
Athens, Ga.	2.7	2.5	2.5	1.8	2.2	1.8
Belle Mina, Ala.	2.3	2.2	1.5	2.2	1.2	1.7
Princeton, Ky.	3.2	3.3	3.2	2.2	2.3	2.7
Martin, Tenn.	3.0	2.0	3.0	1.0	2.0	3.0
Jackson, Tenn.	1.7	2.7	3.0	1.7	2.3	1.3
			Delta			
Portageville, Mo.(A)	1.8	2.0	1.8	1.7	1.7	1.5
Portageville, Mo.(B)	2.5	2.3	2.2	2.0	1.8	2.0
Keiser, Ark.	1.5	1.5	1.2	1.3	1.0	1.2
Jonesboro, Ark.	3.5	2.5	2.0	2.0	2.0	2.0
Stoneville, Miss.(A)	2.0	2.7	2.7	2.3	2.0	2.0
Stoneville, Miss.(B)	2.0	2.7	2.7	3.0	2.3	2.0
St. Joseph, La.	2.2	2.0	1.8	1.2	1.5	1.5
			West			
Appleton City, Mo.	3.1	3.0	2.8	1.9	2.2	1.9
Columbus, Kan.	1.1	1.3	1.0	1.0	1.0	1.0
Stuttgart, Ark.	1.5	2.2	1.7	1.3	1.8	1.0
Pine Bluff, Ark.	1.6	3.0	2.3	1.6	2.0	2.3
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	2.3	2.3	1.7	2.3	1.3	1.7
Lubbock, Texas	3.2	3.2	3.2	2.2	4.0	2.5

Table 14 - Seed quality scores for the strains in Uniform Group V, 1975

Location	Essex	Forrest	D70-3115	R70-332	D71-6860	D72-8814
			East Coast			
Queenstown, Md.	1.8	2.5	2.5	1.8	2.3	2.3
Princess Anne, Md.	2.0	2.2	2.0	2.0	2.5	2.0
Georgetown, Del.	2.1	2.5	1.9	2.2	2.0	2.0
Warsaw, Va.	1.3	1.5	1.4	1.3	1.2	1.5
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.7	1.0	2.0	1.5	2.3	1.7
Plymouth, N.C.	5.0	3.0	3.5	4.0	4.5	4.0
Jay, Fla.	5.0	4.0	4.0	5.0	5.0	5.0
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	1.2	1.8	1.3	1.3	1.5	1.5
Calhoun, Ga.	1.3	1.8	1.5	1.5	1.5	1.5
Athens, Ga.	3.3	2.3	2.0	2.2	2.8	2.3
Belle Mina, Ala.	1.0	1.0	2.0	1.0	1.0	1.0
Princeton, Ky.	1.7	2.0	2.3	1.7	2.3	2.0
Martin, Tenn.	2.0	1.0	2.0	2.0	2.0	2.0
Jackson, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	1.5	2.0	1.5	1.5	2.0	2.0
Portageville, Mo.(B)	1.5	2.0	2.0	1.5	2.0	2.5
Keiser, Ark.	1.0	1.0	1.0	1.2	1.0	1.0
Jonesboro, Ark.	1.3	1.7	2.2	1.7	2.3	2.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Columbus, Kan.	2.1	2.1	1.7	2.0	1.9	2.2
Stuttgart, Ark.	2.0	2.2	2.2	2.0	2.3	2.0
Pine Bluff, Ark.	3.6	3.6	3.3	3.3	3.0	3.6

Table 14 - (continued)

Location	N72-7	N72-40	N72-55	R71-626	V72-128	V72-580
			East Coast			
Queenstown, Md.	2.0	2.0	2.0	2.2	2.5	2.0
Princess Anne, Md.	2.0	2.0	1.5	2.0	2.0	2.0
Georgetown, Del.	2.0	1.7	1.7	2.0	2.2	1.7
Warsaw, Va.	1.4	1.2	1.1	1.2	1.6	1.5
Petersburg, Va.	2.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.3	2.0	1.8	1.3	1.5	1.5
Plymouth, N.C.	3.5	4.0	3.0	3.0	3.5	4.0
Jay, Fla.	5.0	5.0	5.0	5.0	5.0	5.0
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	1.5	1.0	1.5	1.5	1.3	1.2
Calhoun, Ga.	1.5	1.5	1.5	1.5	1.6	1.6
Athens, Ga.	2.7	2.0	1.8	3.2	2.5	2.2
Belle Mina, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	2.3	1.7	2.0	2.0	2.3	2.3
Martin, Tenn.	2.0	2.0	2.0	2.0	3.0	1.0
Jackson, Tenn.	1.0	1.0	1.0	1.5	1.0	1.0
			Delta			
Portageville, Mo.(A)	1.5	1.5	1.0	1.5	2.0	1.5
Portageville, Mo.(B)	2.5	2.0	2.0	1.5	2.0	2.5
Keiser, Ark.	1.0	1.2	1.0	1.0	1.0	1.0
Jonesboro, Ark.	2.0	2.0	1.0	1.8	1.3	1.2
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Columbus, Kan.	2.1	2.0	2.1	1.9	2.1	2.1
Stuttgart, Ark.	2.0	2.0	2.0	1.5	2.0	2.3
Pine Bluff, Ark.	4.0	3.6	3.3	3.0	2.6	3.3

PRELIMINARY GROUP V

1975

Preliminary Group V nurseries, including 34 experimental strains and the two check varieties Hill and Mack, were grown at eight locations. The parentage of these strains is reported in Table 15. Performance data are summarized in Tables 15 through 21.

Differences among strains for seed yield were significant at the 5% level of confidence at six locations. The combined analysis of variance showed differences among strains to be significant. Eight strains had mean seed yields significantly greater than that for Hill. Only one strain had a mean seed yield significantly greater than for Mack and it was later in maturity. One strain yielded significantly less than Hill.

None of the strains showed evidence of injury from phytophthora rot at Stoneville. Only one strain, N73-40, appeared to have a fairly good level of resistance to root knot nematodes. There was little seedcoat mottling at Warsaw, Virginia. All stoneville selections having York, D65-3168 or PI 200503 as parents had been selected as resistant to soybean mosaic virus.

The two strains ranking highest in yield were the latest in maturity. The earliest maturing strain belonged with Group IV material but yielded significantly less than Hill.

Twenty-six strains were significantly higher in protein content of the seed than Hill and one strain was significantly higher in oil content.

The two strains R73-1195 and R73-1218 have the Dt_2 gene.

Table 15 - Parentage of the strains in Preliminary Group V, 1975

	Variety or strain	Parentage	Generation composited
1.	Hill		
2.	Mack		
3.	D73-3704	Hill(3) X PI 274454	F_5
4.	D73-3831	D65-6555 X York	F_5
5.	D73-3867	D65-6555 X York	F_5
6.	D73-3877	D65-6555 X York	F_5
7.	D73-3886	D49-2491(4) X Hawkeye (subline of D64-3253)	F_{12}
8.	D73-3889	D64-3253 X D65-3168	F_5
9.	D73-3936	D64-3253 X D65-3168	F_5
10.	D73-3999	D64-3253 X D65-3168	F_5
11.	D73-4001	D64-3253 X D65-3168	F_5
12.	D73-4098	D64-3253 X D65-3168	F_5
13.	D73-4118	D64-3253 X D65-3168	F_5
14.	D73-4124	D64-3253 X D65-3168	F_5
15.	D73-4200	D64-3253 X D65-3168	F_5
16.	D73-4204	D64-3253 X D65-3168	F_5
17.	D73-4257	D64-3253 X D65-3168	F_5
18.	D73-4278	Hill X PI 96983 (subline of D65-3168)	F_{11}
19.	D73-7244	PI 200503 X Pickett 71	F_5
20.	D73-7684	D67-4632 X D65-3168	F_5
21.	D73-7862	D68-9148 X D65-3168	F_5
22.	D73-7887	D68-9148 X D65-3168	F_5
23.	N73-26	N66-1783 X Lee 68	F_5
24.	N73-40	N66-1783 X Lee 68	F_5
25.	N73-57	N66-1783 X Lee 68	F_5
26.	N73-88	N66-1783 X Lee 68	F_5
27.	N73-100	N66-1783 X Lee 68	F_5
28.	N73-520	Tracy X Ransom	F_5
29.	N73-538	Tracy X Ransom	F_5
30.	OK963	Unknown	
31.	R73-28	(Davis X Lee 68) X R60-66	F_6
32.	R73-345	D65-2839 X Davis	F_5
33.	R73-1195	R68-106 X L62-1251	F_4
34.	R73-1218	R68-106 X L62-1251	F_4
35.	Ts72-802	Hill X Calland	F_5
36.	Ts72-807	Hill X York	

Table 16 - General summary of performance for the strains grown in Preliminary Group V, 1975

	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	R.K.[1]	% mottled seed	Seed holding
Hill	37.7	10-5	35	21.2	39.5	3.0	0	1.0
Mack	41.7	+7	38	21.6	40.3	5.0	0	1.0
D73-3704	38.8	+8	40	20.2-	39.3	4.0	4.0	1.0
D73-3831	40.0	+12	41	20.1-	40.8+	5.0	0	1.0
D73-3867	41.6	+7	38	19.4-	42.4+	4.0	0	1.0
D73-3877	38.8	+9	35	19.7-	41.9+	4.0	0	1.0
D73-3886	40.5	+4	32	21.0	41.9+	5.0	1.0	1.0
D73-3889	39.7	+7	35	18.5-	43.5+	3.0	0	1.0
D73-3936	40.4	+6	40	19.2-	42.3+	5.0	0	1.0
D73-3999	41.7	+7	36	19.2-	42.3+	4.0	0	1.0
D73-4001	43.7+	+8	39	19.9-	41.4+	5.0	1.0	1.0
D73-4098	41.0	+3	39	18.4-	42.2+	5.0	0	1.0
D73-4118	43.4+	+4	38	19.2-	43.4+	5.0	0	1.0
D73-4124	45.9+	+9	37	19.9-	41.3+	5.0	0	1.0
D73-4200	40.8	+8	39	19.2-	41.5+	5.0	0	1.0
D73-4204	38.8	+10	42	19.6-	42.7+	4.0	0	1.0
D73-4257	40.6	+8	41	19.4-	42.4+	5.0	0	1.0
D73-4278	42.1	+8	37	17.5-	43.0+	5.0	0	1.0
D73-7244	39.2	+6	37	20.7	41.6+	4.0	1.5	1.0
D73-7684	39.9	+9	41	18.6-	40.9+	3.0	0	1.0
D73-7862	38.1	+7	36	17.6-	45.9+	4.0	1.5	1.0
D73-7887	38.4	+10	37	17.3-	43.7+	5.0	0	1.0
N73-26	43.0+	+9	37	20.3-	42.0+	5.0	1.0	1.0
N73-40	43.6+	+11	43	21.1	39.7	2.0	0	1.0
N73-57	42.4	+10	36	20.7	40.5+	3.0	0	2.0
N73-88	40.1	+7	35	20.3-	41.4+	5.0	0	1.0
N73-100	38.8	+7	35	20.7	41.1+	3.0	0	1.0
N73-520	47.3+	+11	41	20.0-	39.9	5.0	1.5	1.0
N73-538	46.0+	+11	38	20.4-	40.1	4.0	0	1.0
OK963	44.9+	+10	33	20.6	40.5+	4.0	0	1.0
R73-28	40.7	+9	41	20.6	41.0+	4.0	0	1.0
R73-345	38.8	+12	44	19.4-	40.6+	5.0	0	1.0
R73-1195	41.1	+10	46	21.9+	39.2	5.0	1.0	1.0
R73-1218	37.2	+8	48	20.8	40.0	5.0	2.5	1.0
Ts72-802	32.9-	-7	28	21.2	40.4	3.0	0	1.0
Ts72-807	41.0	+6	34	20.8	39.0	3.0	0	1.0
L.S.D.(.05)	4.8			0.7	1.0			
L.S.D.(.01)	6.3			1.0	1.3			

[1]Root knot ratings (*M.incognita*) made in field near West Fla. Research Center.
[2]Warsaw, Va.

Table 17 - Seed yield, in bushels per acre, for the strains grown in Preliminary Group V, 1975

Strain	George-town, Del.	Queens-town, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)	Halfway* Texas
Hill	46.6	32.1	36.9	27.6	36.9	43.7	40.3	21.5
Mack	42.8	39.4	41.8	35.2+	38.5	51.1	43.5	21.9
D73-3704	43.3	28.1	35.8	37.8+	37.2	45.3	44.6	13.8
D73-3831	43.3	26.2	35.4	44.9+	27.1-	52.4+	51.0+	22.5
D73-3867	38.7	34.7	39.5	35.8+	44.6	53.4+	44.5	16.2
D73-3877	45.5	25.5	38.6	33.3	36.2	46.1	46.4	24.8
D73-3886	44.9	35.8	42.2	28.3	39.8	50.1	42.6	20.9
D73-3889	47.1	26.9	40.5	33.0	39.8	44.5	46.4	23.8
D73-3936	39.3	33.6	40.0	35.7+	39.4	49.5	45.5	27.1
D73-3999	49.6	31.3	41.3	29.8	38.7	54.8+	46.4	18.3
D73-4001	47.7	36.0	42.1	42.1+	39.2	50.0	49.0+	26.0
D73-4098	46.1	36.4	43.2	29.2	39.6	47.5	44.8	14.9
D73-4118	46.6	39.2	36.0	40.1+	40.8	53.0+	47.9	21.2
D73-4124	53.8	40.5	43.0	38.9+	41.6	51.8+	51.8+	18.9
D73-4200	46.2	34.8	40.4	39.6+	41.9	41.2	41.6	16.4
D73-4204	44.4	27.5	37.6	36.9+	35.3	43.0	46.8	21.1
D73-4257	47.5	32.8	41.1	31.5	36.6	48.8	45.8	24.5
D73-4278	47.7	32.0	39.0	44.2	39.2	46.5	46.1	20.8
D73-7244	45.7	36.3	38.9	23.4	44.8+	44.9	40.6	26.1
D73-7684	39.9	29.4	40.5	43.5+	35.8	47.9	42.4	23.0
D73-7862	42.2	32.9	33.9	35.0+	40.0	41.3	41.1	22.7
D73-7887	37.3-	31.7	35.6	36.8+	38.8	46.3	42.6	21.4
N73-26	44.4	35.5	38.8	38.3+	44.1	49.8	49.9+	18.9
N73-40	57.0	30.6	38.7	41.9+	42.0	48.2	46.6	15.3
N73-57	50.2	38.5	43.7	34.9+	42.1	51.2	36.4	25.6
N73-88	50.7	29.2	31.2	31.3	42.6	52.1+	43.3	25.2
N73-100	39.7	39.6	44.3+	26.2	39.5	47.0	35.6	24.0
N73-520	54.4	36.0	48.9+	49.0+	40.7	57.4+	45.1	19.6
N73-538	46.3	35.4	52.2+	51.5+	43.9	52.7+	39.6	18.9
OK963	42.7	34.0	47.9+	48.4+	45.9+	51.6+	43.5	27.7
R73-28	38.0	31.3	40.5	43.9+	40.3	48.8	46.9	24.2
R73-345	38.1	29.0	29.5-	47.0+	37.4	41.5	49.0+	18.6
R73-1195	43.3	29.4	36.7	45.4+	31.2	47.6	54.1+	24.2
R73-1218	43.5	22.6-	29.0-	36.6+	31.3	53.3+	44.1	21.0
Ts72-802	37.5-	29.4	36.5	14.6-	30.7	45.8	36.0	24.5
Ts72-807	50.4	33.8	34.7	43.0+	32.9	48.4	44.0	17.5
L.S.D.(.05)	N.S.	8.9	7.1	6.1	7.8	7.7	8.2	N.S.
C.V.	17%	13%	9%	8%	10%	8%	9%	34%

*Not included in mean.

Table 18 - Oil percentages for the strains in Preliminary Group V, 1975

Strain	Queenstown, Md.	Warsaw, Va.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	19.8	20.8	21.9	22.3
Mack	20.1	21.3	22.2	22.8
D73-3704	18.7	20.0	20.2	21.9
D73-3831	18.5	19.6	20.7	21.5
D73-3867	18.3	19.1	20.0	20.2
D73-3877	17.2	19.1	21.2	21.2
D73-3886	19.6	20.6	21.1	22.6
D73-3889	16.7	18.4	18.9	19.8
D73-3936	17.5	18.7	19.8	20.8
D73-3999	18.5	18.8	19.5	20.1
D73-4001	18.6	19.8	19.8	21.2
D73-4098	16.8	18.7	18.6	19.5
D73-4118	18.2	18.4	19.7	20.3
D73-4124	18.4	20.3	20.1	20.9
D73-4200	18.0	19.3	19.7	19.7
D73-4204	17.7	19.6	19.1	21.8
D73-4257	17.7	18.9	20.3	20.8
D73-4278	16.5	17.5	17.8	18.3
D73-7244	19.4	20.3	21.0	21.9
D73-7684	17.5	18.5	18.5	19.8
D73-7862	16.7	17.2	17.6	18.7
D73-7887	15.7	17.1	17.8	18.5
N73-26	19.0	20.4	20.2	21.4
N73-40	19.6	21.1	21.3	22.3
N73-57	18.4	20.2	22.2	22.1
N73-88	19.0	19.1	21.0	21.9
N73-100	18.9	20.1	21.2	22.4
N73-520	18.4	20.1	19.8	21.7
N73-538	19.1	20.2	20.0	22.2
OK963	18.0	20.6	21.1	22.7
R73-28	19.0	20.9	21.0	21.6
R73-345	18.4	19.5	19.8	20.0
R73-1195	20.2	21.7	22.6	23.1
R73-1218	19.7	19.6	22.0	21.8
Ts72-802	18.8	22.7	20.4	22.9
Ts72-807	19.1	20.0	21.9	22.2

Table 19 - Protein percentages for the strains in Preliminary Group V, 1975

Strain	Queenstown, Md.	Warsaw, Va.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	40.1	38.9	39.0	39.9
Mack	41.4	39.9	39.8	39.9
D73-3704	42.1	38.5	38.3	38.2
D73-3831	43.3	41.0	39.8	38.9
D73-3867	43.6	42.1	42.0	41.7
D73-3877	44.1	42.4	40.8	40.2
D73-3886	43.7	42.0	41.6	40.1
D73-3889	45.5	42.9	43.1	42.6
D73-3936	43.8	42.3	41.6	41.4
D73-3999	43.0	41.4	42.6	42.1
D73-4001	43.6	40.7	41.3	40.0
D73-4098	43.7	41.5	42.0	41.7
D73-4118	44.0	44.4	42.4	42.6
D73-4124	42.3	40.6	41.4	40.9
D73-4200	42.8	41.2	39.9	42.0
D73-4204	44.6	41.6	43.0	41.7
D73-4257	44.2	42.3	41.5	41.6
D73-4278	44.3	42.2	42.5	42.8
D73-7244	43.4	42.5	40.1	40.5
D73-7684	42.2	40.1	40.5	40.6
D73-7862	46.8	46.5	45.1	45.2
D73-7887	45.3	43.0	42.6	44.0
N73-26	43.1	41.3	42.0	41.4
N73-40	41.6	39.2	38.7	39.4
N73-57	42.7	40.0	38.6	40.6
N73-88	42.8	41.7	40.0	41.1
N73-100	42.5	40.9	40.5	40.3
N73-520	41.8	39.7	39.8	38.4
N73-538	41.6	40.1	39.3	39.3
OK963	44.1	40.0	39.8	38.2
R73-28	42.7	41.3	39.3	40.5
R73-345	42.5	39.4	40.7	39.7
R73-1195	40.4	39.6	38.7	37.9
R73-1218	41.3	40.5	38.2	39.8
Ts72-802	42.0	40.9	40.3	38.3
Ts72-807	41.3	40.2	36.9	37.7

Table 20 - Plant height for the strains in Preliminary Group V, 1975

Strain	George-town, Del.	Queens-town, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	41	43	40	33	36	31	23
Mack	48	46	46	35	33	35	24
D73-3704	43	54	46	37	38	38	24
D73-3831	48	52	47	35	43	40	29
D73-3867	42	44	44	33	37	39	27
D73-3877	40	38	40	31	32	35	27
D73-3886	40	40	40	30	28	29	18
D73-3889	41	42	44	32	33	31	22
D73-3936	45	50	48	32	40	35	27
D73-3999	42	42	46	32	32	32	24
D73-4001	40	52	48	37	36	37	26
D73-4098	49	48	44	35	38	33	23
D73-4118	46	47	48	36	36	32	24
D73-4124	45	46	42	34	34	33	24
D73-4200	49	46	43	36	38	33	26
D73-4204	51	51	47	38	36	38	30
D73-4257	48	52	48	37	38	36	26
D73-4278	48	45	44	33	34	32	26
D73-7244	45	47	42	32	36	33	25
D73-7684	42	50	47	37	39	40	31
D73-7862	44	42	42	32	36	34	24
D73-7887	44	46	45	32	37	31	24
N73-26	46	41	43	33	33	37	29
N73-40	50	51	50	41	43	39	28
N73-57	44	44	41	32	38	32	20
N73-88	45	42	43	36	32	29	20
N73-100	41	42	38	33	34	34	20
N73-520	50	46	46	39	39	40	27
N73-538	44	43	46	34	35	38	27
OK963	39	42	39	31	34	28	17
R73-28	45	48	46	41	39	39	27
R73-345	54	54	50	42	42	41	32
R73-1195	50	48	55	45	42	47	37
R73-1218	49	57	54	44	47	48	40
Ts72-802	36	38	34	32	21	23	15
Ts72-807	40	42	40	36	30	28	23

Table 21 - Seed quality scores for the strains in Preliminary Group V, 1975

Strain	George-town, Del.	Queens-town, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	2.3	1.5	1.4	5.0	1.5	1.0	2.0
Mack	2.3	1.5	1.3	4.0	1.5	1.0	2.0
D73-3704	2.3	1.5	1.4	3.0	1.5	1.0	2.0
D73-3831	2.3	1.5	1.3	3.0	1.5	1.0	2.0
D73-3867	2.0	1.5	1.3	3.5	2.0	1.0	2.0
D73-3877	2.0	1.5	1.4	3.0	2.0	1.0	2.0
D73-3886	2.0	1.5	1.2	4.5	1.5	1.0	2.0
D73-3889	2.0	1.5	1.4	4.5	1.5	1.0	2.0
D73-3936	2.0	1.5	1.5	4.5	1.5	1.0	2.0
D73-3999	2.0	1.5	1.5	3.5	1.5	1.0	2.0
D73-4001	2.3	1.5	1.5	3.0	1.5	1.0	2.0
D73-4098	2.0	1.5	1.5	5.0	2.0	1.0	2.0
D73-4118	1.8	1.5	1.3	3.5	1.5	1.0	2.0
D73-4124	2.0	1.5	1.2	4.0	1.5	1.0	2.0
D73-4200	2.0	1.5	1.3	2.0	1.5	1.0	2.0
D73-4204	2.3	1.5	1.1	3.0	1.5	1.0	2.0
D73-4257	2.0	1.5	1.3	4.5	1.5	1.0	2.0
D73-4278	1.8	1.5	1.6	3.0	1.5	1.0	2.0
D73-7244	2.0	1.5	1.6	4.5	2.0	1.0	2.0
D73-7684	2.0	1.5	1.2	3.5	2.0	1.2	2.0
D73-7862	2.0	1.5	1.7	3.5	2.0	1.0	2.0
D73-7887	2.3	1.5	1.8	3.0	1.5	1.0	2.0
N73-26	2.3	1.5	1.6	3.0	1.5	1.0	2.0
N73-40	2.3	1.5	1.4	3.5	2.0	1.2	2.0
N73-57	2.5	1.5	1.2	3.5	1.5	1.0	2.0
N73-88	2.0	1.5	1.5	3.5	1.5	1.0	2.0
N73-100	3.3	1.5	1.7	3.5	2.5	1.2	2.0
N73-520	2.0	1.5	1.1	3.0	2.0	1.0	2.0
N73-538	2.0	1.5	1.3	2.0	2.0	1.0	2.0
OK963	2.0	1.5	1.7	3.0	2.0	1.2	2.0
R73-28	2.5	1.5	1.3	3.0	1.5	1.2	2.0
R73-345	2.3	1.5	1.7	3.0	2.0	1.0	2.0
R73-1195	2.3	1.5	1.7	4.0	2.0	1.0	2.0
R73-1218	2.0	1.5	1.4	4.5	2.0	1.0	2.0
Ts72-802	3.0	4.0	4.5	5.0	2.0	1.0	2.0
Ts72-807	2.0	1.5	1.3	3.5	1.5	1.2	2.0

UNIFORM GROUP VI

1975

	Variety or strain	Parentage	Generation composited
1.	Tracy	D61-618 X D60-9647	F_5
2.	Pickett 71	Pickett X P.R. resistant Lee	Comp. F_4 lines
3.	D70-3185	D64-4636 X tawny pubescence Pickett 71 type	F_5
4.	D71-6841	D64-4636 X D64-3937	F_5
5.	N70-1501	Dare X D65-6765	F_4
6.	D71-6234	D66-7398 X PI 95960	F_5
7.	D72-8489	Hood X Lee 68	F_5
8.	D72-8579	Hood X Lee 68	F_5
9.	N72-337	D65-6765 X (N64-1758 X N64-2457)	F_5
10.	N72-3037	D67-B5 X N64-2451	F_5
11.	N72-3038	D67-B5 X N64-2451	F_5
12.	R71-72	(Bragg X Davis) X(Dare X Davis)	F_5

Background of strains used as parents:

D68-618 is a phytophthora-rot-resistant selection from Hill(2) X PI 171442.

D60-9647 is a moderately high protein strain selected from FC31745 X D49-2510 which was included in Uniform Group VI 1963-65.

D64-4636 is a selection from Hill X D58-3311. D58-3311 is a bacterial pustule resistant strain selected from Jackson(4) X D49-2491.

D64-3937 is a selection from Hill X D59-1619. D59-1619 is a selection from D51-5427 X D49-2491. D51-5427 is a selection from Ralsoy X Ogden.

D65-6765 is a Group VII line grown in Uniform Group VII in 1968 and 1969. It is a selection from D58-3358 [Jackson(4) X D49-2491] X D59-9289 (a selection from D51-4877 X D55-4168).

D66-7398 is a high protein, yellow hilum strain selected from D61-3505 X (PI 96035 X D61-2624). D61-3505 and D61-2624 have D49-2491 as a recurrent parent and PI 165926 as non-recurrent parent.

N64-1758 is a selection from (N55-3843 X N55-2908) X D56-1192. D56-1192 is a selection from Perry X Lee. N55-2908 is a selection from Jackson X D49-2491. N55-3843 is a selection from (N45-2994 X Ogden) X (N44-92 X N48-1867).

N64-2457 has the same parentage as Ransom.

D67-B5 is D49-2491 converted to a narrow leaf, phytophthora-resistant type.

N64-2451 is from the same cross as Ransom. It was grown in Uniform Group VII in 1968

Results of 36 Uniform Group VI nurseries are summarized in Tables 22 through 28. Table 22 gives a general summary of agronomic qualities, oil and protein percentages of the seed, and field reaction to several diseases. Two- and three-year data are reported for seed yield, and oil and protein percentages.

Seed yield differences among strains were significant at the 5% level of confidence at 28 locations. The combined analysis of variance for mean seed yield by production regions showed differences to be significant in all but the Delta region.

Special plantings were made near the West Florida Research Center to evaluate strains against two species of root knot nematodes, *Meloidogyne incognita* and *M. arenaria*. Phytophthora rot ratings were made at Stoneville. Shattering scores were reported from several locations.

Three-year mean seed yields for Tracy are greater than for Pickett 71 in all regions. D70-3185 is being increased for release. It has the same level of resistance to phytophthora rot and cyst nematodes as Pickett 71 and in addition has a high level of resistance to *M. incognita*. D70-3185 makes taller growth than Pickett 71 and has higher mean seed yields in all production areas. D70-3185 should replace Pickett 71, Lee 68, and Lee 74 in all areas and will fill a special need in west Florida and south Alabama where a variety combining resistance to root knot nematodes and cyst nematodes is badly needed. D70-3185 has equalled Tracy in seed yield in the Southeast, but in other areas it has not yielded as well.

Two strains, D71-6841 and N70-1501, have been grown two years. D71-6841 has not yielded as well as Tracy. N70-1501 is 5 days earlier than Tracy and has yielded well.

Of the seven strains grown one year, D71-6234 has a fairly high protein percentage. Its yield approached that of Pickett 71 but was lower than that for Tracy. N72-3037 has the best yield record. Three strains, D72-8489, N72-337, and N72-3037, appeared resistant to soybean mosaic virus at Halfway, Texas.

Table 22 - General summary of the performance for the strains in Uniform Group VI, 1975

	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234
Seed Yield-1975						
East Coast	41.5	36.5-	39.8	37.0-	40.6	35.3-
Southeast	40.9	39.8	42.3	35.0-	37.8	36.4
Upper & Central South	43.7	39.6	42.3	40.1	40.9	40.6
Delta	45.6	41.2	43.8	42.3	43.4	41.1
West	37.1	34.4	35.5	36.6	39.2	33.3-
-1974-75						
East Coast	39.7	35.9	37.4	38.7	40.0	
Southeast	44.3	40.9	43.6	38.1	42.1	
Upper & Central South	41.3	38.3	39.4	39.8	40.8	
Delta	41.6	36.6	38.8	39.9	40.0	
West	38.3	35.7	37.2	38.1	39.3	
-1973-75						
East Coast	39.7	36.6	38.5			
Southeast	44.4	41.2	44.3			
Upper & Central South	40.3	38.3	38.9			
Delta	42.5	38.4	40.3			
West	39.0	36.0	38.2			
Oil Content-1975	18.0	19.9+	19.1+	19.7+	20.5+	17.8
-1974-75	17.6	19.7	19.1	19.7	20.7	
-1973-75	18.7	20.7	20.2			
Protein Content-1975	42.7	41.2-	42.8	41.4-	40.8-	45.5+
-1974-75	43.2	41.3	42.6	41.5	40.6	
-1973-75	43.3	40.9	42.4			
Seed size	16.1	12.4-	13.6-	13.5-	13.2-	11.4-
Maturity index	10-18	+1	+2	-2	-5	+2
Height	38	32	38	38	35	38
Bacterial pustule	R	R	R	R	R	R
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Shatter resistance	1.2	1.0	1.0	1.0	1.3	1.0
Percent mottled seed[1]	39	34	32	18	35	30
Downy mildew	1.0	2.0	1.7	2.7	2.0	1.0
M. incognita	4.0	4.0	1.0	1.0	3.0	4.0
M. arenaria	4.0	3.0	4.0	3.0	3.0	4.0
Cyst nematode (race 3)	S	R	R	S	S	S
Flower color	W	P	P	W	W	W
Pubescence color	T	G	T	G	G	T
Pod wall color	T	T	T	T	T	Br

[1] Halfway, Texas

Table 22 - (continued)

	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72
Seed Yield - 1975						
East Coast	37.9	32.5-	38.8	41.5	41.8	39.2
Southeast	39.0	30.9-	37.2	43.3	39.8	42.5
Upper & Central South	39.0-	36.8-	42.1	46.1	43.4	40.6
Delta	43.8	40.0	42.4	43.9	45.7	42.3
West	34.1	32.2-	38.1	38.5	38.7	37.7
- 1974-75						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
- 1973-75						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content-1975	19.8+	22.1+	20.4+	20.8+	20.2+	19.9+
-1974-75						
-1973-75						
Protein Content-1975	42.1	41.3-	41.9-	39.8-	40.7-	41.1-
-1974-75						
-1973-75						
Seed size	13.3-	14.1-	14.2-	12.5-	13.0-	12.0-
Maturity index	+2	-6	0	-1	-1	+2
Height	40	40	36	32	37	33
Bacterial pustule	R	R	R	R	R	R
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Shatter resistance	1.3	2.0	1.0	1.0	1.0	1.0
Percent mottled seed[1]	0	11	0	0	24	17
Downy mildew	2.0	3.0	2.7	2.0	2.7	2.0
M. incognita	4.0	5.0	4.0	5.0	5.0	5.0
M. arenaria	4.0	2.0	5.0	3.0	3.0	3.0
Cyst nematode (race 3)	S	S	S	S	S	S
Flower color	P	P	W	P	P	W
Pubescence color	T	T	T	T	T	G
Pod wall color	T	T	T	T	T	Br

Table 23 - Seed yield in bushels per acre, for the strains in Uniform Group VI,1975

Location	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234	D72-8489
			East Coast				
Princess Anne, Md.	27.8	23.1	25.8	28.0	35.9+	30.8	30.7
Warsaw, Va.	39.5	26.8-	28.2-	32.2-	34.6-	24.8-	27.8-
Petersburg, Va.	29.8	26.9	37.4+	32.2	42.3+	25.9	28.9
Holland, Va.	53.9	44.0-	47.4-	49.0	46.6-	42.2-	47.8-
Plymouth, N.C.	50.1	38.0-	50.8	43.6	51.5	38.9-	40.9-
Clinton, N.C.	43.1	43.2	46.3	35.7	43.0	43.3	41.4
Clayton, N.C.	35.8	40.0	38.5	34.3	35.0	37.1	41.0+
Florence, S.C.	48.6	39.9	38.0	33.1	34.1	30.0	38.2
Hartsville, S.C.	44.8	46.3	46.0	43.0	42.5	45.0	44.5
Mean	41.5	36.5-	39.8	37.0-	40.6	35.3-	37.9
			Southeast				
Blackville, S.C.	40.7	43.4	42.7	35.0-	38.9	36.6	37.1
Tifton, Ga.	35.9	33.1	34.1	27.9-	29.9-	33.9	35.9
Quincy, Fla.	46.7	41.1	45.0	33.3-	38.6-	30.5-	39.6-
Jay, Fla.	42.6	37.3	43.3	44.6	38.3	39.6	41.3
Fairhope, Ala.	46.2	42.6	44.4	44.2	44.2	44.9	43.8
Baton Rouge, La.	33.0	41.4+	44.2+	25.2-	36.9	33.1	36.5
Mean	40.9	39.8	42.3	35.0-	37.8	36.4	39.0
			Upper and Central South				
Athens, Ga.	55.6	43.9-	47.3-	48.6-	51.3	45.1-	51.6
Calhoun, Ga.	24.6	21.3	23.9	27.1	27.2	22.6	25.2
Belle Mina, Ala.	56.1	46.7-	52.6	51.5	50.1	52.8	49.9
Clemson, S.C.	37.3	40.1	39.9	31.5	37.4	43.8	36.8
Jackson, Tenn.	41.8	44.3	44.8	42.9	46.1	42.6	34.0
Verona, Miss.	46.6	41.2	45.3	38.7-	33.3-	36.9-	36.3-
Mean	43.7	39.6	42.3	40.1	40.9	40.6	39.0-
			Delta				
Portageville,Mo.(A)	53.1	46.5	46.7	43.4-	46.3-	47.9	45.0-
Portageville,Mo.(B)	42.0	39.1	40.3	39.3	36.7	34.8	39.5
Keiser, Ark.	48.8	45.1	45.7	48.2	50.3	45.8	51.6
Jonesboro, Ark.	23.6	35.6+	40.9+	25.5	22.2	26.7	24.6
Stoneville,MS(A)	45.6	41.8	41.2	47.5	47.6	42.7	42.2
Stoneville,MS(B)	51.8	40.2-	41.1-	47.4	52.9	44.2-	48.6
St. Joseph, La.	52.2	39.9-	50.6	45.0-	48.1	45.8-	55.0
Mean	45.6	41.2	43.8	42.3	43.4	41.1	43.8
			West				
Pine Bluff, Ark.	26.6	36.1+	30.9+	33.6+	33.3+	23.5	20.8-
Stuttgart, Ark.	41.0	39.4	42.2	43.5	42.6	39.0	40.7
Curtis, La.	52.8	48.8	48.0	52.1	57.0	45.5-	54.4
Crowley, La.	34.7	23.8	35.5	32.5	35.9	32.3	28.8
Beaumont, Texas	49.3	38.0-	47.0	38.8-	51.4	45.4	43.6
Bixby, Okla.	32.5	33.4	29.9	34.7	33.6	32.5	30.6
Halfway, Texas	22.0	19.2	14.4-	21.0	19.9	15.0-	17.4
Lubbock, Texas	37.3	36.5	36.0	36.5	39.6	33.4-	38.3
Mean	37.1	34.4	35.5	36.6	39.2	33.3-	34.1

(+) - Strains yielding significantly more (odds 19:1 or greater) than Tracy.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Tracy.

Table 23 - (continued)

Location	D72-8579	N72-337	N72-3037	N72-3038	R71-72	L.S.D. (.05)	C.V. (%)
			East Coast				
Princess Anne, Md.	30.5	36.5+	35.4+	30.1	29.4	5.2	10
Warsaw, Va.	36.7	36.6	40.1	38.9	35.6	4.3	8
Petersburg, Va.	30.8	31.0	28.1	36.2	28.8	5.9	11
Holland, Va.	41.6-	42.5-	51.2	51.6	44.4-	6.1	7
Plymouth, N.C.	31.6-	41.1-	43.5-	51.4	45.2	6.6	9
Clinton, N.C.	36.4	44.2	52.7	44.6	50.5	N.S.	13
Clayton, N.C.	28.1-	37.9	42.6+	44.4+	38.5	4.6	7
Florence, S.C.	25.1	36.1	32.7	32.7	35.4	N.S.	23
Hartsville, S.C.	31.8-	43.7	47.5	46.6	45.1	4.4	6
Mean	32.5-	38.8	41.5	41.8	39.2	3.9	
			Southeast				
Blackville, S.C.	28.1-	41.4	40.4	41.6	40.6	5.0	8
Tifton, Ga.	28.6-	27.1-	33.9	27.6-	36.6	4.9	9
Quincy, Fla.	34.1-	31.3-	48.6	35.3-	46.3	5.9	8
Jay, Fla.	32.0-	42.1	47.6	45.4	42.4	6.9	10
Fairhope, Ala.	44.5	49.3	47.8	46.8	46.9	3.7	5
Baton Rouge, La.	17.9-	32.2	41.3+	42.1+	42.1+	5.6	9
Mean	30.9-	37.2	43.3	39.8	42.5	4.6	
			Upper and Central South				
Athens, Ga.	44.3-	50.0-	57.1	52.2	48.0-	5.1	6
Calhoun, Ga.	25.9	28.7	31.7+	32.2+	26.1	4.2	10
Belle Mina, Ala.	51.0	53.0	59.5	53.7	46.4-	7.0	7
Clemson, S.C.	30.0	37.9	47.4	41.7	45.2	N.S.	15
Jackson, Tenn.	40.8	44.5	41.6	44.8	42.6	N.S.	12
Verona, Miss.	29.2-	38.5-	39.1-	35.9-	35.6-	5.5	9
Mean	36.8-	42.1	46.1	43.4	40.6	4.4	
			Delta				
Portageville, Mo.(A)	42.9-	42.3-	49.6	54.1	48.5	6.8	8
Portageville, Mo.(B)	37.6	42.7	38.8	42.8	41.1	N.S.	8
Keiser, Ark.	47.5	47.9	47.0	53.5+	49.2	4.6	6
Jonesboro, Ark.	22.3	26.6	21.4	25.6	25.6	7.1	16
Stoneville, MS.(A)	40.5	46.8	44.5	45.2	38.6	N.S.	9
Stoneville, MS.(B)	47.8	47.1-	48.3	53.9	43.8-	4.5	6
St. Joseph, La.	40.8-	45.8-	58.0+	45.1-	49.6	4.7	6
Mean	40.0	42.4	43.9	45.7	42.3	N.S.	
			West				
Pine Bluff, Ark.	24.1	21.3-	25.9	29.1	20.2-	3.4	7
Stuttgart, Ark.	38.8	42.8	41.2	41.7	39.3	N.S.	5
Curtis, La.	43.7-	54.5	52.1	56.3	55.6	6.2	7
Crowley, La.	26.7	37.1	30.3	37.4	28.7	N.S.	19
Beaumont, Texas	40.5-	43.4	52.0	51.7	51.1	6.7	9
Bixby, Okla.	27.0	42.4+	34.2	32.9	41.1+	7.0	12
Halfway, Texas	15.8-	20.9	28.5+	18.8	24.7	5.6	17
Lubbock, Texas	40.8	42.6+	44.0+	41.9+	40.7	3.8	6
Mean	32.2-	38.1	38.5	38.7	37.7	3.7	

Table 24 - Chemical composition and seed size for the strains in Uniform Group VI, 1975

Location	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234
			Oil Percentage			
Warsaw, Va.	18.1	19.9	19.7	19.8	20.4	17.7
Plymouth, N.C.	18.2	19.9	19.1	19.5	20.8	16.9
Clinton, N.C.	19.0	20.6	20.0	20.1	21.2	17.5
Jay, Fla.	19.8	21.7	20.1	21.7	22.6	18.5
Jackson, Tenn.	18.6	20.9	18.5	19.1	18.7	18.0
Portageville, Mo.(A)	16.8	19.3	18.4	18.7	19.7	17.2
Keiser, Ark.	16.7	19.3	19.2	19.4	20.1	18.6
Stoneville, Miss.(B)	19.4	21.3	19.9	21.5	22.0	19.6
Stuttgart, Ark.	17.6	18.5	18.2	19.2	20.9	17.3
Halfway, Texas	15.6	17.6	17.5	17.6	18.7	17.0
Mean	18.0	19.9+	19.1+	19.7+	20.5+	17.8
			Protein Percentage			
Warsaw, Va.	41.4	39.8	41.2	39.8	39.5	45.0
Plymouth, N.C.	44.3	42.4	45.1	42.8	41.7	47.4
Clinton, N.C.	45.1	41.6	44.2	42.9	42.1	47.8
Jay, Fla.	45.2	42.1	44.7	42.8	41.2	46.0
Jackson, Tenn.	41.4	40.8	43.0	42.4	42.7	44.5
Portageville, Mo.(A)	42.3	41.1	42.0	41.2	40.9	45.6
Keiser, Ark.	41.7	40.6	41.6	40.2	40.3	44.5
Stoneville, Miss.(B)	41.1	38.6	41.4	38.6	38.6	42.6
Stuttgart, Ark.	43.4	44.2	44.5	43.4	41.5	46.4
Halfway, Texas	40.8	41.1	40.4	39.9	39.1	44.7
Mean	42.7	41.2-	42.8	41.4-	40.8-	45.5+
			Grams per 100 Seeds			
Warsaw, Va.	15.5	11.1	11.7	12.4	11.9	9.8
Plymouth, N.C.	18.2	12.6	15.8	14.0	14.9	12.0
Clinton, N.C.	18.5	12.7	16.4	14.5	15.4	13.1
Jay, Fla.	15.0	15.0	14.0	14.0	13.0	11.0
Jackson, Tenn.	17.8	14.3	16.0	15.5	14.8	12.9
Portageville, Mo.(A)	15.7	12.9	13.9	13.4	13.2	12.5
Keiser, Ark.	15.0	10.5	12.0	14.0	12.0	11.0
Stoneville, Miss.(B)	14.8	11.2	10.4	12.0	12.2	10.6
Stuttgart, Ark.	14.7	11.0	12.0	11.7	11.7	9.3
Mean	16.1	12.4-	13.6-	13.5-	13.2-	11.4-

Table 24 - (continued)

	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72	L.S.D. (.05)
			Oil Percentage				
Warsaw, Va.	19.8	21.3	21.2	21.3	20.7	20.3	
Plymouth, N.C.	19.7	22.8	20.4	21.6	21.3	19.9	
Clinton, N.C.	20.4	23.7	20.2	21.4	20.9	20.8	
Jay, Fla.	21.2	25.3	21.6	21.9	20.9	21.0	
Jackson, Tenn.	19.6	20.8	19.7	21.2	20.3	19.5	
Portageville, Mo.(A)	18.6	21.4	19.9	19.3	18.9	19.8	
Keiser, Ark.	19.4	22.8	20.5	20.2	20.2	19.5	
Stoneville, Miss.(B)	21.2	23.3	21.8	22.2	21.5	21.0	
Stuttgart, Ark.	19.8	21.3	19.5	19.6	19.1	19.1	
Halfway, Texas	18.1	18.7	19.4	19.0	18.4	18.5	
Mean	19.8+	22.1+	20.4+	20.8+	20.2+	19.9+	.05
			Protein Percentage				
Warsaw, Va.	41.5	39.8	39.8	38.1	39.3	40.0	
Plymouth, N.C.	43.9	43.3	43.9	40.6	41.0	43.5	
Clinton, N.C.	43.3	42.8	43.9	40.7	40.5	41.9	
Jay, Fla.	43.5	43.9	43.3	41.6	42.9	42.6	
Jackson, Tenn.	41.9	42.4	43.0	38.2	41.1	41.0	
Portageville, Mo.(A)	41.8	40.9	41.7	40.9	41.9	40.4	
Keiser, Ark.	41.9	39.0	40.8	38.5	39.5	40.2	
Stoneville, Miss.(B)	39.5	38.8	38.7	38.0	38.4	38.4	
Stuttgart, Ark.	43.5	42.9	44.6	42.5	43.8	43.4	
Halfway, Texas	40.6	38.9	39.3	39.0	39.1	39.6	
Mean	42.1	41.3-	41.9-	39.8-	40.7-	41.1-	0.7
			Grams per 100 Seeds				
Warsaw, Va.	11.6	12.5	13.1	11.5	12.7	11.7	
Plymouth, N.C.	14.3	13.6	14.5	12.5	14.1	13.0	
Clinton, N.C.	14.5	14.7	16.8	13.2	13.0	12.9	
Jay, Fla.	12.0	14.0	14.0	13.0	12.0	12.0	
Jackson, Tenn.	15.1	15.5	16.4	15.6	15.0	13.9	
Portageville, Mo.(A)	12.9	13.6	12.9	12.4	12.9	12.7	
Keiser, Ark.	14.5	15.0	13.0	11.5	13.0	11.5	
Stoneville, Miss.(B)	12.2	14.6	14.0	12.0	12.2	10.2	
Stuttgart, Ark.	12.3	13.3	13.0	11.0	11.7	9.7	
Mean	13.3-	14.1-	14.2-	12.5-	13.0-	12.0-	0.8

Table 25 - Relative maturity data, days earlier (-) or later (+) than Tracy, for the strains in Uniform Group VI, 1975

Location	Date planted	Tracy matured	Pickett 71	D70-3185	D71-6841	N70-1501
			East Coast			
Princess Anne, Md.	6-17	11-1	0	0	0	0
Warsaw, Va.	5-19	10-26	+1	0	-4	-2
Petersburg, Va.	6-1	11-1	-3	-1	-4	-6
Holland, Va.	5-23	11-6	-4	-3	-5	-10
Plymouth, N.C.	5-14	10-28	-2	0	-2	-13
Clinton, N.C.	5-21	10-20	+8	+10	+4	0
Clayton, N.C.	6-5	11-6	-8	-2	-8	-16
Florence, S.C.	5-15	10-18	+2	0	-3	-3
Hartsville, S.C.	6-5	10-24	0	-1	-5	-10
Mean		10-28	-1	+1	-3	-7
			Southeast			
Blackville, S.C.	5-27	10-15	+1	0	+1	-1
Tifton, Ga.	5-8	10-2	+12	+7	+5	-15
Quincy, Fla.	5-30	10-7	+7	+4	-5	-8
Jay, Fla.	5-23	10-11	+2	+2	-2	-2
Fairhope, Ala.	6-6	10-11	+1	+2	0	-5
Baton Rouge, La.	5-19	10-9	+3	+4	+3	0
Mean		10-9	+4	+3	0	-5
			Upper and Central South			
Athens, Ga.	5-12	10-6	+4	+5	-2	-4
Calhoun, Ga.	5-27	10-18	0	+2	+2	-7
Belle Mina, Ala.	5-1	10-8	+1	+4	+3	-1
Clemson, S.C.	5-26	10-30	-1	0	-5	-9
Jackson, Tenn.	5-13	10-29	-2	-2	-10	-12
Verona, Miss.	5-28	10-14	+2	+2	-3	-4
Mean		10-18	0	+2	-3	-6
			Delta			
Portageville, Mo.(A)	5-5	10-25	+1	+1	-6	-10
Portageville, Mo.(B)	5-19	10-27	0	+3	-3	-5
Keiser, Ark.	5-20	10-24	+1	-2	-3	-6
Stoneville, Miss.(A)	5-20	10-15	+4	+1	-4	-4
Stoneville, Miss.(B)	5-23	10-13	+2	+2	-3	-2
Mean		10-21	+2	+1	-4	-5
			West			
Pine Bluff, Ark.	5-15	10-10	-1	+1	-4	-5
Stuttgart, Ark.	5-20	10-13	-1	-1	-3	-2
Curtis, La.	5-14	10-10	+4	-2	+1	-6
Crowley, La.	5-23	10-9	+3	+3	+2	-8
Beaumont, Texas	5-23	10-11	+1	0	+1	-3
Lubbock, Texas	5-27	10-22	+3	+9	+4	+10
Mean		10-13	+2	+2	0	-2

Table 25 - (continued)

Location	D71-6234	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72
			East Coast				
Princess Anne, Md.	0	0	-4	-1	0	0	0
Warsaw, Va.	-2	0	-7	-5	-3	-3	+2
Petersburg, Va.	-6	-2	-14	-7	-3	-2	+4
Holland, Va.	0	-3	-4	-3	-3	-4	0
Plymouth, N.C.	0	-4	-12	0	-2	-2	+3
Clinton, N.C.	+4	+4	+10	+13	+10	+4	+10
Clayton, N.C.	0	-8	-22	0	-8	-10	--
Florence, S.C.	+2	+4	-3	+2	-3	0	0
Hartsville, S.C.	-2	-1	-10	-6	-5	-5	+1
Mean	0	-1	-7	-1	-2	-2	+2
			Southeast				
Blackville, S.C.	+1	+1	0	+2	-1	-1	+2
Tifton, Ga.	+7	+8	-22	0	0	+1	+10
Quincy, Fla.	+21	+8	+21	+9	+3	+4	+3
Jay, Fla.	+3	+2	-1	+3	-1	-1	+3
Fairhope, Ala.	+2	+2	-8	-1	-4	-1	+1
Baton Rouge, La.	+6	+9	0	+1	-1	+4	+11
Mean	+7	+5	-2	+2	0	+1	+5
			Upper and Central South				
Athens, Ga.	+2	+4	-9	-2	-2	-1	+4
Calhoun, Ga.	-1	+2	-13	-7	0	-1	+2
Belle Mina, Ala.	+5	0	-5	-3	-3	-4	+3
Clemson, S.C.	+1	+1	-4	+1	-2	-1	+1
Jackson, Tenn.	0	0	-18	-6	-7	-8	-2
Verona, Miss.	+1	+1	-4	0	-2	-2	-2
Mean	+1	+1	-9	-3	-3	-3	+1
			Delta				
Portageville, Mo.(A)	+1	+2	-14	-4	-3	-2	+1
Portageville, Mo.(B)	0	+1	-8	-5	-3	-1	+3
Keiser, Ark.	0	+1	-5	-3	-3	-2	0
Stoneville, Miss.(A)	+3	+3	-8	+1	+1	+1	0
Stoneville, Miss.(B)	+2	+2	-5	+1	+2	+1	+1
Mean	+1	+2	-8	-2	-1	-1	+1
			West				
Pine Bluff, Ark.	-3	+1	-30	-1	-3	-5	-2
Stuttgart, Ark.	-1	+1	-12	-2	-2	-2	-2
Curtis, La.	+8	+5	-4	+6	+2	+1	+6
Crowley, La.	0	+2	-7	+3	-1	0	+3
Beaumont, Texas	+3	+5	+6	+1	0	+1	+3
Lubbock, Texas	+2	+10	+9	-2	+5	0	+10
Mean	+2	+4	-6	+1	0	-1	+3

Table 26 - Plant height for the strains in Uniform Group VI, 1975

Location	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234
			East Coast			
Pincess Anne, Md.	38	34	41	38	36	40
Warsaw, Va.	47	42	47	47	46	45
Petersburg, Va.	38	38	41	39	37	40
Holland, Va.	46	41	48	46	44	43
Plymouth, N.C.	41	31	41	40	37	42
Clinton, N.C.	38	32	37	37	33	34
Clayton, N.C.	41	38	45	41	39	45
Florence, S.C.	34	23	32	33	28	25
Hartsville, S.C.	39	37	43	42	41	46
Mean	40	35	42	40	38	40
			Southeast			
Blackville, S.C.	35	36	38	38	36	40
Tifton, Ga.	28	20	27	29	28	28
Jay, Fla.	32	26	30	33	26	31
Fairhope, Ala.	34	29	38	36	35	35
Baton Rouge, La.	35	32	40	34	37	40
Mean	33	29	35	34	32	35
			Upper and Central South			
Athens, Ga.	34	33	38	36	37	36
Calhoun, Ga.	42	39	43	42	41	44
Belle Mina, Ala.	42	37	45	46	43	44
Clemson, S.C.	36	34	35	36	32	37
Jackson, Tenn.	42	33	39	43	34	42
Verona, Miss.	38	32	38	38	34	38
Mean	39	35	40	40	37	40
			Delta			
Portageville, MO.(A)	45	35	44	45	40	45
Portageville, MO.(B)	41	32	37	45	35	39
Keiser, Ark.	42	32	40	45	36	42
Jonesboro, Ark.	36	38	43	46	39	43
Stoneville, Miss.(A)	35	28	37	37	30	36
Stoneville, Miss.(B)	38	31	38	38	35	35
St. Joseph, La.	31	26	34	31	29	34
Mean	39	31	38	40	34	39
			West			
Pine Bluff, Ark.	47	43	45	41	40	47
Stuttgart, Ark.	38	32	40	40	37	38
Curtis, La.	36	26	37	37	36	39
Crowley, La.	28	20	27	22	20	25
Beaumont, Texas	31	28	32	31	31	28
Bixby, Okla.	33	33	38	38	33	38
Lubbock, Texas	33	26	30	34	27	33
Mean	35	30	36	35	32	35

Table 26 - (continued)

Location	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72
			East Coast			
Princess Anne, Md.	45	41	37	35	37	35
Warsaw, Va.	46	53	46	42	48	40
Petersburg, Va.	43	38	39	36	38	37
Holland, Va.	53	54	42	39	49	41
Plymouth, N.C.	39	43	39	33	39	39
Clinton, N.C.	36	39	35	31	36	31
Clayton, N.C.	47	45	41	41	45	34
Florence, S.C.	36	34	22	20	22	22
Hartsville, S.C.	47	47	43	35	41	33
Mean	44	44	38	35	39	35
			Southeast			
Blackville, S.C.	41	40	36	31	38	33
Tifton, Ga.	32	32	17	18	24	21
Jay, Fla.	35	29	32	25	34	28
Fairhope, Ala.	38	37	33	27	35	29
Baton Rouge, La.	41	36	36	30	35	33
Mean	37	35	31	26	33	29
			Upper and Central South			
Athens, Ga.	35	44	37	32	35	35
Calhoun, Ga.	49	45	44	38	42	36
Belle Mina, Ala.	46	47	38	34	42	36
Clemson, S.C.	37	42	40	32	35	33
Jackson, Tenn.	43	40	39	35	40	37
Verona, Miss.	41	41	36	35	36	34
Mean	42	43	39	34	38	35
			Delta			
Portageville, Mo.(A)	46	47	44	38	44	35
Portageville, Mo.(B)	44	41	36	37	43	38
Keiser, Ark.	49	43	39	36	44	37
Jonesboro, Ark.	36	41	44	35	42	37
Stoneville, Miss.(A)	37	33	32	27	34	28
Stoneville, Miss.(B)	39	35	33	30	35	34
St. Joseph, La.	34	30	36	24	30	26
Mean	42	38	37	32	38	33
			West			
Pine Bluff, Ark.	41	47	47	41	46	42
Stuttgart, Ark.	42	36	34	31	38	34
Curtis, La.	40	37	30	24	31	29
Crowley, La.	28	23	25	21	26	21
Beaumont, Texas	36	33	28	27	28	25
Bixby, Okla.	37	39	32	32	38	30
Lubbock, Texas	33	33	31	29	28	32
Mean	37	35	32	29	34	30

Table 27 - Lodging scores for the strains in Uniform Group VI, 1975

Location	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234
			East Coast			
Princess Anne, Md.	4.2	3.8	3.5	3.0	3.2	2.5
Warsaw, Va.	3.0	4.0	2.6	2.6	2.8	2.7
Petersburg, Va.	3.7	3.7	3.0	2.3	2.6	3.3
Holland, Va.	2.2	3.7	1.8	2.5	3.5	1.8
Plymouth, N.C.	3.0	4.0	2.0	3.0	2.7	2.0
Clinton, N.C.	3.7	3.0	3.0	3.0	2.7	2.7
Clayton, N.C.	3.7	2.7	3.0	2.7	3.7	3.0
Florence, S.C.	3.0	2.0	2.0	2.0	1.0	1.0
Hartsville, S.C.	2.3	2.3	2.7	2.7	2.5	2.8
			Southeast			
Blackville, S.C.	2.0	2.0	2.0	2.0	2.0	2.0
Tifton, Ga.	2.0	1.0	1.0	1.3	1.0	1.0
Quincy, Fla.	4.3	1.3	3.7	3.7	4.3	3.3
Jay, Fla.	2.0	2.0	2.0	2.0	2.0	2.0
Fairhope, Ala.	2.0	1.3	1.0	1.0	1.3	1.3
Baton Rouge, La.	1.7	1.5	1.2	1.0	1.0	1.8
			Upper and Central South			
Athens, Ga.	1.8	2.3	1.8	1.8	1.5	1.7
Calhoun, Ga.	2.6	3.3	2.2	2.6	3.0	2.6
Belle Mina, Ala.	3.0	2.2	3.3	3.0	3.5	4.3
Clemson, S.C.	2.2	2.0	1.8	1.5	1.7	2.0
Jackson, Tenn.	2.0	2.3	1.7	2.3	2.0	1.3
			Delta			
Portageville, Mo.(A)	2.8	2.7	2.7	2.3	3.0	2.2
Portageville, Mo.(B)	3.3	2.8	2.2	2.0	3.0	1.8
Keiser, Ark.	2.0	1.5	1.3	1.7	1.4	1.8
Jonesboro, Ark.	1.6	3.3	2.5	2.1	1.2	1.6
Stoneville, Miss.(A)	2.3	2.0	2.0	2.0	2.3	2.7
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	3.0
St. Joseph, La.	2.2	1.5	2.2	1.5	2.8	2.2
			West			
Pine Bluff, Ark.	2.0	2.0	2.0	2.3	2.3	2.0
Stuttgart, Ark.	3.0	2.2	1.8	2.2	1.7	1.7
Curtis, La.	2.0	1.2	1.8	1.3	2.0	2.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	3.0	3.0	2.0	3.0	3.0	2.0
Lubbock, Texas	3.0	3.0	3.0	3.0	3.0	2.7

Table 27 - (continued)

	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72
			East Coast			
Princess Anne, Md.	3.7	3.3	2.2	3.3	3.5	4.2
Warsaw, Va.	3.9	3.2	1.8	3.4	3.0	4.0
Petersburg, Va.	3.7	2.0	1.3	3.7	3.0	4.7
Holland, Va.	3.0	3.2	1.7	3.5	2.7	4.2
Plymouth, N.C.	4.0	3.3	2.0	3.3	3.0	3.0
Clinton, N.C.	3.7	4.0	3.0	3.3	2.7	2.7
Clayton, N.C.	3.0	3.0	2.0	3.0	3.0	3.3
Florence, S.C.	3.0	2.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	3.2	3.3	2.2	2.8	2.7	2.8
			Southeast			
Blackville, S.C.	2.3	3.0	1.0	2.0	2.3	2.3
Tifton, Ga.	2.7	2.3	1.0	1.0	1.0	1.0
Quincy, Fla.	3.0	4.7	1.0	2.0	2.3	2.3
Jay, Fla.	3.0	2.0	1.0	1.0	2.0	1.0
Fairhope, Ala.	1.7	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.8	1.0	1.0	1.0	1.3	1.0
			Upper and Central South			
Athens, Ga.	3.2	2.5	1.5	1.8	1.7	2.0
Calhoun, Ga.	3.5	2.8	2.3	3.0	3.0	3.2
Belle Mina, Ala.	4.0	3.8	1.5	2.3	3.0	5.0
Clemson, S.C.	2.3	2.7	1.7	2.3	2.0	2.0
Jackson, Tenn.	2.7	3.0	1.0	2.3	2.0	2.7
			Delta			
Portageville, Mo.(A)	3.3	3.5	1.8	2.5	3.1	3.5
Portageville, Mo.(B)	3.0	4.0	1.7	3.5	3.1	4.0
Keiser, Ark.	2.3	2.4	1.0	2.1	2.2	2.0
Jonesboro, Ark.	2.0	2.5	1.8	1.5	1.6	1.5
Stoneville, Miss.(A)	3.0	3.0	2.0	2.3	3.0	2.7
Stoneville, Miss.(B)	3.0	2.0	2.0	2.0	2.3	2.0
St. Joseph, La.	2.8	3.0	1.0	1.5	2.0	2.2
			West			
Pine Bluff, Ark.	2.6	3.0	1.0	2.3	3.0	1.6
Stuttgart, Ark.	3.5	2.7	1.2	2.0	2.8	2.3
Curtis, La.	2.5	1.7	1.0	1.0	1.3	1.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	4.0	3.7	1.0	1.7	1.7	1.3
Lubbock, Texas	3.5	3.5	2.5	4.0	4.5	3.7

Table 28 - Seed quality scores for the strains in Uniform Group VI, 1975

Location	Tracy	Pickett 71	D70-3185	D71-6841	N70-1501	D71-6234
			East Coast			
Princess Anne, Md.	2.5	2.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.7	1.5	1.8	2.0	1.3	1.5
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	1.5	1.7	1.0	2.3	1.5	1.2
Plymouth, N.C.	2.0	2.0	2.0	3.0	2.0	2.0
Clinton, N.C.	1.5	1.5	1.5	3.0	3.0	2.0
Clayton, N.C.	1.5	1.5	1.0	1.5	1.5	1.5
			Southeast			
Blackville, S.C.	2.0	2.0	2.0	3.0	2.0	2.0
Tifton, Ga.	3.3	2.7	2.8	3.5	3.5	3.0
Quincy, Fla.	2.7	3.3	1.7	5.0	3.0	2.7
Jay, Fla.	4.0	3.0	4.0	5.0	3.0	3.0
Fairhope, Ala.	3.0	2.0	2.0	3.3	2.3	2.7
			Upper and Central South			
Athens, Ga.	2.5	1.5	1.7	3.0	1.7	1.8
Calhoun, Ga.	2.0	1.5	1.5	2.2	1.5	1.7
Belle Mina, Ala.	1.0	1.0	1.0	1.0	2.0	1.0
Jackson, Tenn.	1.0	1.0	1.0	1.5	1.0	1.0
			Delta			
Portageville, Mo.(A)	2.0	1.5	1.5	2.0	2.0	2.0
Portageville, Mo.(B)	1.5	1.5	1.5	2.0	1.5	2.0
Keiser, Ark.	1.0	1.5	1.0	1.7	1.0	1.0
Jonesboro, Ark.	1.8	1.7	1.8	1.8	1.3	2.2
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Pine Bluff, Ark.	1.6	1.6	3.0	3.3	2.6	3.0
Stuttgart, Ark.	1.7	2.0	1.7	3.0	1.5	1.5
Beaumont, Texas	1.0	1.0	2.0	2.0	1.0	2.0

Table 28 - (continued)

Location	D72-8489	D72-8579	N72-337	N72-3037	N72-3038	R71-72
			East Coast			
Princess Anne, Md.	2.0	2.0	1.5	2.2	2.0	2.0
Warsaw, Va.	1.2	1.4	1.5	1.3	1.4	1.3
Petersburg, Va.	1.0	2.0	1.0	1.0	1.0	1.0
Holland, Va.	1.2	1.8	1.3	1.5	1.5	1.0
Plymouth, N.C.	2.0	4.0	2.5	1.5	2.0	2.0
Clinton, N.C.	2.0	4.0	2.5	2.0	2.0	2.0
Clayton, N.C.	1.0	2.0	1.0	1.0	1.5	1.5
			Southeast			
Blackville, S.C.	2.0	3.0	2.0	2.0	3.0	2.0
Tifton, Ga.	2.8	3.5	3.2	3.7	3.2	2.0
Quincy, Fla.	3.3	5.0	5.0	2.3	4.3	1.3
Jay, Fla.	3.0	5.0	4.0	3.0	3.0	2.0
Fairhope, Ala.	2.0	4.0	3.0	2.3	2.7	2.3
			Upper and Central South			
Athens, Ga.	2.0	3.0	2.0	1.5	1.5	1.5
Calhoun, Ga.	2.0	2.5	1.6	1.5	2.0	1.2
Belle Mina, Ala.	1.0	2.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	2.0	1.0	1.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	2.5	2.5	2.0	2.0	1.5	2.0
Portageville, Mo.(B)	2.0	1.5	1.5	1.5	1.5	1.5
Keiser, Ark.	1.0	1.5	1.0	1.0	1.0	1.0
Jonesboro, Ark.	1.0	1.5	2.0	2.1	1.5	1.3
Stoneville, Miss.(A)	2.0	2.3	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Pine Bluff, Ark.	2.3	3.3	3.0	3.3	3.0	4.0
Stuttgart, Ark.	2.0	2.7	2.0	1.8	1.8	2.0
Beaumont, Texas	1.0	2.0	2.0	2.0	1.0	1.0

PRELIMINARY GROUP VI

1975

Preliminary Group VI nurseries, including 34 experimental strains along with Lee 74 and D64-4636 as checks, were grown at eight locations. The parentage of these strains is reported in Table 29. Performance data are summarized in Tables 30 through 35. Differences among strains were significant at the 5% level of confidence at seven locations. Only one replication of planting on clay at Stoneville was harvested.

N72-137 and D64-4636 were the only strains having mean seed yields significantly greater than Lee 74. Seven strains produced mean seed yields significantly lower than Lee 74. Twenty-five strains produced seed yields significantly lower than D64-4636.

Additional plantings were made on soils infested with root knot nematodes on a field near the West Florida Research Center. One field was heavily infested with *M. incognita* and the other with *M. arenaria*. Phytophthora rot injury can be expected from the plantings on clay at Stoneville and Keiser.

The newly released Hood 75 was included along with the parent Hood. Hood 75 has a major gene giving resistance to phytophthora rot. Mean seed yields were similar. All growth characteristics were also similar.

D72-6175, selected to combine resistance to race 3 of the soybean cyst nematode and phytophthora rot, also received low ratings for both species of root knot nematodes. D73-8105, which had the highest protein content, equalled Lee 74 in seed yield. Several other high protein lines yielded significantly lower than Lee 74. However, N72-137, which was the highest yielding strain, was significantly higher in protein than Lee 74.

The strains R73-66, N72-3045, N72-3191, and RAB67-100 appeared variable for one or more characters. Strains which appear to merit advancing to Uniform Group VI are N72-137, N72-3148, N72-3058, D72-6175, R73-81, N72-546, and D73-8105.

Table 29 - Parentage of the strains in Preliminary Group VI, 1975

	Variety or strain	Parentage	Generation composited
1.	Lee 74	Lee 68 X R66-1517	F_5
2.	D64-4636	Hill X D58-3311[Jackson(4) X D49-2491]	F_5
3.	Hood	Roanoke X N45-745 (Ogden X CNS)	F_5
4.	Hood 75	Hood(8) X Arksoy	F_6
5.	D72-6175	D64-4636 X Pickett 71	F_4
6.	D73-3674	Hill(3) x PI 274454	F_7
7.	D73-3873	D65-6555 X York	F_5
8.	D73-4467	(Arksoy X Lee) X D68-12087	F_5
9.	D73-7413	PI 200503 X Pickett 71	F_5
10.	D73-7447	PI 200503 x Pickett 71	F_5
11.	D73-7782	D67-4632 X D65-3168	F_5
12.	D73-7787	D67-4632 X D65-3168	F_5
13.	D73-7854	D68-9148 X D65-3168	F_5
14.	D73-7894	D68-9148 X D65-3168	F_5
15.	D73-7946	D68-9148 X D65-3168	F_5
16.	D73-8105	D67-4823 X Pickett 71	F_5
17.	D73-8693	D66-8666 X D69-8155	F_5
18.	D73-8874	D66-7398 X PI 227555	F_5
19.	La70-47	Dare X Davis	F_5
20.	La70-94	Dare X Davis	F_5
21.	La70-267	Davis X PI 166147	F_5
22.	R72-1382	R68-106 X L62-1251	F_4
23.	R73-23	(Davis X Lee 68) X R60-66	F_4
24.	R73-66	Davis X R66-100	F_6
25.	R73-81	R56-49 X D68-B2	F_5
26.	R73-219	R64-502 x Pickett	F_5
27.	R73-2515	(Bragg X Davis) X (Dare X Davis)	F_5
28.	N72-137	D65-6765 X (D67-B5 X N64-2451)	F_6
29.	N72-357	D65-6765 X (D67-B5 X N64-2451)	F_5
30.	N72-376	D65-6765 X (D67-B5 X N64-2451)	F_5
31.	N72-546	D65-6765 X (N64-1758 X N64-2451)	F_5
32.	N72-3045	D67-B5 X N64-2451	F_5
33.	N72-3058	F65-1376 x Ransom	F_5
34.	N72-3148	D67-B5 x N64-2451	F_5
35.	N72-3191	D65-6765 x Ransom	F_5
36.	RAB67-100	Davis X Lee 68	F_8

Table 30 - General summary of performance for the strains in Preliminary Group VI, 1975

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	Root knot *M. arenaria*	Root knot *M. incognita*
Lee 74	42.4	10-20	33	20.3	42.5	1.0	2.0	3.5
D64-4636	47.1+	-9	31	19.8	42.7	1.0	3.0	1.5
Hood	40.7	-9	35	21.2	41.2-	2.0	4.0	5.0
Hood 75	40.8	-9	33	20.9	40.9-	2.0	3.0	5.0
D72-6175	44.7	-10	35	20.5	43.1	1.0	3.0	1.5
D73-3674	42.5	-14	29	20.3	41.3-	1.5	3.0	4.0
D73-3873	41.7	-12	39	18.6-	43.5+	1.5	3.0	4.0
D73-4467	36.8-	-3	41	19.4-	43.3	1.0	3.0	4.5
D73-7413	38.7	0	34	19.5-	41.3-	2.5	4.0	4.5
D73-7447	40.6	-1	35	19.3-	42.8	1.0	3.0	4.5
D73-7782	40.7	-1	35	18.9-	42.4	1.0	5.0	4.5
D73-7787	36.0-	-7	34	18.6-	43.1	1.5	5.0	4.5
D73-7854	34.1-	-8	30	16.6-	46.7+	1.5	4.0	4.0
D73-7894	39.6	-4	35	18.3-	43.4	1.0	3.0	4.0
D73-7946	37.2-	-7	36	15.9-	46.9+	1.0	4.0	4.5
D73-8105	42.1	-1	32	17.9-	47.7+	1.0	1.0	5.0
D73-8693	40.6	-4	37	19.9	42.4	1.0	3.0	5.0
D73-8874	36.7-	0	34	17.1-	45.1+	1.5	3.0	4.0
La70-47	40.2	-3	38	20.4	41.3-	1.0	4.0	4.0
La70-94	40.7	-1	43	21.0+	40.2-	1.0	5.0	4.5
La70-267	41.6	-1	38	18.9-	42.1	1.0	5.0	4.5
R72-1382	36.4-	-2	49	20.8	39.5-	1.0	4.0	5.0
R73-23	38.1-	0	42	19.9	41.8	1.5	4.0	5.0
R73-66	43.0	-5	36	21.1+	40.7-	3.0	5.0	5.0
R73-81	44.5	0	33	21.5+	40.8-	1.0	4.0	5.0
R73-219	41.5	0	31	19.8	42.3	1.0	3.0	5.0
R73-2515	41.9	-9	36	20.9	41.6	1.5	4.0	3.5
N72-137	47.2+	-1	36	19.8	43.8+	1.0	3.0	4.0
N72-357	41.5	-9	37	19.8	43.4	2.5	3.0	5.0
N72-376	42.4	-1	37	19.7	43.3	1.5	4.0	4.5
N72-546	43.6	-5	37	19.3-	43.3	1.0	4.0	4.5
N72-3045	40.5	-1	34	20.3	41.5-	1.0	4.0	5.0
N72-3058	45.3	0	37	21.4+	42.3	1.0	4.0	4.5
N72-3148	45.9	0	33	21.1+	40.4-	1.0	5.0	5.0
N72-3191	42.9	0	37	18.7-	43.6+	1.5	5.0	5.0
RAB67-100	43.4	0	33	19.2-	42.2	1.0	4.0	5.0
L.S.D.(.05)	4.2			0.7	1.0			
L.S.D.(.01)	5.5			0.9	1.4			

Table 31 - Seed yield, in bushels per acre for the strains in Preliminary Group VI, 1975

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(A)	Stone-ville, Miss(B)	Jay, Fla.	Belle Mina, Ala.
Lee 74	38.8	37.7	38.9	45.5	47.8	39.6	43.9	44.5
D64-4636	50.6+	44.5+	46.6+	50.7	50.0	46.4	39.3	47.7
Hood	36.6	41.3	38.7	42.7	46.2	48.5	42.0	37.4
Hood 75	34.1	44.2	38.3	44.8	45.7	45.3	39.7	38.9
D72-6175	35.7	38.7	46.7+	44.2	51.7	29.2	44.7	50.8
D73-3674	35.9	36.6	48.1+	51.5	45.5	40.9	37.5	42.3
D73-3873	44.3	36.7	42.7	44.1	44.0	42.8	38.2	41.9
D73-4467	38.8	39.3	34.2	39.2-	40.9	41.0	33.7-	31.5-
D73-7413	35.1	35.8	44.1	38.4-	38.5-	38.8	39.0	40.0
D73-7447	37.0	36.0	41.6	37.5-	44.6	34.8	44.3	43.4
D73-7782	42.8	36.4	39.8	47.7	44.0	43.9	34.1-	39.9
D73-7787	44.3	38.4	40.1	34.4-	38.6-	38.9	20.4-	36.4-
D73-7854	37.7	21.3-	39.2	36.9-	38.2-	39.0	26.9-	38.4
D73-7894	31.1-	38.0	41.2	45.2	43.8	43.6	38.6	38.9
D73-7946	40.6	34.0	38.9	35.4-	42.7	36.7	31.4-	37.6
D73-8105	34.4	37.5	43.3	51.8+	43.9	39.0	44.7	38.7
D73-8693	35.5	40.4	37.9	40.7	47.4	44.9	40.9	41.2
D73-8874	35.5	34.8	38.7	39.0-	35.4-	37.3	39.3	34.3-
La70-47	34.8	41.7	39.5	43.4	48.4	43.6	33.3-	40.3
La70-94	32.9	45.6+	41.5	46.7	46.6	47.2	30.6-	40.9
La70-267	37.3	46.9+	41.4	47.5	45.2	48.9	32.9-	39.9
R72-1382	27.1-	38.4	33.6	44.1	43.9	31.2	32.9-	35.0-
R73-23	33.3	44.8+	36.1	40.7	45.6	44.3	31.8-	34.1-
R73-66	35.5	42.4	46.1+	47.9	45.4	43.6	39.7	44.0
R73-81	42.5	37.5	40.1	45.5	49.7	31.9	48.0	48.1
R73-219	40.3	38.5	39.5	48.6	43.3	41.3	39.4	41.1
R73-2515	40.6	41.1	39.4	45.5	50.6	49.0	35.2-	40.9
N72-137	42.5	48.4+	43.6	45.6	53.4	44.1	45.4	51.7
N72-357	35.5	35.5	39.5	38.2-	49.6	29.9	40.5	52.0+
N72-376	33.3	38.9	39.4	44.4	50.8	50.8	40.9	46.9
N72-546	40.6	41.7	44.3	41.4	44.1	45.7	46.5	46.9
N72-3045	31.8-	41.5	38.3	47.1	46.9	46.8	36.0-	42.1
N72-3058	42.9	43.5	37.2	44.2	52.6	49.1	50.3	46.5
N72-3148	33.0	46.4+	41.7	49.4	53.8	31.0	46.9	50.3
N72-3191	41.8	39.1	42.1	48.8	41.8	44.7	45.8	41.2
RAB67-100	35.5	40.0	44.4	44.9	49.8	43.9	41.2	47.7
L.S.D.(.05)	7.0	6.8	7.2	6.3	7.0	--	7.5	7.6
C.V.	9%	9%	9%	7%	8%	--	9%	9%

Table 32 - Oil percentages for the strains in Preliminary Group VI, 1975

Strain	Petersburg, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(A)	Jay, Fla.
Lee 74	19.2	21.0	19.6	20.8	20.7
D64-4636	18.0	19.6	20.1	20.4	21.0
Hood	18.7	21.5	21.2	21.8	22.7
Hood 75	18.6	20.9	21.4	21.3	22.4
D72-6175	19.3	20.1	20.6	21.5	21.2
D73-3674	17.4	19.9	20.1	21.2	23.0
D73-3873	17.5	18.6	18.7	19.5	18.9
D73-4467	18.6	19.0	18.1	21.2	20.0
D73-7413	18.5	20.7	18.6	20.0	19.9
D73-7447	18.3	19.3	18.9	20.3	19.7
D73-7782	17.6	18.6	18.3	20.6	19.5
D73-7787	17.5	18.4	17.9	20.2	18.8
D73-7854	16.1	16.6	16.3	17.6	16.2
D73-7894	17.6	18.5	17.6	20.0	18.0
D73-7946	15.7	15.3	15.4	16.8	16.2
D73-8105	16.8	18.1	17.4	19.2	17.8
D73-8693	19.0	19.2	19.4	21.3	20.4
D73-8874	16.0	16.8	17.0	18.1	17.7
La70-47	19.2	21.0	19.0	22.4	20.6
La70-94	19.5	20.7	20.7	22.6	21.7
La70-267	17.2	18.7	18.2	20.1	20.1
R72-1382	19.0	21.2	20.5	21.7	21.8
R73-23	18.9	20.8	18.8	21.6	19.6
R73-66	19.7	20.7	20.4	22.5	22.3
R73-81	20.5	22.3	20.8	21.6	22.2
R73-219	17.8	19.8	19.7	21.4	20.4
R73-2515	20.6	20.2	20.0	21.7	21.9
N72-137	18.2	20.3	19.5	20.8	20.3
N72-357	17.8	19.1	20.0	20.7	21.2
N72-376	17.9	19.3	19.7	20.8	20.6
N72-546	18.4	18.8	19.6	20.2	19.7
N72-3045	18.7	20.3	19.7	21.2	21.4
N72-3058	20.7	21.4	20.5	21.9	22.5
N72-3148	19.3	21.3	21.1	21.5	22.3
N72-3191	17.6	18.5	17.9	19.6	20.1
RAB67-100	17.8	18.7	18.3	20.3	20.8

Table 33 - Protein percentages for the strains in Preliminary Group VI, 1975

Strain	Petersburg, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(A)	Jay, Fla.
Lee 74	43.4	42.9	40.6	41.3	44.2
D64-4636	43.4	43.8	39.6	42.5	44.2
Hood	42.1	42.9	39.1	39.6	42.2
Hood 75	42.2	42.5	38.2	39.7	41.8
D72-6175	43.6	44.6	40.3	42.3	44.7
D73-3674	41.6	42.1	39.1	40.9	42.7
D73-3873	44.0	44.4	41.0	42.9	45.0
D73-4467	43.2	44.9	42.9	41.5	44.0
D73-7413	41.9	43.2	40.6	39.2	41.6
D73-7447	43.9	43.7	41.7	41.1	43.7
D73-7782	44.0	44.5	41.6	39.4	42.4
D73-7787	44.0	45.2	41.8	40.8	43.7
D73-7854	46.4	48.7	45.6	45.8	47.0
D73-7894	43.7	44.7	42.2	41.3	45.2
D73-7946	45.7	49.9	45.8	45.5	47.6
D73-8105	47.9	49.5	46.6	45.2	49.1
D73-8693	41.9	44.8	40.5	41.3	43.3
D73-8874	45.5	48.4	43.6	42.5	45.5
La70-47	42.3	42.9	39.8	38.1	43.6
La70-94	42.1	42.7	37.8	37.6	40.8
La70-267	43.1	44.2	40.4	40.3	42.3
R72-1382	41.7	40.6	38.1	36.6	40.3
R73-23	41.9	44.0	39.8	39.6	43.9
R73-66	41.4	42.1	39.1	39.1	41.7
R73-81	41.8	40.6	39.3	39.9	42.4
R73-219	44.6	43.3	39.9	40.2	43.7
D73-2515	41.6	44.0	40.7	40.9	41.0
N72-137	45.3	43.8	42.4	42.3	45.1
N72-357	44.4	44.6	41.3	41.4	45.2
N72-376	45.2	43.8	41.2	41.8	44.4
N72-546	44.3	44.7	40.7	41.4	45.5
N72-3045	43.0	42.1	39.9	39.2	43.4
N72-3058	43.4	42.8	41.1	41.4	42.9
N72-3148	42.0	40.4	38.4	40.0	41.4
N72-3191	45.2	44.6	43.1	42.3	42.8
RAB67-100	43.6	43.0	40.9	40.9	42.6

Table 34 - Plant height for the strains in Preliminary Group VI, 1975

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss(A)	Stone-ville, Miss(B)	Jay, Fla.	Belle Mina, Ala.
Lee 74	33	35	35	34	35	34	29	31
D64-4636	28	36	36	31	31	26	26	34
Hood	30	40	40	37	33	32	30	37
Hood 75	29	39	38	33	29	28	29	35
D72-6175	31	37	38	35	34	32	32	41
D73-3674	27	35	30	29	26	24	25	33
D73-3873	37	36	44	42	38	34	38	40
D73-4467	37	43	44	45	43	38	23	52
D73-7413	31	36	40	40	34	32	21	40
D73-7447	31	32	41	35	36	34	35	37
D73-7782	31	33	42	39	37	34	24	39
D73-7787	30	33	35	41	35	28	30	37
D73-7854	29	28	30	29	30	32	29	33
D73-7894	31	37	39	39	35	36	16	45
D73-7946	31	35	40	35	36	34	35	38
D73-8105	34	36	35	38	29	28	29	30
D73-8693	30	37	42	37	37	34	34	47
D73-8874	34	34	36	35	34	34	30	34
La70-47	31	39	44	43	42	38	24	44
La70-94	40	43	49	51	44	38	31	45
La70-267	33	42	42	43	38	36	30	41
R72-1382	43	49	56	54	49	46	42	56
R73-23	33	47	50	41	41	40	35	50
R73-66	31	39	40	40	35	34	32	37
R73-81	33	33	37	37	33	26	30	35
R73-219	30	32	35	37	31	24	25	32
R73-2515	26	46	42	44	39	24	24	41
N72-137	31	39	31	37	38	34	36	41
N72-357	36	39	42	39	39	28	30	44
N72-376	30	38	45	42	35	34	31	43
N72-546	33	40	45	42	37	32	30	39
N72-3045	27	37	38	37	32	34	26	39
N72-3058	31	41	38	40	39	36	35	38
N72-3148	30	36	37	38	35	28	29	34
N72-3191	33	42	42	41	36	36	28	40
RAB67-100	30	35	37	37	33	28	30	34

Table 35 - Seed quality scores for the strains in Preliminary Group VI, 1975

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss(A)	Stone-ville Miss(B)	Jay, Fla.	Belle Mina, Ala.
Lee 74	1.0	2.0	2.0	1.2	2.0	2.0	2.0	1.0
D64-4636	1.0	2.0	2.5	1.5	2.0	2.0	2.0	1.0
Hood	1.0	3.0	2.0	1.0	2.0	2.0	2.0	2.0
Hood 75	1.0	3.0	2.0	1.0	2.0	2.0	2.0	1.0
D72-6175	1.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0
D73-3674	1.0	3.0	2.0	1.0	2.0	3.0	2.0	2.0
D73-3873	1.0	3.0	2.0	1.5	2.0	2.0	2.0	1.0
D73-4467	1.0	3.0	2.0	1.5	2.0	2.0	3.0	1.0
D73-7413	1.0	2.5	2.5	1.0	2.0	2.0	5.0	1.0
D73-7447	1.0	2.0	2.0	1.0	2.0	2.0	4.0	1.0
D73-7782	1.0	3.0	2.1	1.0	2.0	2.0	5.0	1.0
D73-7787	1.0	3.5	2.0	1.0	2.0	2.0	5.0	1.0
D73-7854	1.0	3.0	1.5	1.5	2.0	2.0	4.0	1.0
D73-7894	1.0	3.0	2.0	1.0	2.0	2.0	4.0	1.0
D73-7946	1.0	2.5	2.0	1.5	2.0	2.0	4.0	1.0
D73-8105	1.0	1.5	2.0	1.0	2.0	2.0	1.0	1.0
D73-8693	1.0	3.0	1.5	1.5	2.0	2.0	2.0	1.0
D73-8874	1.0	3.0	2.0	1.0	2.0	2.0	3.0	1.0
La70-47	1.0	3.0	2.5	1.0	2.0	2.0	3.0	1.0
La70-94	1.0	3.0	2.0	1.5	2.0	2.0	2.0	1.0
La70-267	1.0	3.0	2.0	1.0	2.0	2.0	2.0	1.0
R72-1382	1.0	2.5	2.0	1.2	2.0	2.0	5.0	1.0
R73-23	1.0	2.0	2.0	1.5	2.0	2.0	3.0	1.0
R73-66	1.0	3.5	2.0	1.0	2.0	2.0	3.0	1.0
R73-81	1.0	2.5	1.5	1.0	2.0	2.0	1.0	1.0
R73-219	1.0	3.0	2.0	1.0	2.0	2.0	1.0	1.0
R73-2515	1.0	3.0	2.5	1.0	2.0	2.0	3.0	1.0
N72-137	1.0	2.5	2.0	1.0	2.0	2.0	3.0	1.0
N72-357	1.0	3.5	2.0	1.0	2.0	2.0	3.0	1.0
N72-376	1.0	2.5	2.0	2.0	2.0	2.0	2.0	1.0
N72-546	1.0	2.0	2.0	1.0	2.0	2.0	1.0	1.0
N72-3045	1.0	2.5	2.0	1.5	2.0	2.0	1.0	1.0
N72-3058	1.0	2.0	2.0	1.0	2.0	2.0	1.0	1.0
N72-3148	1.0	2.0	2.0	1.0	2.0	2.0	1.0	1.0
N72-3191	1.0	2.0	2.0	1.5	2.0	2.0	2.0	1.0
RAB67-100	1.0	3.0	2.0	1.0	2.0	2.0	2.0	1.0

UNIFORM GROUP VII

1975

	Variety or strain	Parentage	Generation composited
1.	Bragg	Jackson X D49-2491	F_6
2.	Ransom	(N55-5931 X N55-3818) X D56-1185	F_5
3.	F70-2061	F62-2953 X D62-3286	F_6
4.	N70-1816	Dare X D65-6765	F_4
5.	N70-2173	Hampton X Ransom	F_4
6.	D71-9203	Semmes X D67-10539	F_5
7.	D72-7959	D61-4269 X D61-5264	F_5
8.	D71-1180	F59-1505 X [Bragg(3) X D60-7965]	F_5
9.	N72-1014	629-22-27 X Ransom	F_5
10.	N72-3167	F65-1376 X Ransom	F_5
11.	N72-3154	D67-B5 X N64-2451	F_5
12.	N72-3213	D67-B5 X N64-2451	F_5

Background of strains used as parents:

D49-2491 is a sister strain of Lee selected from S100 X CNS.

N55-5931 is a selection from Roanoke X D49-2491 which was grown in Uniform Group VII in 1958.

N55-3818 is a selection from (N45-2994 X Ogden) X (N44-92 X N58-1867) which was grown in Preliminary VI in 1957. N45-2994 is from Arksoy X Ogden, N44-92 is from Haberlandt X Ogden, and N48-1867 is from Roanoke X N45-745.

D56-1185 is a selection from Perry X Lee.

F62-2953 is a selection from D51-5091 X N50-2542. D51-5091 is a tall selection from Roanoke X N45-745 and N50-2542 is a high protein selection from Ogden X Biloxi.

D62-3286 is a high protein selection from D49-2491(4) X PI 163453, a wild type.

D65-6765 is a selection from D58-3358 X D59-9289.

D67-10539 is a root knot resistant line selected from D62-7562 X Semmes. D62-7562 is a selection from D49-2491 X Laredo.

D61-4269 is a late maturing selection from D49-2491(6) X Barchet.

D61-5264 is a selection from Lee X PI 200532.

F59-1505 is a selection from Jackson X D49-2491.

D60-7965 is a high protein selection from a cross of an F_5 line from Ogden X CNS with an F_5 line from Ogden x Biloxi.

629-22-27 is a second cycle recurrent selection line from D49-2491 crossed with nine plant introduction strains and backcrossed to D49-2491.

F65-1376 was included in Uniform Group VII in 1968 and 1969.

N64-2451 is from the same cross as Ransom. It was grown in Unifrom Group VII in 1968.

Results from 29 Uniform Group VII nurseries are summarized in Tables 36 through 42. Table 36 gives a general summary of agronomic qualities, oil and protein percentages of the seed and field reaction to several diseases and nematodes. Two- and three-year data are reported for seed yield and oil and protein percentages.

Differences among strains were significant at the 5% level of confidence at 22 locations. The combined analysis of variance for seed yield by production regions showed differences among strains to be significant in the East Coast, Southeast, and Upper and Central South regions.

Special plantings were made near the West Florida Research Center to evaluate strains for reaction to *Meloidogyne incognita* and *M. arenaria*. Phytophthora rot and downy mildew ratings were made at Stoneville.

Three strains have been evaluated two years. All have yielded well but do not appear to be sufficiently superior to Bragg or Ransom to justify release.

Seven strains were grown for the first time. D71-9203 has a high level of resistance to several strains of *M. incognita* and also to *M. arenaria*. Seed yield was low in most tests. It has value for use as a parent. F71-1180 yielded well in all regions and appeared to have good resistance to both species of root knot nematodes. Its yield was significantly higher than that for Bragg in the East Coast and Southeast. N72-3167 had a seed yield significantly higher than that for Bragg in the East Coast, while N72-3154 had a seed yield significantly greater than that for Bragg in both the East Coast and Southeast. D72-7959 received a lower score for pod and stem blight than other strains in the planting at Quincy.

Table 36 - General summary of performance for the strains in Uniform Group VII, 1975

	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
Seed Yield - 1975						
East Coast	43.4	46.6	44.9	42.8	45.6	38.8-
Southeast	39.8	39.3	40.5	39.6	40.0	38.6
Upper & Central South	48.5	47.5	49.1	45.2	47.2	37.7-
Delta and West	38.5	39.5	37.9	38.1	39.7	34.4
- 1974-75						
East Coast	41.1	43.4	41.5	41.0	42.9	
Southeast	40.6	39.6	41.4	40.6	41.4	
Upper & Central South	41.5	43.2	44.5	41.2	41.6	
Delta and West	38.4	37.2	36.5	37.9	38.0	
- 1973-75						
East Coast	41.0	42.8				
Southeast	40.1	41.0				
Upper & Central South	38.6	40.9				
Delta and West	39.2	38.2				
Oil Content - 1975	20.4	22.6+	21.5+	20.4	21.9+	20.1-
- 1974-75	20.4	22.7	21.7	20.6	21.9	
- 1973-75	21.1	23.2				
Protein Content - 1975	42.1	40.7-	40.2-	41.0-	39.6-	43.0+
- 1974-75	41.9	40.5	40.1	41.1	39.6	
- 1973-75	41.9	40.5				
Seed size	15.1	14.9	13.7-	13.1-	14.7	13.0-
Maturity index	10-24	0	-2	-2	0	-5
Height	39	35	37	34	35	36
Shattering	1.0	1.0	1.0	1.0	1.0	1.3
Phytophthora rot	1.0	2.5	1.0	1.5	1.0	1.0
Downy mildew	2.0	2.0	3.0	2.0	1.0	3.0
M. incognita	2.0	4.0	2.0	2.0	4.0	2.0
M. arenaria	2.0	3.0	4.0	4.0	4.0	2.0
Flower color	W	P	P	W	P	Pt
Pubescence color	T	T	G	G	T	G
Pod wall color	T	T	T	T	Br	T

Table 36 - (continued)

	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213
Seed Yield - 1975						
East Coast	45.0	48.5+	46.3	48.0+	48.9+	46.3
Southeast	37.8	43.1+	40.8	41.1	43.3+	38.7
Upper & Central South	44.4	47.5	46.6	46.2	49.3	46.6
Delta and West	35.5	39.4	40.5	39.7	40.7	40.6
- 1974-75						
East Coast						
Southeast						
Upper & Central South						
Delta and West						
- 1973-75						
East Coast						
Southeast						
Upper & Central South						
Delta and West						
Oil Content - 1975	20.1-	20.1-	21.1+	22.2+	21.0+	21.6+
- 1974-75						
- 1973-75						
Protein Content - 1975	41.5-	42.1	43.6+	41.1-	41.6-	41.0-
- 1974-75						
- 1973-75						
Seed size	13.0-	17.3+	16.0+	14.5	15.2	14.8
Maturity index	+4	+2	-1	-1	-1	+1
Height	40	39	36	34	36	34
Shattering	1.0	1.0	1.0	1.0	1.7	1.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Downy mildew	1.0	2.0	2.0	2.0	2.0	2.0
M. incognita	5.0	1.0	3.0	4.0	5.0	4.0
M. arenaria	2.0	2.0	4.0	4.0	4.0	3.0
Flower color	P	P	P	P	P	P
Pubescence color	T	T	T	T	T	T
Pod wall color	T	T	T	T	T	Br

Table 37 - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1975

Location	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203	D72-7959
			East Coast				
Plymouth, N.C.	46.3	46.0	36.0-	38.9	48.6	34.5-	43.0
Clayton, N.C.	40.2	42.1	46.7+	35.7	42.1	36.1-	41.0
Clinton, N.C.	50.9	46.2	53.4	46.5	47.7	41.0-	49.4
Florence, S.C.(A)	39.8	46.9	44.0	50.8	46.0	41.9	47.4
Florence, S.C.(B)	38.9	45.7	42.1	37.8	45.0	37.5	39.7
Hartsville, S.C.	44.2	52.5	47.0	47.0	44.3	41.7	49.4
Mean	43.4	46.6	44.9	42.8	45.6	38.8-	45.0
			Southeast				
Blackville, S.C.	37.0	37.9	37.1	38.3	38.9	34.4	32.1-
Tallassee, Ala.	43.8	45.4	45.2	38.8-	44.9	40.1	37.0-
Tifton, Ga.	34.6	33.1	43.2+	33.9	34.6	38.4	40.6
Gainesville, Fla.	55.4	43.7-	48.3-	46.7-	52.0	49.6	45.8-
Live Oak, Fla.	44.2	40.0	43.8	42.1	45.0	39.7	39.0
Marianna, Fla.	33.9	33.2	37.1	32.8	32.7	31.2	33.6
Quincy, Fla.	38.2	41.4	40.3	47.9	39.9	43.4	39.9
Jay, Fla.	37.5	43.9	38.3	38.5	43.4	38.1	41.1
Fairhope, Ala.	45.6	44.2	41.3	44.4	42.6	39.3-	45.1
Poplarville, Miss.	26.8	26.5	30.0	25.8	23.9	27.8	16.3
Baton Rouge, La.	41.0	43.4	41.0	47.0	41.6	43.0	44.8
Mean	39.8	39.3	40.5	39.6	40.0	38.6	37.8
			Upper and Central South				
Athens, Ga.	50.1	47.1	52.7	46.4	49.2	38.4-	45.8
Calhoun, Ga.*	26.8	26.4	27.2	25.2	25.6	20.4-	23.4
Clemson, S.C.	46.9	47.8	45.4	43.9	45.2	37.0	43.0
Mean	48.5	47.5	49.1	45.2	47.2	37.7-	44.4
			Delta and West				
Stoneville, Miss.(A)	44.1	38.3	38.2	41.8	33.0-	35.8-	42.4
Stoneville, Miss.(B)	34.4	32.3	30.9	33.8	32.5	27.6-	32.1
Pine Bluff, Ark.	25.2	23.0-	20.4-	19.5-	23.7	16.8-	19.4-
Stuttgart Ark.	35.9	43.0+	39.9+	34.3	38.4	35.2	34.8
St. Joseph, La.	52.4	44.1-	46.7	49.9	57.7	43.4-	39.2-
Curtis, La.	50.1	64.4+	59.0+	56.6+	59.7+	49.6	52.8
Crowley, La.	34.1	40.3	32.1	35.2	39.6	30.4	35.1
Beaumont, Texas	42.5	51.4	44.5	41.0	45.5	39.9	40.0
Uvalde, Texas	27.5	17.4-	27.1	31.7	27.0	32.0	22.5
Mean	38.5	39.5	37.9	38.1	39.7	34.4	35.5

*Not included in mean.
(+) - Strains yielding significantly more (odds 19:1 or greater) than Bragg.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Bragg.

Table 37 - (continued)

Location	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213	LS.D. (.05)	C.V. (%)
			East Coast				
Plymouth, N.C.	43.3	46.6	51.3	43.5	45.2	9.1	12
Clayton, N.C.	39.1	38.4	38.7	45.7+	43.5	3.7	5
Clinton, N.C.	53.5	46.4	57.0+	59.1+	53.3	5.2	6
Florence, S.C.(A)	52.3	50.1	45.1	52.0	44.3	N.S.	10
Florence, S.C.(B)	50.8	46.7	48.6	46.7	42.8	N.S.	13
Hartsville, S.C.	51.8	49.5	47.5	46.6	49.0	9.0	11
Mean	48.5+	46.3	48.0+	48.9+	46.3	4.0	
			Southeast				
Blackville, S.C.	39.0	36.8	39.4	33.4-	37.7	3.6	7
Tallassee, Ala.	45.5	47.7	47.7	51.6+	41.8	4.9	8
Tifton, Ga.	38.4	37.9	37.6	40.4	37.9	5.2	8
Gainesville, Fla.	57.9	51.1	49.5	52.6	53.3	7.1	8
Live Oak, Fla.	40.4	35.5-	37.4-	46.4	36.7-	5.4	8
Marianna, Fla.	40.0+	27.9-	31.9	36.2	31.8	4.0	7
Quincy, Fla.	46.1	42.9	48.7	44.7	41.4	N.S.	10
Jay, Fla.	45.7+	42.1	48.7+	48.9+	42.3	7.3	10
Fairhope, Ala.	47.2	51.1+	46.3	49.3	40.3-	4.5	6
Poplarville, Miss.	28.7	30.5	25.4	26.8	22.2	N.S.	25
Baton Rouge, La.	45.3	44.7	39.5	45.9	40.6	N.S.	8
Mean	43.1+	40.8	41.1	43.3+	38.7	2.6	
			Upper and Central South				
Athens, Ga.	46.1	50.3	48.5	49.0	48.1	6.4	8
Calhoun, Ga.*	30.8+	23.5	27.9	26.8	27.7	4.0	9
Clemson, S.C.	48.9	42.9	44.0	49.4	45.1	N.S.	9
Mean	47.5	46.6	46.2	49.3	46.6	4.5	
			Delta and West				
Stoneville, Miss.(A)	52.5+	41.4	44.0	39.2	42.2	6.9	10
Stoneville, Miss.(B)	41.1+	35.2	34.5	32.3	36.7	3.7	7
Pine Bluff, Ark.	25.6	28.9+	19.5-	33.3+	34.5+	2.2	5
Stuttgart, Ark.	38.2	39.9+	42.4+	40.7+	41.5+	3.8	6
St. Joseph, La.	57.2	51.0	52.4	56.0	46.8	8.3	10
Curtis, La.	53.2	60.0+	60.4+	59.0+	62.7+	6.0	6
Crowley, La.	36.1	38.8	37.2	41.1+	38.3	6.4	10
Beaumont, Texas	36.8	47.3	42.9	49.3	47.0	N.S.	13
Uvalde, Texas	12.9-	23.1	24.0	18.0-	18.4-	6.1	15
Mean	39.4	40.5	39.7	40.7	40.6	N.S.	

Table 38 - Chemical composition and seed size for the strains in Unifrom Group VII, 1975

Location	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
			Oil Percentage			
Plymouth, N.C.	19.7	21.4	19.8	19.2	20.9	19.2
Clinton, N.C.	20.1	22.3	21.1	20.2	21.5	19.6
Blackville, S.C.	19.5	21.5	20.7	20.0	21.3	20.0
Tifton, Ga.	20.7	23.8	22.1	20.7	23.5	21.1
Live Oak, Fla.	22.4	24.1	23.4	22.2	24.1	21.1
Jay, Fla.	20.1	22.0	21.3	19.8	21.5	19.6
Baton Rouge, La.	20.6	22.9	21.9	20.9	21.7	20.4
Clemson, S.C.	20.5	22.8	21.5	20.5	21.5	19.8
Stoneville, Miss.(B)	20.1	22.5	21.6	20.0	21.3	20.4
Beaumont, Texas	20.4	22.7	21.3	20.2	21.8	19.4
Mean	20.4	22.6+	21.5+	20.4	21.9+	20.1-
			Protein Percentage			
Plymouth, N.C.	43.5	41.4	41.9	43.1	40.7	44.6
Clinton, N.C.	41.4	41.0	40.8	40.9	40.3	43.4
Blackville, S.C.	42.1	41.3	40.0	40.9	39.9	42.3
Tifton, Ga.	45.0	42.3	42.1	42.8	39.6	43.7
Live Oak, Fla.	41.1	39.5	39.9	40.0	38.7	42.4
Jay, Fla.	42.4	42.2	41.0	42.5	41.2	44.1
Baton Rouge, La.	43.6	41.2	41.4	41.7	41.0	43.1
Clemson, S.C.	40.2	39.0	39.0	38.9	38.6	42.4
Stoneville, Miss.(B)	39.2	37.3	35.5	37.3	36.7	39.8
Beaumont, Texas	42.7	41.5	40.3	41.7	39.7	44.0
Mean	42.1	40.7-	40.2-	41.0-	39.6-	43.0+
			Grams per 100 Seeds			
Plymouth, N.C.	16.2	14.2	13.3	13.7	15.2	13.2
Clinton, N.C.	15.6	16.2	14.3	13.4	16.3	14.0
Blackville, S.C.	13.0	12.0	13.0	12.0	12.0	12.0
Tifton, Ga.	15.6	14.0	14.1	13.4	13.1	13.5
Live Oak, Fla.	17.3	17.7	16.7	14.6	17.5	14.5
Jay, Fla.	13.0	14.0	12.0	13.0	14.0	12.0
Baton Rouge, La.	16.8	18.0	15.6	14.7	16.5	14.5
Clemson, S.C.	17.1	17.0	15.1	14.2	16.7	15.1
Stoneville, Miss.(B)	11.0	11.0	10.4	9.4	11.0	9.8
Beaumont, Texas	15.5	15.3	12.4	12.4	14.3	10.9
Mean	15.1	14.9	13.7-	13.1-	14.7	13.0-

Table 38 - (continued)

Location	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213	L.S.D. (.05)
			Oil Percentage				
Plymouth, N.C.	18.4	19.1	20.0	20.9	20.5	20.6	
Clinton, N.C.	19.4	20.0	20.9	21.6	20.7	21.4	
Blackville, S.C.	19.4	20.1	20.7	21.9	21.4	21.3	
Tifton, Ga.	21.1	21.1	21.7	24.1	21.2	23.0	
Live Oak, Fla.	21.0	21.8	22.2	24.2	22.4	23.3	
Jay, Fla.	19.7	20.1	20.6	22.6	19.6	21.1	
Baton Rouge, La.	21.4	19.8	21.2	21.5	20.6	21.8	
Clemson, S.C.	20.8	19.8	21.2	21.9	20.9	21.8	
Stoneville, Miss.(B)	19.9	20.0	21.3	21.7	21.5	20.7	
Beaumont, Texas	20.2	19.0	20.7	21.6	20.7	20.8	
Mean	20.1-	20.1-	21.1+	22.2+	21.0+	21.6+	0.3
			Protein Percentage				
Plymouth, N.C.	43.7	43.6	43.8	42.2	41.8	42.6	
Clinton, N.C.	42.5	42.7	44.1	42.3	41.6	41.8	
Blackville, S.C.	41.6	42.1	44.0	41.5	41.6	41.3	
Tifton, Ga.	42.7	44.1	44.3	41.8	42.6	41.3	
Live Oak, Fla.	41.9	41.8	43.6	39.6	41.0	39.5	
Jay, Fla.	42.3	42.0	44.8	41.4	43.8	42.5	
Baton Rouge, La.	40.9	42.9	45.0	42.6	42.7	41.4	
Clemson, S.C.	38.8	40.2	42.5	40.2	39.9	38.9	
Stoneville, Miss.(B)	38.4	38.3	39.6	37.8	38.0	38.3	
Beaumont, Texas	41.8	42.8	44.0	42.0	42.6	42.5	
Mean	41.5-	42.1	43.6+	41.1-	41.6-	41.0-	0.5
			Grams per 100 Seeds				
Plymouth, N.C.	12.4	17.7	15.7	13.2	15.2	15.5	
Clinton, N.C.	14.6	19.7	16.7	16.2	16.8	16.1	
Blackville, S.C.	11.0	14.0	15.0	13.0	14.0	12.0	
Tifton, Ga.	13.6	18.7	15.2	13.3	14.0	13.3	
Live Oak, Fla.	15.3	20.4	19.1	16.7	18.7	17.4	
Jay, Fla.	11.0	17.0	15.0	15.0	14.0	14.0	
Baton Rouge, La.	15.2	18.8	18.8	17.3	16.2	17.8	
Clemson, S.C.	14.8	20.5	17.5	15.8	17.5	16.8	
Stoneville, Miss.(B)	9.6	12.0	11.6	10.4	11.8	11.2	
Beaumont, Texas	12.0	14.1	15.6	14.0	13.7	13.0	
Mean	13.0-	17.3+	16.0+	14.5	15.2	14.8	0.7

Table 39 - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1975

Location	Date planted	Bragg matured	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
			East Coast				
Plymouth, N.C.	5-14	11-2	0	-3	-5	-1	-3
Clayton, N.C.	6-6	10-31	+4	+4	-1	+6	-3
Clinton, N.C.	5-21	11-3	0	-6	-2	-2	-6
Florence, S.C.(A)	5-15	10-26	-2	0	+2	+6	-4
Florence, S.C.(B)	6-13	11-1	+1	-6	-4	-6	-10
Hartsville, S.C.	6-6	10-29	+1	-4	0	-2	-5
Mean		10-31	+1	-3	-2	0	-5
			Southeast				
Blackville, S.C.	6-6	10-29	+1	-4	0	-2	-5
Tallassee, Ala.	5-15	10-21	+4	-1	-1	+1	-3
Tifton, Ga.	5-8	10-14	-6	-2	-1	-5	-6
Gainesville, Fla.	5-29	10-19	-5	-7	-6	0	-6
Marianna, Fla.	6-13	10-17	+1	-1	0	-1	-6
Quincy, Fla.	5-30	10-10	+8	+2	+1	+6	-10
Jay, Fla.	5-23	10-20	0	0	-2	0	-2
Fairhope, Ala.	6-6	10-16	0	-1	+1	-1	-3
Poplarville, Miss.	5-27	10-19	-5	-2	-2	-9	-14
Baton Rouge, La.	5-19	10-20	+4	-1	-1	0	-8
Mean		10-19	0	-2	-1	-1	-6
			Upper and Central South				
Athens, Ga.	5-12	10-15	-4	-4	-4	-3	-11
Calhoun, Ga.	5-27	10-28	0	0	0	0	-1
Clemson, S.C.	5-26	10-31	0	-5	-2	0	-5
Mean		10-25	-1	-3	-2	-1	-6
			Delta and West				
Stoneville, Miss.(A)	5-20	10-22	-1	-4	-3	-5	-8
Stoneville, Miss.(B)	6-3	10-19	-1	-3	-1	0	-4
Pine Bluff, Ark.	5-15	10-12	-1	-1	0	-1	-4
Stuttgart, Ark.	5-20	10-16	-1	-3	-2	-2	-4
St. Joseph, La.	5-20	10-20	+2	-3	-2	-1	-3
Curtis, La.	5-14	10-20	+3	-5	-2	+4	0
Crowley, La.	5-23	10-19	+6	-1	0	+1	-2
Beaumont, Texas	5-20	10-20	0	0	-3	0	0
Uvalde, Texas	6-3	11-4	+8	+7	-9	+8	-11
Mean		10-20	+2	-1	-2	0	-4

Table 39 - (continued)

Location	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213
			East Coast			
Plymouth, N.C.	+2	0	-5	-3	-3	0
Clayton, N.C.	+7	0	+3	+4	+4	+3
Clinton, N.C.	+3	0	0	-2	0	0
Florence, S.C.(A)	-4	+4	+2	+7	+2	+7
Florence, S.C.(B)	+29	-4	-10	-4	-8	+1
Hartsville, S.C.	+4	-1	-5	-2	-3	+1
Mean	+7	0	-3	-1	-1	+2
			Southeast			
Blackville, S.C.	+4	-1	-5	-2	-3	+1
Tallassee, Ala.	+6	+3	0	+2	0	+3
Tifton, Ga.	+2	+5	-8	-6	-8	-3
Gainesville, Fla.	+2	+1	-5	-9	-6	-2
Marianna, Fla.	+6	+3	-4	-3	-4	+3
Quincy, Fla.	+10	+6	+6	+2	+11	+11
Jay, Fla.	+6	+3	0	+1	-1	+1
Fairhope, Ala.	+5	+5	-2	-2	-2	+1
Poplarville, Miss.	0	+2	-13	-9	-4	-5
Baton Rouge, La.	+1	+2	+3	+4	+3	-1
Mean	+4	+3	-3	-2	-1	+1
			Upper and Central South			
Athens, Ga.	+5	0	-7	-6	-5	+1
Calhoun, Ga.	+1	0	+1	0	+1	+2
Clemson, S.C.	+2	+1	+1	-1	+1	0
Mean	+3	0	-2	-2	-1	+1
			Delta and West			
Stoneville, Miss.(A)	+4	0	-5	-5	-4	0
Stoneville, Miss.(B)	+3	+1	-4	-3	-2	-1
Pine Bluff, Ark.	-1	0	-3	+1	0	0
Stuttgart, Ark.	+7	0	-4	-2	-4	-1
St. Joseph, La.	+1	+1	+2	+2	0	+2
Curtis, La.	+2	+3	+2	0	+7	-16
Crowley, La.	+8	0	-8	-4	-6	0
Beaumont, Texas	0	+2	+1	+6	0	+3
Uvalde, Texas	+8	+10	0	+7	+8	+9
Mean	+4	+2	+2	0	0	0

Table 40 - Plant height for the strains in Uniform Group VII, 1975

Location	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
			East Coast			
Plymouth, N.C.	43	43	40	39	43	44
Clayton, N.C.	46	39	43	37	45	37
Clinton, N.C.	44	40	39	39	41	41
Florence, S.C.(A)	36	36	36	34	40	34
Florence, S.C.(B)	40	34	38	35	36	34
Hartsville, S.C.	49	42	45	42	45	43
Mean	43	39	40	38	42	39
			Southeast			
Blackville, S.C.	49	42	45	42	45	43
Tallassee, Ala.	40	32	37	33	38	35
Tifton, Ga.	32	24	33	27	24	28
Gainesville, Fla.	44	37	44	39	37	40
Live Oak, Fla.	37	33	35	31	33	31
Marianna, Fla.	32	30	32	23	28	30
Jay, Fla.	34	26	28	29	31	35
Fairhope, Ala.	35	30	36	33	30	33
Poplarville, Miss.	35	27	37	32	29	33
Baton Rouge, La.	42	39	42	42	42	42
Mean	38	32	37	33	34	35
			Upper and Central South			
Athens, Ga.	44	37	39	36	39	41
Calhoun, Ga.	45	39	37	35	36	31
Clemson, S.C.	41	37	40	35	36	37
Mean	43	38	39	35	37	36
			Delta and West			
Stoneville, Miss.(A)	39	32	35	33	29	35
Stoneville, Miss.(B)	40	32	35	32	29	33
Pine Bluff, Ark.	42	45	41	48	44	43
Stuttgart, Ark.	45	40	42	37	38	41
St. Joseph, La.	36	36	40	32	34	36
Curtis, La.	42	36	40	38	40	37
Crowley, La.	28	27	26	25	23	22
Beaumont, Texas	35	34	35	35	35	35
Uvalde, Texas	22	17	17	17	14	23
Mean	37	33	35	33	32	34

Table 40 - (continued)

Location	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213
			East Coast			
Plymouth, N.C.	41	47	43	38	43	40
Clayton, N.C.	47	43	45	39	43	41
Clinton, N.C.	44	42	43	39	41	33
Florence, S.C.(A)	42	42	33	34	38	35
Florence, S.C.(B)	42	40	42	34	36	35
Hartsville, S.C.	51	43	46	45	46	43
Mean	45	43	42	38	41	38
			Southeast			
Blackville, S.C.	51	43	46	45	46	43
Tallassee, Ala.	46	39	36	30	34	32
Tifton, Ga.	33	33	24	23	22	24
Gainesville, Fla.	45	45	40	38	41	37
Live Oak, Fla.	42	34	32	33	34	34
Marianna, Fla.	35	32	30	26	29	27
Jay, Fla.	35	38	28	29	30	29
Fairhope, Ala.	39	37	32	31	33	29
Poplarville, Miss.	41	37	27	25	28	29
Baton Rouge, La.	44	45	40	37	39	39
Mean	41	38	34	32	34	32
			Upper and Central South			
Athens, Ga.	41	45	36	36	39	35
Calhoun, Ga.	42	39	35	38	38	36
Clemson, S.C.	39	40	40	34	38	37
Mean	41	41	37	36	38	36
			Delta and West			
Stoneville, Miss.(A)	39	37	34	32	33	33
Stoneville, Miss.(B)	37	35	30	33	33	33
Pine Bluff, Ark.	41	45	46	41	44	40
Stuttgart, Ark.	43	46	41	38	38	37
St. Joseph, La.	40	37	37	36	36	31
Curtis, La.	44	43	36	41	38	37
Crowley, La.	31	26	27	28	26	27
Beaumont, Texas	34	34	37	37	39	35
Uvalde, Texas	19	19	11	16	17	16
Mean	36	36	33	34	34	32

Table 41 - Lodging scores for the strains in Uniform Group VII, 1974

Location	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
			East Coast			
Plymouth, N.C.	3.7	2.3	3.3	3.3	2.0	2.0
Clayton, N.C.	3.0	3.6	3.0	3.6	3.0	2.0
Clinton, N.C.	4.0	4.0	4.0	3.3	4.0	3.0
Florence, S.C.(A)	3.0	3.0	1.0	2.0	3.0	2.0
Florence, S.C.(B)	3.0	2.0	3.0	3.0	1.0	2.0
Hartsville, S.C.	3.3	3.2	3.7	3.8	3.3	3.3
			Southeast			
Blackville, S.C.	3.3	3.2	3.7	3.8	3.3	3.3
Tallassee, Ala.	3.2	2.3	3.5	3.8	2.3	2.8
Tifton, Ga.	1.7	1.3	2.3	1.0	1.0	1.7
Gainesville, Fla.	1.7	1.0	1.7	1.3	1.0	1.3
Live Oak, Fla.	1.0	1.0	1.3	1.0	1.0	1.0
Marianna, Fla.	1.3	1.3	1.3	1.0	1.3	1.0
Quincy, Fla.	3.7	2.3	4.3	5.0	2.7	3.0
Jay, Fla.	1.0	1.0	2.0	2.0	1.0	1.0
Fairhope, Ala.	2.0	1.3	1.7	1.7	1.3	1.0
Poplarville, Miss.	1.0	1.0	1.0	1.7	1.0	1.0
Baton Rouge, La.	1.8	1.0	2.0	1.5	1.0	1.5
			Upper and Central South			
Athens, Ga.	3.0	2.5	3.0	2.8	2.0	2.8
Calhoun, Ga.	2.6	2.0	2.0	2.2	2.0	1.5
Clemson, S.C.	2.3	2.0	2.0	2.0	2.2	1.5
			Delta and West			
Stoneville, Miss.(A)	3.0	2.3	3.0	2.7	2.3	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Pine Bluff, Ark.	2.0	2.6	2.0	2.0	2.0	2.6
Stuttgart, Ark.	3.3	1.8	2.3	2.3	1.8	1.5
St. Joseph, La.	2.5	1.7	2.2	2.5	2.0	2.3
Curtis. La.	2.0	1.5	2.5	2.5	2.0	2.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	1.0	2.0	1.0	1.0	1.0
Uvalde, Texas	1.3	1.0	1.0	1.0	1.0	1.0

Table 41 - (continued)

Location	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213
			East Coast			
Plymouth, N.C.	3.3	2.3	2.3	2.7	3.3	3.3
Clayton, N.C.	3.0	3.0	3.0	3.6	3.6	3.6
Clinton, N.C.	4.0	3.3	3.3	3.3	4.0	3.6
Florence, S.C.(A)	2.0	2.0	3.0	2.0	2.0	3.0
Florence, S.C.(B)	2.0	2.0	2.0	2.0	3.0	3.0
Hartsville, S.C.	2.7	2.8	3.3	3.8	4.2	4.0
			Southeast			
Blackville, S.C.	2.7	2.8	3.3	3.8	4.2	4.0
Tallassee, Ala.	2.3	3.3	2.0	1.5	2.2	2.7
Tifton, Ga.	2.3	1.3	1.3	1.3	1.7	2.0
Gainesville, Fla.	2.0	2.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	2.0	1.0	1.0	1.0	1.3	1.0
Marianna, Fla.	1.0	1.3	1.0	1.3	1.0	1.0
Quincy, Fla.	3.0	3.3	2.7	3.0	4.3	4.3
Jay, Fla.	2.0	1.0	1.0	1.0	1.0	2.0
Fairhope, Ala.	2.0	2.0	1.3	1.3	1.0	1.3
Poplarville, Miss.	1.0	1.0	1.0	1.0	1.3	1.0
Baton Rouge, La.	1.5	1.5	1.8	1.5	2.0	2.0
			Upper and Central South			
Athens, Ga.	2.7	2.3	2.7	2.2	2.7	3.0
Calhoun, Ga.	1.8	1.5	1.3	2.5	2.0	3.0
Clemson, S.C.	2.2	2.0	2.2	2.2	2.0	2.3
			Delta and West			
Stoneville, Miss.(A)	2.3	2.7	2.0	2.7	3.7	3.0
Stoneville, Miss.(B)	2.3	2.3	2.0	2.0	2.0	2.0
Pine Bluff, Ark.	2.0	2.0	2.6	1.0	2.6	2.0
Stuttgart, Ark.	2.5	2.3	2.8	2.8	2.8	2.8
St. Joseph, La.	3.3	2.5	2.5	1.5	2.5	3.0
Curtis, La.	1.5	1.5	1.0	2.0	2.0	2.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	1.0	1.0	1.0	2.0	3.0
Uvalde, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 42 - Seed quality scores for the strains in Uniform Group VII, 1975

Location	Bragg	Ransom	F70-2061	N70-1816	N70-2173	D71-9203
			East Coast			
Plymouth, N.C.	2.0	2.0	2.5	2.0	1.5	3.0
Clayton, N.C.	1.0	1.0	2.0	1.0	1.0	1.5
Clinton, N.C.	2.0	2.0	1.5	1.0	1.0	1.5
			Southeast			
Blackville, S.C.	2.0	2.0	2.0	1.0	2.0	2.0
Tallassee, Ala.	1.0	1.5	1.0	1.0	1.0	1.0
Tifton, Ga.	2.5	2.5	2.0	2.0	2.2	2.0
Gainesville, Fla.	1.0	1.7	1.3	1.3	2.0	2.0
Live Oak, Fla.	1.7	1.3	1.7	1.7	1.7	2.0
Quincy, Fla.	3.0	3.7	4.0	1.3	2.7	4.0
Jay, Fla.	1.0	3.0	4.0	1.0	3.0	2.0
Fairhope, Ala.	1.3	1.7	2.3	1.0	2.0	2.3
Baton Rouge, La.	1.8	2.0	2.2	1.2	2.2	2.0
			Upper and Central South			
Athens, Ga.	1.5	1.7	1.7	1.3	1.7	1.7
Calhoun, Ga.	1.8	1.7	1.5	1.8	1.7	1.8
			Delta and West			
Stoneville, Miss.(A)	2.0	2.0	2.3	2.0	2.0	2.3
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Pine Bluff, Ark.	3.0	3.0	2.6	3.0	3.0	3.6
Stuttgart, Ark.	1.8	2.7	2.5	1.7	3.0	2.7
Beaumont, Texas	1.0	1.0	2.0	1.0	1.0	1.0

Table 42 - (continued)

Location	D72-7959	F71-1180	N72-1014	N72-3167	N72-3154	N72-3213
			East Coast			
Plymouth, N.C.	2.0	2.0	1.5	2.0	2.0	2.0
Clayton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Clinton, N.C.	1.5	1.0	1.5	1.5	1.5	1.5
			Southeast			
Blackville, S.C.	3.0	2.0	2.0	2.0	2.0	2.0
Tallassee, Ala.	1.0	1.5	2.0	1.5	1.0	1.5
Tifton, Ga.	1.5	2.5	2.2	2.5	2.2	2.3
Gainesville, Fla.	1.0	1.3	1.7	1.3	2.0	1.3
Live Oak, Fla.	1.7	1.7	2.3	1.7	1.7	1.7
Quincy, Fla.	1.0	3.3	3.0	3.7	2.3	3.7
Jay, Fla.	1.0	3.0	3.0	3.0	3.0	3.0
Fairhope, Ala.	1.7	1.3	1.3	1.7	1.0	2.0
Baton Rouge, La.	1.5	2.4	2.2	2.2	1.8	2.0
			Upper and Central South			
Athens, Ga.	1.7	1.7	1.5	1.5	1.5	1.7
Calhoun, Ga.	1.3	1.3	1.8	2.0	1.8	2.0
			Delta and West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Pine Bluff, Ark.	4.0	3.6	2.3	3.0	3.0	3.6
Stuttgart, Ark.	1.5	2.0	2.8	2.3	1.8	2.5
Beaumont, Texas	1.0	1.0	1.0	2.0	1.0	1.0

PRELIMINARY GROUP VII

1975

Preliminary Group VII nurseries, including 34 experimental strains and the two checks Bragg and D70-3185, were grown at eight locations. The parentage of these strains is reported in Table 43. Performance data are summarized in Tables 44 through 49. Differences among strains for seed yield were significant at seven locations. The combined analysis of variance for seed yield showed differences among strains to be significant. One strain, N72-3189, had a mean seed yield significantly greater than that for Bragg. Ten strains had mean seed yields ranking above D70-3185.

Twenty-two strains were significantly higher in protein content of the seed than Bragg and seven strains had significantly higher oil content. Seventeen strains appeared to have good resistance to *M. incognita* and 12 strains appeared to be resistant to both *M. incognita* and *M. arenaria*. Bragg received a score of 2 in these plantings for *M. arenaria* but has been damaged rather severely in plantings near Blackville, South Carolina. D71-9201 and D72-9241 have demonstrated good resistance to *M. arenaria* in South Carolina plantings.

D73-10232 and D73-10246 were selected for resistance to foliar-feeding insects. Both produced mean seed yields similar to that for Bragg. Seed of D73-10246 used for these plantings had become mixed.

Strains which appear to merit advancing to Uniform VII are N72-3189, F71-1735, F71-1138, F70-1350, GaT71-1088, and D73-9442.

Table 43 - Parentage of strains in Preliminary Group VII, 1975

	Variety or strain	Parentage	Generation composited
1.	Bragg	Jackson X D49-2491	F_6
2.	D70-3185	D64-4636 X tawny pub. Pickett 71 type	F_5
3.	D70-8360	Semmes X Hardee	F_5
4.	D71-9022	D49-772 X D55-4102	F_5
5.	D71-9201	Semmes X D67-10539	F_5
6.	D71-9241	Semmes X D67-10539	F_5
7.	D72-8126	D65-6765 X D55-4102	F_5
8.	D73-8644	D66-8666 X D69-8155	F_5
9.	D73-9344	D66-8666(2) X (Hill X PI 274454)	F_5
10.	D73-9442	D66-8666(2) X (Hill X PI 274454)	F_5
11.	D73-9521	D66-8666 X (Hill X PI 274454)	F_5
12.	D73-10232	D66-8666 X (Bragg X PI 229388)	F_5
13.	D73-10246	D66-8666 X (Bragg X PI 229388)	F_5
14.	D73-10280	D66-8666 X (Bragg X PI 229388)	F_5
15.	F70-1350	Bragg(3) X D60-7965	F_6
16.	F70-1456	Bragg(3) X D60-7965	F_6
17.	F70-2595	(Hardee X D60-9647) X (Bragg X F59-2496)	F_7
18.	F71-1138	F59-1505 X [Bragg(2) X D60-7965]	F_5
19.	F71-1675	Bragg(3) X D60-7965	F_7
20.	F71-1704	Bragg(3) X D60-7965	F_7
21.	F71-1719	Bragg(3) X D60-7965	F_7
22.	F71-1735	Bragg(3) X D60-7965	F_7
23.	F72-7439	F59-1505 X [Bragg(3) X PI 96035]	F_4
24.	Ga70-227	Bragg X Hood	F_4
25.	Ga70-276	Bragg X Hood	F_4
26.	Ga70-519	Jackson X Hood	F_4
27.	Ga T 71-1088	Bragg X Hood	F_4
28.	N72-713	D65-6765 X(D67-B5 X N64-2451)	F_5
29.	N72-3162	F65-1376 X Ransom	F_5
30.	N72-3189	D65-6765 X Ransom	F_5
31.	N72-3216	D67-B5 X N64-2451	F_5
32.	N72-3217	D67-B5 X N64-2451	F_5
33.	N72-3219	D67-B5 X N64-2451	F_5
34.	Ts74-23	Semmes X PI 200492	F_6
35.	Ts74-33	N66-1337 X Ransom	F_5
36.	Ts74-34	Ransom X N66-1337	F_5

Table 44 - General summary of performance for the strains in Preliminary Group VII, 1975

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	P.R.	*M. incognita* R.K.	*M. arenaria* R.K.
Bragg	40.6	10-23	40	20.3	41.5	1.0	1.0	2.0	2.0
D70-3185	42.4	-4	37	20.4	43.5+	1.0	1.0	1.0	3.0
D70-8360	38.7	-4	33	20.2	42.9+	1.0	2.0	5.0	4.0
D71-9022	40.2	0	39	19.3-	44.9+	1.0	1.0	5.0	3.0
D71-9201	35.3-	-5	36	19.4-	43.1+	1.5	1.0	1.0	1.0
D71-9241	39.4	-4	37	19.3-	42.3+	1.0	1.0	1.0	1.0
D72-8126	38.0	-2	37	17.5-	47.4+	1.0	1.0	5.0	4.0
D73-8644	39.5	+1	39	20.2	42.6+	1.5	1.0	2.0	3.0
D73-9344	37.9	-3	38	19.9	42.5+	1.0	1.0	1.0	3.0
D73-9442	42.2	+1	40	19.2-	42.5+	1.0	1.0	1.0	2.0
D73-9521	39.1	-1	38	18.5-	42.3+	1.0	1.0	3.0	1.0
D73-10232	40.3	+4	42	19.5-	42.9+	1.0	1.0	5.0	2.0
D73-10246	40.6	+2	39	19.4-	43.2+	1.0	1.0	5.0	2.0
D73-10280	33.0-	+2	38	18.8-	43.1+	1.0	1.0	1.0	4.0
F70-1350	43.4	0	36	20.5	42.4+	1.0	1.0	1.0	2.0
F70-1456	39.7	-3	36	20.1	42.5+	1.0	1.0	1.0	2.0
F70-2595	41.5	0	39	20.1	42.7+	1.0	2.0	1.0	2.0
F71-1138	43.6	+1	38	20.3	41.4	1.0	1.0	1.0	3.0
F71-1675	43.0	-1	39	20.9	41.2	1.0	1.0	1.0	2.0
F71-1704	41.6	-2	41	20.2	43.0+	1.0	2.0	1.0	1.0
F71-1719	41.9	-2	40	19.5-	43.5+	1.0	1.0	1.0	2.0
F71-1735	44.1	-3	40	20.6	41.7	1.0	1.0	1.0	3.0
F72-7439	42.8	0	41	20.6	41.1	1.0	2.0	2.0	2.1
Ga70-227	38.2	-2	39	20.4	42.0	1.0	2.0	2.0	1.0
Ga70-276	41.9	-4	36	20.1	41.1	1.0	3.0	1.0	2.0
Ga70-519	39.1	-3	36	21.1+	40.0-	1.0	1.0	5.0	2.0
Ga T71-1088	44.0	-1	39	20.2	40.3-	1.0	2.0	5.0	2.0
N72-713	43.2	-2	32	20.3	42.8+	1.0	3.0	5.0	2.0
N72-3162	43.5	-3	32	21.9+	42.8+	1.0	3.0	3.0	1.0
N72-3189	45.5+	+1	31	22.5+	39.6-	1.0	2.0	5.0	2.0
N72-3216	43.3	-2	35	21.6+	40.7-	1.0	3.0	5.0	3.0
N72-3217	41.6	-1	36	21.9+	40.8	1.0	1.0	5.0	3.0
N72-3219	42.5	-3	31	21.5+	40.5-	1.0	3.0	5.0	2.0
Ts74-23	40.6	+2	38	20.1	43.4+	1.0	2.0	5.0	2.0
Ts74-33	39.2	+3	40	18.5-	46.1+	1.0	1.0	3.0	2.0
Ts74-34	40.2	0	39	21.1+	41.4	1.0	1.0	3.0	3.0
L.S.D.(.05)	3.7			0.7	0.8				
L.S.D.(.01)	4.9			0.9	1.1				

Tabel 45 - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1975

Strain	Clinton, N.C.	Black-ville, S.C.	Tallas-see, Ala.	Jay, Fla.	Baton Rouge, La.	Stone-ville, Miss(A)	Stone-ville, Miss(B)	Beaumont, Texas
Bragg	47.4	39.9	39.6	28.7	37.4	42.3	41.8	47.6
D70-3185	50.4	38.3	43.9	39.7+	34.2	44.0	34.8	53.8
D70-8360	45.5	37.6	38.1	29.2	41.2	45.1	36.4	36.3
D71-9022	44.7	35.2-	35.2	37.1+	39.8	39.9	37.8	51.9
D71-9201	42.9	37.7	31.6-	33.7	30.2	35.7	29.1-	41.3
D71-9241	44.8	39.2	38.5	37.8+	33.0	41.8	31.6-	48.7
D72-8126	50.9	35.3-	35.7	33.3	33.8	41.2	33.1-	41.0
D73-8644	49.3	40.2	36.8	35.9+	34.0	39.2	31.2-	49.2
D73-9344	42.1	41.6	37.6	33.3	37.1	38.1	33.4-	40.3
D73-9442	51.8	39.6	41.7	41.6+	44.3	38.3	35.3	45.2
D73-9521	42.3	35.1-	38.0	34.4	30.0	41.2	37.2	54.3
D73-10232	50.3	43.0	40.4	40.5+	33.0	37.0	33.6-	43.8
D73-10246	53.3	40.9	36.1	39.7+	36.4	40.1	33.7-	45.5
D73-10280	45.3	33.3-	28.7-	29.5	28.2	32.0-	30.5-	36.5
F70-1350	53.0	36.7	36.6	42.0+	40.9	41.5	44.8	52.1
F70-1456	50.6	37.5	36.0	33.3	32.7	43.9	37.0	46.4
F70-2595	51.1	39.0	39.4	36.3+	43.4	39.7	32.4-	50.8
F71-1138	47.9	40.7	39.6	36.3+	38.2	52.5+	41.4	53.2
F71-1675	51.9	39.9	35.9	29.1	41.8	45.5	41.4	58.8
F71-1704	51.1	36.0	36.9	35.6+	33.6	44.2	40.6	54.7
F71-1719	49.8	37.8	44.8	38.6+	36.6	41.5	35.0	51.4
F71-1735	55.2+	38.1	44.2	39.7+	36.5	47.8	35.8	55.9
F72-7439	50.4	39.6	40.3	37.9+	39.6	44.5	36.1	54.0
Ga70-227	51.3	35.1-	37.2	31.1	33.8	39.5	29.6-	48.4
Ga70-276	49.8	40.9	42.2	33.7	41.0	38.8	40.5	48.4
Ga70-519	56.4+	43.3	29.6-	26.5	39.0	37.3	34.9	45.6
Ga T71-1088	54.9+	40.7	37.3	33.7	49.2	41.0	39.7	55.7
N72-713	48.4	42.3	44.6	39.3+	37.8	45.8	36.6	51.2
N72-3162	52.5	44.9+	42.9	42.8+	34.2	43.0	32.0-	55.7
N72-3189	56.2+	42.9	44.6	43.9+	38.2	43.8	40.7	53.9
N72-3216	59.1+	38.9	43.4	41.6+	40.5	39.6	28.8-	54.2
N72-3217	50.9	39.2	38.4	34.1	40.9	46.1	32.3-	51.1
N72-3219	49.2	41.0	41.6	36.6+	40.8	45.6	34.7-	50.7
Ts74-23	53.4	38.7	35.2	34.4	42.9	40.4	29.1-	51.1
Ts74-33	49.4	40.0	37.4	36.3+	41.8	46.4	34.7-	45.5
Ts74-34	52.2	39.6	32.8	25.7	37.5	48.2	35.9	49.4
L.S.D.(.05)	7.5	4.5	8.0	6.7	N.S.	7.3	7.1	12.0
C.V.	7%	7%	10%	9%	13%	9%	10%	12%

Table 46 - Oil percentages for the strains in Preliminary Group VII, 1975

Strain	Clinton, N.C.	Blackville, S.C.	Jay, Fla.	Baton Rouge, La.	Stoneville, Miss(B)	Beaumont, Texas
Bragg	20.2	20.4	19.8	20.7	20.0	20.7
D70-3185	20.5	20.2	20.1	20.4	20.6	20.5
D70-8360	19.9	19.9	19.8	20.5	20.9	20.4
D71-9022	18.5	19.7	18.1	19.9	19.2	20.2
D71-9201	19.5	19.7	19.1	19.5	19.7	18.9
D71-9241	18.9	19.3	18.9	19.3	20.3	19.0
D72-8126	16.9	17.7	17.7	18.1	17.5	17.1
D73-8644	20.3	20.9	19.5	20.0	20.4	20.1
D73-9344	19.7	20.1	19.8	20.0	19.9	19.7
D73-9442	19.4	19.8	18.8	19.4	19.6	18.4
D73-9521	18.4	18.5	18.3	19.0	18.0	18.8
D73-10232	19.3	20.2	19.2	18.8	19.5	19.7
D73-10246	19.4	20.0	19.2	18.8	19.5	19.2
D73-10280	18.7	20.1	18.7	18.8	18.7	18.0
F70-1350	21.0	20.7	20.2	19.9	20.8	20.5
F70-1456	19.8	20.9	19.9	20.4	19.7	20.1
F70-2595	20.1	20.1	19.5	21.0	19.8	20.2
F71-1138	20.4	20.4	20.4	20.2	20.3	20.2
F71-1675	21.3	20.6	20.1	20.8	21.7	21.0
F71-1704	20.2	20.4	19.3	20.2	21.6	19.3
F71-1719	19.1	19.8	18.8	19.8	20.6	18.8
F71-1735	19.9	20.9	20.1	21.0	21.4	20.4
F72-7439	20.5	20.7	20.9	20.5	20.6	20.4
Ga70-227	20.8	16.1	20.9	21.6	21.5	21.7
Ga70-276	19.5	20.2	20.2	20.3	20.7	19.8
Ga70-519	20.5	21.1	20.8	22.4	20.8	21.1
Ga T71-1088	19.9	20.1	19.7	21.0	20.6	20.0
N72-713	19.5	20.5	20.3	20.1	21.2	20.0
N72-3162	21.6	21.6	22.1	21.0	22.2	22.6
N72-3189	21.8	22.3	23.1	22.6	22.9	22.3
N72-3216	20.7	21.6	21.9	22.4	21.2	22.0
N72-3217	22.0	21.4	21.3	23.1	21.4	22.0
N72-3219	22.7	21.0	21.1	21.5	21.0	21.4
Ts74-23	20.7	20.5	19.9	19.8	19.7	20.1
Ts74-33	18.1	18.0	18.3	18.5	19.2	18.6
Ts74-34	21.3	21.0	20.3	20.9	21.8	21.0

Table 47 - Protein percentages for the strains in Preliminary Group VII, 1975

Strain	Clinton, N.C.	Blackville, S.C.	Jay, Fla.	Baton Rouge, La.	Stoneville, Miss(B)	Beaumont, Texas
Bragg	42.0	41.2	42.7	42.0	38.7	42.3
D70-3185	42.9	43.2	45.3	44.2	40.5	44.9
D70-8360	43.1	42.9	45.3	43.2	39.4	43.4
D71-9022	46.7	44.5	46.7	44.8	41.4	45.4
D71-9201	43.1	42.4	44.9	44.4	38.9	44.9
D71-9241	43.0	41.7	42.4	42.9	40.3	43.3
D72-8126	48.9	46.7	47.3	47.6	45.2	48.7
D73-8644	43.3	41.8	43.2	43.7	40.0	43.5
D73-9344	42.7	42.2	42.9	43.2	40.0	43.7
D73-9442	43.1	41.7	43.6	43.2	39.6	43.8
D73-9521	42.6	42.0	43.1	42.3	41.2	42.7
D73-10232	43.5	41.5	43.3	44.4	41.2	43.6
D73-10246	43.1	42.6	44.0	44.5	41.3	43.7
D73-10280	43.8	42.6	42.9	43.6	41.5	44.1
F70-1350	42.4	42.5	43.0	44.2	39.6	42.4
F70-1456	43.2	42.4	42.9	43.5	40.1	43.0
F70-2595	43.0	42.8	44.3	42.3	41.0	42.9
F71-1138	41.6	42.6	41.2	43.0	38.6	41.3
F71-1675	40.7	41.1	42.6	42.9	37.8	41.9
F71-1704	43.5	43.4	44.1	43.9	38.9	44.2
F71-1719	44.0	43.2	44.1	44.8	39.8	44.8
F71-1735	42.8	41.1	42.5	42.6	38.8	42.4
F72-7439	41.9	41.3	41.2	43.1	37.5	41.5
Ga70-227	42.2	44.3	42.1	42.5	38.9	42.1
Ga70-276	41.2	41.3	42.0	42.3	37.8	42.1
Ga70-519	41.2	40.0	41.2	40.4	36.6	40.7
Ga T71-1088	40.8	40.3	41.1	41.0	36.3	42.1
N72-713	43.8	42.2	44.5	44.2	38.7	43.6
N72-3162	43.4	42.7	43.8	44.8	38.5	43.6
N72-3189	40.1	39.2	40.4	41.3	35.2	41.1
N72-3216	40.5	40.0	41.3	42.2	37.9	42.3
N72-3217	40.8	40.7	42.9	41.1	37.8	41.7
N72-3219	40.1	40.5	41.7	42.0	37.1	41.8
Ts74-23	43.2	41.6	43.9	45.2	41.7	45.0
Ts74-33	47.7	45.7	46.0	47.5	42.5	47.3
Ts74-34	41.0	41.3	42.9	42.9	37.0	43.0

Table 48 - Plant height for the strains in Preliminary Group VII, 1975

Strain	Clinton, N.C.	Black-ville, S.C.	Tallas-see, Ala.	Jay, Fla.	Baton Rouge, La.	Stone-ville, Miss(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	44	40	39	37	41	42	39	37
D70-3185	39	38	40	35	44	37	33	34
D70-8360	37	33	28	22	36	34	32	31
D71-9022	41	41	43	34	42	41	40	35
D71-9201	38	39	34	31	43	38	35	31
D71-9241	40	37	34	35	40	41	35	31
D72-8126	37	34	39	35	41	37	37	32
D73-8644	40	39	40	38	42	44	37	35
D73-9344	43	43	39	33	40	38	36	35
D73-9442	41	40	37	36	44	43	38	38
D73-9521	38	43	39	30	41	39	38	38
D73-10232	47	39	42	38	40	45	42	38
D73-10246	42	38	39	32	40	44	43	36
D73-10280	37	40	41	25	42	44	41	35
F70-1350	39	36	38	25	46	38	34	32
F70-1456	42	38	38	28	40	39	35	31
F70-2595	37	39	42	36	44	41	39	34
F71-1138	49	41	40	19	47	42	35	36
F71-1675	41	39	39	33	44	40	39	35
F71-1704	50	41	41	31	47	46	41	34
F71-1719	44	40	41	37	44	42	39	35
F71-1735	46	41	43	35	42	41	39	34
F72-7439	45	41	46	32	48	44	38	36
Fa70-227	45	43	40	22	46	45	42	34
Ga70-276	46	41	38	21	38	42	33	35
Ga70-519	38	39	31	29	44	40	36	32
Ga T71-1088	43	39	38	32	42	44	39	38
N72-713	38	36	28	26	34	32	28	35
N72-3162	37	40	29	24	34	34	31	33
N72-3189	40	38	26	27	34	31	31	30
N72-3216	39	37	33	35	38	35	32	35
N72-3217	37	38	34	31	40	39	34	34
N72-3219	35	35	29	25	36	30	30	29
Ts74-23	42	39	35	31	42	44	39	36
Ts74-33	49	43	40	22	43	43	43	39
Ts74-34	45	45	39	33	40	46	37	35

Table 49 - Seed quality scores for the strains in Preliminary Group VII, 1975

Strain	Clinton, N.C.	Black-ville, S.C.	Tallas-see, Ala.	Jay, Fla.	Baton Rouge, La.	Stone-ville, Miss(A)	Stone-ville, Miss(B)	Beaumont, Texas
Bragg	1.0	2.0	2.0	2.0	2.2	2.0	2.0	1.0
D70-3185	1.0	2.0	2.0	5.0	2.2	2.0	2.0	1.0
D70-8360	2.0	2.0	1.5	5.0	2.2	2.0	2.0	1.0
D71-9022	1.5	1.0	1.0	2.0	1.5	2.0	2.0	1.0
D71-9201	2.0	2.0	1.0	2.0	1.5	2.0	2.0	1.0
D71-9241	2.0	2.0	1.0	2.0	2.0	2.0	2.0	1.0
D72-8126	1.5	1.0	1.0	2.0	1.5	2.0	2.0	2.0
D73-8644	1.5	2.0	2.0	3.0	2.5	2.0	2.0	2.0
D73-9344	1.5	2.0	2.0	2.0	2.0	2.0	2.0	1.0
D73-9442	1.0	2.0	1.0	2.0	2.0	2.0	2.0	1.0
D73-9521	1.0	2.0	1.0	2.0	1.5	2.0	2.0	1.0
D73-10232	1.0	3.0	1.0	2.0	2.0	2.0	2.0	1.0
D73-10246	1.0	2.0	2.0	3.0	2.2	2.0	2.0	2.0
D73-10280	1.0	2.0	1.0	2.0	1.5	2.0	2.0	1.0
F70-1350	1.5	1.0	1.0	2.0	2.2	2.0	2.0	1.0
F70-1456	1.5	1.0	1.0	3.0	2.2	2.0	2.0	1.0
F70-2595	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0
F71-1138	1.0	2.0	1.0	1.0	2.5	2.0	2.0	2.0
F71-1675	1.0	2.0	1.5	3.0	2.2	2.0	2.0	2.0
F71-1704	1.5	2.0	2.0	4.0	2.0	2.0	2.0	1.0
F71-1719	1.5	2.0	1.5	4.0	2.0	2.0	2.0	1.0
F71-1735	1.5	1.0	2.0	3.0	1.5	2.0	2.0	1.0
F72-7439	1.5	2.0	2.0	3.0	2.2	2.0	2.0	1.0
Ga70-227	1.5	2.0	1.0	1.0	2.0	2.0	2.0	1.0
Ga70-276	1.5	2.0	2.0	4.0	1.5	2.0	2.0	2.0
Ga70-519	1.5	1.0	1.0	4.0	2.0	2.0	2.0	1.0
Ga T71-1088	1.0	1.0	1.0	3.0	1.5	2.0	2.0	1.0
N72-713	1.0	1.0	1.5	5.0	2.2	2.0	2.0	2.0
N72-3162	1.5	2.0	1.0	4.0	2.5	2.0	2.0	1.0
N72-3189	1.5	2.0	2.0	4.0	2.5	2.0	2.0	1.0
N72-3216	1.0	2.0	1.5	3.0	2.0	2.0	2.0	1.0
N72-3217	1.0	1.0	1.0	3.0	2.2	2.0	2.0	1.0
N72-3219	1.5	2.0	1.0	2.0	2.0	2.0	2.0	1.0
Ts74-23	1.5	1.0	1.5	2.0	2.0	2.0	2.0	1.0
Ts74-33	1.5	2.0	1.5	3.0	1.5	2.0	2.0	1.0
Ts74-34	1.5	2.0	1.0	3.0	2.0	2.0	2.0	1.0

UNIFORM GROUP VIII

1975

	Variety or strain	Parentage	Generation composited
1.	Hutton	F55-822 X (Roanoke X CNS-4)	F_6
2.	Cobb	F57-735 X D58-3358	F_6
3.	Coker 338	Hampton 266 X Bragg	F_4
4.	F68-2507	Bragg(3) X D60-7965	F_4
5.	Ts72-6	Bragg X PI 200492	F_8
6.	Co72-286	Hampton 266 X Bragg	F_6
7.	F70-2060	F62-2953 X D62-3286	F_7
8.	F70-3374	F63-3999 X Hutton	F_4
9.	F70-3380	F63-3999 X Hutton	F_4
10.	F71-1004	Bragg(2) X D60-7965	F_4
11.	Ga70-163	Davis X Lee	F_4
12.	Ts73-16	Semmes X PI 200492	F_8

Background for strains used as parents:

F55-822 is the parent line of Bragg.

F57-735 is a selection from D49-772 X Improved Pelican which was grown in Uniform Group VIII.

D58-3358 is a bacterial-pustule-resistant selection from Jackson(4) X D49-2491.

D60-7965 is a high protein selection from a cross of an F_5 line from Ogden X CNS with an F_5 line from Ogden X Biloxi.

F62-2953 is a selection from D51-5091 X N50-2542. D51-5091 is a tall selection from Roanoke X N45-745 and N50-2542 is a high protein selection from Ogden X Biloxi.

D62-3286 is a high protein selection from D49-2491(4) X PI 163453, a wild type.

F63-3999 is from the same cross as Hutton.

Twenty-four Uniform Group VIII nurseries were grown. Results are summarized in Tables 50 through 56. Table 50 gives a general summary of agronomic qualties, oil and protein content of the seed, and field reaction to several diseases and nematodes. Two- and three-year data are reported for seed yield, and oil and protein percentage of the seed.

Phytophthora rot ratings were made at Stoneville and root knot nematode ratings were made in a special planting near the west Florida Research Center.

Differences among strains were significant at 15 locations. The combined analysis of variance showed F70-2060 and Ts73-16 to have a seed yield significantly greater than Hutton.

Two strains have been grown two years. F68-2507 has averaged 5 days earlier than Hutton and slightly lower in seed yield. Ts72-6 is similar in maturity to Cobb. Seed yield is slightly higher, but it is more susceptible to *M. incognita*.

Seven strains were included for the first year. Two of these, F70-2060 and Ts73-16, had a mean seed yield significantly greater than that for Hutton. F70-2060 appears to have good resistance to root knot nematodes. None of the other five strains appear to offer any superiority over Hutton.

Table 50 - General summary of performance for the strains in Uniform Group VIII, 1975

	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286
Seed Yield - 1975	40.0	39.9	41.3	39.5	39.9	39.0
- 1974-75	40.3	38.3	40.2	39.3	39.4	
- 1973-75	40.0	38.6	40.8			
Oil Content - 1975	20.1	21.2+	21.8+	20.2	21.2+	21.4+
- 1974-75	20.1	21.4	22.2	20.5	21.3	
- 1973-75	20.8	21.8	22.9			
Protein Content - 1975	42.7	39.8-	40.6-	41.8-	39.6-	40.3-
- 1974-75	43.0	39.9	40.8	42.2	39.8	
- 1973-75	43.0	40.1	40.8			
Seed size	16.8	14.3-	16.2	14.5-	14.1-	16.2
Maturity index	10-27	+5	0	-5	+5	+1
Height	36	39	35	36	38	40
Shattering	2.0	3.0	1.7	1.0	3.0	2.0
Phytophthora rot	1.0	1.0	2.0	1.0	1.0	1.0
M. incognita	1.0	2.0	4.0	2.0	5.0	3.0
M. arenaria	3.0	4.0	4.0	1.0	4.0	4.0
Flower color	P	W	W	W	W	P
Pubescence color	T	G	T	T	G	T
Pod wall color	T	T	Br	T	T	T

Table 50 - (continued)

	F70-2060	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16
Seed Yield - 1975	42.0+	39.6	39.5	39.5	40.0	42.2+
- 1974-75						
- 1973-75						
Oil Content - 1975	21.6+	19.4-	19.6-	20.5+	21.2+	21.3+
- 1974-75						
- 1973-75						
Protein Content - 1975	40.3-	42.5	42.8	41.0-	41.6-	40.0-
- 1974-75						
- 1973-75						
Seed size	12.0-	14.2-	15.2-	16.6	12.7-	13.8-
Maturity index	-1	-1	0	0	-2	+4
Height	34	36	36	36	33	37
Shattering	2.3	2.0	2.0	1.0	2.7	2.7
Phytophthora rot	1.0	2.0	1.0	1.0	1.0	1.0
M. incognita	1.0	3.0	2.0	3.0	5.0	5.0
M. arenaria	2.0	2.0	3.0	3.0	2.0	5.0
Flower color	P	P	P	W	W	W
Pubescence color	G	T	T	T	G	G
Pod wall color	T	T	T	T	T	T

Table 51 - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1975

Location	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286	F70-2060
			South				
Clinton, N.C.	54.2	44.5	50.2	49.8	51.6	52.8	51.7
Florence, S.C.(A)	49.4	52.6	55.6	50.1	47.7	47.7	54.9
Florence, S.C.(B)	44.5	39.9	45.5	39.2-	39.7	39.5	39.7
Hartsville,S.C.(A)	52.3	53.5	53.7	47.4	53.9	45.0-	54.7
Hartsville,S.C.(B)	45.7	45.3	46.2	42.4	50.5+	44.5	48.9
Blackville,S.C.(A)	33.1	32.3	34.7	37.1	34.3	33.5	37.9
Blackville,S.C.(B)	30.0	30.0	29.5	27.4	33.4	32.1	29.3
Athens, Ga.	47.0	40.3-	44.6	49.8	47.7	43.4	48.0
Clemson, S.C.	39.9	40.3	41.5	36.5	34.5	34.4	39.9
Tallassee, Ala.	34.2	37.6	40.4	31.2	32.9	34.7	37.4
Tifton, Ga.	34.1	35.9	31.9	33.6	41.9+	40.1	39.6
Live Oak, Fla.	45.4	40.7	40.8	33.4-	45.0	40.3	45.1
Gainesville, Fla.	47.9	49.2	52.2	48.4	50.2	51.2	53.7
Marianna, Fla.	43.1	42.7	37.3-	37.2-	42.1	43.1	39.4
Quincy, Fla.	33.2	36.9	38.0	42.6	31.2	38.6	34.3
Jay, Fla.	34.8	40.8	42.1+	35.3	37.6	40.3	43.4
Fairhope, Ala.	41.6	39.5	39.6	47.0+	36.9	38.8	42.6
Poplarville, Miss.	30.7	16.0-	33.8	20.7-	17.8-	18.9-	32.9
Baton Rouge, La.	40.0	46.7	43.9	41.0	46.3	42.0	45.6
Stoneville, Miss.	35.0	33.8	36.4	39.1	34.7	29.9	34.5
Curtis, La.	53.0	53.6	55.8	52.3	51.7	40.8-	51.9
Crowley, La.	31.2	32.7	36.7	34.2	34.4	37.3	33.5
Beaumont, Texas	41.8	47.0	44.8	45.3	42.1	46.8	41.6
Uvalde, Texas	18.1	25.5+	15.7	28.1+	20.7	19.7	26.9+
Mean	40.0	39.9	41.3	39.5	39.9	39.0	42.0+

(+) - Strains yielding significantly more (odds 19:1 or greater) than Hutton.

(-) - Strains yielding significantly less (odds 19:1 or greater) than Hutton.

Table 51 - (continued)

Location	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16	L.S.D. (.05)	C.V. (%)
			South				
Clinton, N.C.	49.9	51.1	49.7	53.2	58.1	5.7	7
Florence, S.C.(A)	49.4	50.8	54.1	44.3	46.0	N.S.	9
Florence, S.C.(B)	36.5-	36.1-	41.1	46.2	43.1	5.2	8
Hartsville,S.C.(A)	46.0-	47.8	47.6	47.4	57.2	5.6	7
Hartsville,S.C.(B)	43.8	43.1	47.5	44.0	51.0+	4.4	6
Blackville,S.C.(A)	34.3	34.3	34.0	33.7	38.6	N.S.	8
Blackville,S.C.(B)	29.3	29.1	31.7	29.0	31.5	4.1	8
Athens, Ga.	48.6	47.1	45.4	50.4	46.8	4.7	6
Clemson, S.C.	38.0	42.0	38.1	36.2	46.1	N.S.	11
Tallassee, Ala.	38.3	36.3	38.7	34.2	31.8	N.S.	12
Tifton, Ga.	32.6	36.9	38.2	41.9+	42.4+	6.6	10
Live Oak, Fla.	43.6	42.8	38.9-	45.4	41.8	6.0	9
Gainesville, Fla.	52.5	54.2	41.8	49.6	57.5	N.S.	11
Marianna, Fla.	36.9-	38.0	35.0-	37.9	46.5	5.5	8
Quincy, Fla.	40.2	31.3	35.2	33.0	38.8	N.S.	16
Jay, Fla.	37.8	34.8	36.6	39.8	42.9+	6.1	9
Fairhope, Ala.	41.4	38.8	40.1	37.3	38.7	5.3	8
Poplarville, Miss.	26.5	30.8	17.8-	26.9	14.8-	7.4	18
Baton Rouge, La.	45.6	42.8	48.9	46.7	45.7	N.S.	11
Stoneville, Miss.	36.4	33.9	37.7	33.3	32.9	N.S.	10
Curtis, La.	47.4	53.0	42.0	55.6	54.8	5.9	7
Crowley, La.	26.7	25.9	34.1	28.7	35.1	6.2	11
Beaumont, Texas	49.6	48.1	44.2	43.1	46.2	N.S.	14
Uvalde, Texas	19.2	20.3	29.0+	23.4	24.0+	5.8	15
Mean	39.6	39.5	39.5	40.0	42.2+	2.0	

Table 52 - Chemical composition and seed size for the strains in Uniform Group VIII, 1975

Location	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286	F70-2060
			Oil Percentage				
Hartsville, S.C.(A)	19.5	20.4	20.8	20.0	19.6	20.3	21.4
Blackville, S.C.(B)	20.1	19.6	20.5	19.5	19.3	20.2	20.2
Tifton, Ga.	19.3	21.5	22.4	20.3	22.4	22.4	21.6
Live Oak, Fla.	21.5	22.6	23.0	21.7	22.8	22.9	23.0
Gainesville, Fla.	20.8	23.3	23.8	21.9	23.7	24.0	23.1
Jay, Fla.	20.4	20.5	21.5	19.9	21.1	20.9	21.4
Baton Rouge, La.	19.9	21.0	21.7	19.6	21.0	20.8	21.5
Beaumont, Texas	19.5	20.9	21.6	19.3	20.5	20.5	20.7
Stoneville, Miss.	19.5	20.6	20.9	19.8	20.3	20.7	21.1
Mean	20.1	21.2+	21.8+	20.2	21.2+	21.4+	21.6+
			Protein Percentage				
Hartsville, S.C.(A)	42.1	40.2	40.3	40.6	39.6	40.4	38.6
Blackville, S.C.(B)	43.2	41.4	40.5	42.1	41.3	40.9	40.4
Tifton, Ga.	44.1	40.1	41.9	43.3	39.9	41.1	41.6
Live Oak, Fla.	42.2	39.0	39.8	40.9	39.4	39.8	39.6
Gainesville, Fla.	43.2	39.2	41.6	42.1	38.5	39.7	39.9
Jay, Fla.	43.2	41.6	41.8	42.3	40.4	41.0	41.1
Baton Rouge, La.	42.9	39.7	41.4	42.9	39.1	40.1	41.3
Beaumont, Texas	43.6	40.3	40.7	43.5	41.2	41.5	43.2
Stoneville, Miss.	40.0	37.0	37.7	38.8	37.1	38.2	36.6
Mean	42.7	39.8-	40.6-	41.8-	39.6-	40.3-	40.3-
			Grams per 100 Seeds				
Hartsville, S.C.(A)	17.6	16.4	18.1	15.4	15.7	16.0	11.8
Blackville, S.C.(B)	14.0	12.0	14.0	12.0	11.0	14.0	10.0
Tifton, Ga.	17.9	14.1	14.4	13.9	13.7	16.5	11.5
Live Oak, Fla.	18.0	15.6	18.5	16.0	14.7	19.4	14.0
Gainesville, Fla.	19.4	16.2	19.2	18.7	16.0	21.0	15.1
Jay, Fla.	16.0	13.0	16.0	13.0	13.0	17.0	11.0
Baton Rouge, La.	19.3	16.8	17.1	16.6	18.8	17.5	14.2
Beaumont, Texas	16.8	14.2	15.5	14.4	14.2	12.3	12.0
Stoneville, Miss.	11.8	10.0	12.6	10.8	9.8	11.8	8.2
Mean	16.8	14.3-	16.2	14.5-	14.1-	16.2	12.0-

Table 52 - (continued)

Location	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16	L.S.D. (.05)
			Oil Percentage			
Hartsville, S.C.(A)	19.0	18.8	19.8	20.1	20.2	
Blackville, S.C.(B)	18.8	18.6	19.7	19.7	20.0	
Tifton, Ga.	18.7	19.2	21.4	21.2	21.3	
Live Oak, Fla.	20.8	21.0	21.9	22.7	22.8	
Gainesville, Fla.	21.0	21.4	22.2	22.8	23.9	
Jay, Fla.	18.3	18.9	19.5	20.8	20.6	
Baton Rouge, La.	20.0	19.7	20.7	21.8	21.2	
Beaumont, Texas	18.8	18.9	20.0	20.9	20.7	
Stoneville, Miss.	19.0	19.6	19.4	20.5	20.9	
Mean	19.4-	19.6-	20.5+	21.2+	21.3+	0.4
			Protein Percentage			
Hartsville, S.C.(A)	41.8	42.2	40.7	41.5	39.0	
Blackville, S.C.(B)	42.8	43.3	41.2	42.4	40.5	
Tifton, Ga.	44.3	44.9	42.0	40.9	42.7	
Live Oak, Fla.	41.3	42.2	40.7	40.9	39.2	
Gainesville, Fla.	42.5	42.5	40.7	41.4	38.2	
Jay, Fla.	43.4	43.4	41.6	42.8	40.4	
Baton Rouge, La.	42.4	43.1	40.8	40.8	40.0	
Beaumont, Texas	43.9	44.1	42.1	43.7	40.9	
Stoneville, Miss.	40.3	39.8	39.0	39.7	36.1	
Mean	42.5	42.8	41.0-	41.6-	40.0-	0.9
			Grams per 100 Seeds			
Hartsville, S.C.(A)	15.8	16.8	17.1	12.2	14.8	
Blackville, S.C.(B)	12.0	11.0	15.0	10.0	13.0	
Tifton, Ga.	14.0	16.6	17.9	12.9	13.9	
Live Oak, Fla.	15.8	16.8	19.8	13.0	15.5	
Gainesville, Fla.	18.8	19.9	20.0	14.2	15.9	
Jay, Fla.	12.0	14.0	14.0	11.0	12.0	
Baton Rouge, La.	15.2	16.2	18.9	14.7	16.5	
Beaumont, Texas	13.7	14.4	15.2	16.6	13.3	
Stoneville, Miss.	10.8	11.2	11.8	9.6	9.6	
Mean	14.2-	15.2-	16.6	12.7-	13.8-	1.0

Table 53 - Relative maturity, days earlier (-) or later (+) than Hutton for the strains in Uniform Group VIII, 1975

Location	Date planted	Hutton matured	Cobb	Coker 388	F68-2507	Ts72-6	Co72-286
			South				
Clinton, N.C.	5-21	11-6	+2	0	-5	+2	0
Florence, S.C.(A)	5-15	10-28	+9	-2	-4	+9	+3
Florence, S.C.(B)	6-13	11-3	+3	-1	-8	+3	0
Hartsville, S.C.(A)	6-6	11-2	+9	+1	-2	+7	+2
Hartsville, S.C.(B)	6-12	11-3	+9	+1	-5	+8	+1
Blackville, S.C.(A)	5-27	10-25	+3	0	-2	+3	0
Blackville, S.C.(B)	7-1	10-26	+5	-3	-4	+4	+1
Athens, Ga.	5-12	10-20	+3	+1	-5	+3	+2
Clemson, S.C.	5-26	11-2	+6	+5	-4	+7	+6
Tallassee, Ala.	5-15	10-31	+3	+1	-8	+3	-1
Tifton, Ga.	5-8	10-23	0	-11	-9	0	-4
Gainesville, Fla.	5-29	10-23	+5	-3	-9	+3	+3
Marianna, Fla.	6-13	10-23	+6	+8	-5	+6	0
Quincy, Fla.	5-30	10-27	+9	-3	-15	+3	-2
Jay, Fla.	5-24	10-27	+2	0	-3	+2	-3
Fairhope, Ala.	6-6	10-21	+4	+1	-5	+4	+2
Poplarville, Miss.	5-27	10-20	+6	-2	-2	+7	+2
Baton Rouge, La.	5-19	10-26	+6	-2	-3	+4	0
Stoneville, Miss.	6-2	10-20	+10	+5	-2	+9	+5
Curtis, La.	5-14	10-24	+5	+2	0	+8	+2
Crowley, La.	5-23	10-23	+7	+1	-1	+8	+5
Beaumont, Texas	5-20	10-22	+4	0	0	+2	+1
Uvalde, Texas	6-3	11-14	-2	-3	-8	-1	-2
Mean		10-27	+5	0	-5	+5	+1

Table 53 - (continued)

Location	F70-2060	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16
			South			
Clinton, N.C.	0	-3	0	0	0	+2
Florence, S.C.(A)	+3	-1	0	+3	-3	+5
Florence, S.C.(B)	+3	-2	0	-1	0	+3
Hartsville, S.C.(A)	+2	+1	+2	+1	+1	+7
Hartsville, S.C.(B)	0	0	0	+1	-1	0
Blackville, S.C.(A)	-1	-1	-1	+1	-1	+3
Blackville, S.C.(B)	-2	-1	0	+1	-1	+4
Athens, Ga.	-3	-3	-1	-2	-4	+4
Clemson, S.C.	+1	0	+1	+1	+2	+7
Tallassee, Ala.	-4	-1	0	0	-6	+2
Tifton, Ga.	-8	-7	-3	0	-7	0
Gainesville, Fla.	0	+1	0	+4	-7	+4
Marianna, Fla.	-1	0	-1	0	-2	+6
Quincy, Fla.	0	-7	+1	-2	-6	+3
Jay, Fla.	0	0	0	-3	0	+3
Fairhope, Ala.	-6	-4	-2	+2	-4	+3
Poplarville, Miss.	-3	+1	0	+5	-1	+4
Baton Rouge, La.	-3	-3	-3	-1	-3	+1
Stoneville, Miss.	-1	+2	+3	+3	-1	+10
Curtis, La.	0	0	+1	0	+1	+4
Crowley, La.	0	0	+1	0	+1	+13
Beaumont, Texas	+2	0	-1	0	0	+2
Uvalde, Texas	-3	-1	-2	-8	-2	-1
Mean	-1	-1	0	0	-2	+4

Table 54 - Plant height for the strains in Uniform Group VIII, 1975

Location	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286
			South			
Clinton, N.C.	41	44	43	45	43	45
Florence, S.C.(A)	38	40	40	40	46	42
Florence, S.C.(B)	38	39	34	36	36	42
Hartsville, S.C.(A)	50	49	51	46	49	55
Hartsville, S.C.(B)	41	45	44	46	43	48
Blackville, S.C.(A)	41	45	40	41	40	43
Blackville, S.C.(B)	30	35	27	27	30	33
Athens, Ga.	40	44	39	45	41	47
Clemson, S.C.	40	40	42	39	41	41
Tallassee, Ala.	36	40	33	36	38	41
Tifton, Ga.	34	39	31	34	36	40
Live Oak, Fla.	36	41	37	26	40	41
Gainesville, Fla.	43	48	41	43	46	51
Marianna, Fla.	34	37	32	36	34	40
Jay, Fla.	20	25	18	20	26	24
Fairhope, Ala.	36	40	32	37	38	43
Poplarville, Miss.	36	39	34	33	40	32
Baton Rouge, La.	42	46	43	45	45	51
Stoneville, Miss.	40	41	35	38	38	38
Curtis, La.	42	46	42	44	44	47
Crowley, La.	21	27	27	28	29	27
Beaumont, Texas	35	35	36	37	37	39
Uvalde, Texas	23	27	18	19	23	22
Mean	36	39	35	36	38	40

Table 54 - (continued)

Location	F70-2060	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16
			South			
Clinton, N.C.	35	43	41	42	39	42
Florence, S.C.(A)	36	42	40	38	36	40
Florence, S.C.(B)	30	36	34	32	30	36
Hartsville, S.C.(A)	47	51	51	50	47	45
Hartsville, S.C.(B)	41	40	41	40	41	44
Blackville, S.C.(A)	37	41	39	39	40	39
Blackville, S.C.(B)	27	29	30	30	27	30
Athens, Ga.	41	43	41	43	38	43
Clemson, S.C.	36	39	39	38	36	40
Tallassee, Ala.	31	36	36	38	37	37
Tifton, Ga.	31	33	33	33	31	35
Live Oak, Fla.	36	34	37	33	33	40
Gainesville, Fla.	42	44	44	43	40	45
Marianna, Fla.	33	32	33	34	32	35
Jay, Fla.	19	22	18	22	18	23
Fairhope, Ala.	36	35	36	37	34	36
Poplarville, Miss.	33	30	30	36	34	38
Baton Rouge, La.	42	41	44	44	43	44
Stoneville, Miss.	35	37	39	37	35	39
Curtis, La.	40	40	43	41	40	43
Crowley, La.	25	23	24	27	24	23
Beaumont, Texas	35	32	34	34	34	33
Uvalde, Texas	19	21	19	22	14	22
Mean	34	36	36	36	33	37

Table 55 - Lodging scores for the strains in Uniform Group VIII, 1975

Location	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286
			South			
Clinton, N.C.	4.3	4.0	4.0	4.0	4.0	4.0
Florence, S.C.(A)	4.0	4.0	3.0	3.0	4.0	2.0
Florence, S.C.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Hartsville, S.C.(A)	4.2	4.0	3.2	4.0	3.7	3.0
Hartsville, S.C.(B)	3.3	3.5	3.0	3.0	3.5	3.0
Blackville, S.C.(A)	2.3	2.7	2.3	2.0	2.3	1.7
Blackville, S.C.(B)	1.3	2.0	2.0	1.3	2.0	2.0
Athens, Ga.	2.5	3.6	2.0	2.5	3.2	2.2
Clemson, S.C.	2.0	2.2	2.3	2.2	2.0	2.0
Tallassee, Ala.	3.0	2.0	1.7	2.0	2.3	2.0
Tifton, Ga.	1.3	3.0	1.3	2.0	2.0	2.0
Live Oak, Fla.	1.0	1.7	1.0	1.0	1.7	1.0
Gainesville, Fla.	1.7	2.7	1.7	1.3	2.0	2.3
Marianna, Fla.	2.0	2.7	1.3	2.3	1.7	2.0
Quincy, Fla.	3.3	3.7	3.3	4.3	4.7	2.0
Jay, Fla.	4.0	3.0	4.0	3.0	3.0	3.0
Fairhope, Ala.	2.0	2.7	2.0	1.7	2.7	1.0
Baton Rouge, La.	3.5	3.5	2.8	2.5	3.5	2.5
Stoneville, Miss.	2.0	2.3	2.0	2.0	2.0	2.0
Curtis, La.	3.0	2.5	2.5	2.5	2.0	2.0
Crowley, La.	1.0	1.0	1.0	1.7	1.3	1.0
Beaumont, Texas	1.0	2.0	1.0	1.0	2.0	2.0
Uvalde, Texas	1.7	1.7	1.0	1.3	1.0	1.3

Table 55 - (continued)

Location	F70-2060	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16
			South			
Clinton, N.C.	4.3	4.3	4.3	4.3	4.0	4.0
Florence, S.C.(A)	4.0	3.0	3.0	3.0	4.0	4.0
Florence, S.C.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Hartsville, S.C.(A)	3.7	4.0	4.2	3.3	4.2	4.0
Hartsville, S.C.(B)	2.7	3.5	3.7	2.8	2.8	3.2
Blackville, S.C.(A)	2.0	2.0	2.0	2.0	2.7	2.3
Blackville, S.C.(B)	1.3	1.3	1.3	2.0	1.0	2.0
Athens, Ga.	1.8	2.2	2.3	2.3	2.3	2.0
Clemson, S.C.	2.0	2.0	2.2	2.0	2.0	2.2
Tallassee, Ala.	1.7	2.8	2.7	2.0	1.7	3.0
Tifton, Ga.	2.0	1.7	1.0	1.3	2.3	2.3
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.7
Gainesville, Fla.	1.7	1.3	2.3	2.0	1.0	2.3
Marianna, Fla.	1.3	2.0	2.0	2.0	1.3	2.3
Quincy, Fla.	4.3	3.3	3.0	4.3	3.0	4.7
Jay, Fla.	3.0	3.0	3.0	4.0	4.0	3.0
Fairhope, Ala.	1.0	1.3	1.7	2.0	1.7	2.0
Baton Rouge, La.	2.5	3.0	3.0	3.0	2.2	2.8
Stoneville, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
Curtis, La.	2.5	2.5	3.0	2.5	3.0	2.0
Crowley, La.	1.0	1.0	1.3	1.3	1.0	1.0
Beaumont, Texas	3.0	1.0	1.0	1.0	1.0	1.0
Uvalde, Texas	1.3	1.7	1.3	1.3	1.0	1.3

Table 56 - Seed quality scores for the strains in Uniform Group VIII, 1975

Location	Hutton	Cobb	Coker 338	F68-2507	Ts72-6	Co72-286
			South			
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Blackville, S.C.(A)	2.0	2.0	2.0	2.0	1.0	3.0
Athens, Ga.	1.0	1.3	1.5	1.2	1.0	1.5
Tallassee, Ala.	2.0	1.0	1.0	1.5	1.5	1.5
Tifton, Ga.	2.0	1.8	2.0	2.2	2.0	2.0
Live Oak, Fla.	1.0	1.0	1.3	1.3	1.0	1.3
Gainesville, Fla.	2.0	1.0	2.0	2.0	1.0	1.7
Quincy, Fla.	3.3	3.7	2.3	3.0	3.7	2.3
Jay, Fla.	2.0	2.0	3.0	3.0	2.0	2.0
Fairhope, Ala.	1.0	1.7	1.3	1.0	1.7	1.0
Baton Rouge, La.	2.2	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
Beaumont, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 56 - (continued)

Location	F70-2060	F70-3374	F70-3380	F71-1004	Ga70-163	Ts73-16
			South			
Clinton, N.C.	1.5	1.0	1.0	1.0	1.5	1.5
Blackville, S.C.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Athens, Ga.	1.3	1.2	1.3	1.0	1.0	1.5
Tallassee, Ala.	1.0	2.0	2.0	2.0	1.5	2.0
Tifton, Ga.	2.0	2.0	2.0	2.0	2.0	1.5
Live Oak, Fla.	1.0	1.0	1.0	1.3	1.0	1.0
Gainesville, Fla.	1.3	1.0	1.0	1.7	1.7	1.0
Quincy, Fla.	2.7	3.3	4.3	1.7	2.7	1.7
Jay, Fla.	3.0	3.0	3.0	3.0	2.0	2.0
Fairhope, Ala.	1.3	1.0	1.3	1.0	1.3	1.3
Baton Rouge, La.	2.2	2.0	1.8	1.8	1.5	1.8
Stoneville, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
Beaumont, Texas	1.0	1.0	2.0	1.0	1.0	1.0

PRELIMINARY GROUP VIII

1975

Preliminary Group VIII nurseries, including 34 experimental strains along with the varieties Hutton and Cobb, were grown at seven locations. The parentage of these strains is reported in Table 57. Performance data are summarized in Tables 58-63. Differences among strains were significant at each of the locations. The combined analysis of variance for seed yield showed differences among strains to be significant, but there were none which yielded significantly above Hutton. Two strains gave mean seed yields significantly lower than Hutton.

All but one of the strains were earlier in maturity than Hutton. Two strains were significantly higher in protein content of the seed than Hutton and 22 strains were significantly lower. Seventeen strains appeared to have good resistance to the root knot nematode *M. incognita*. Most appeared to have fair field resistance to phytophthora rot.

Strains which appear to merit being advanced to Uniform Group VIII are: Co73-410, Co73-400, F72-6745, F73-4826, F73-6041, and F73-7571.

Table 57 - Parentage of strains in Preliminary Group VIII, 1975

	Variety or strain	Parentage	Generation Composited
1.	Hutton	F55-822 X (Roanoke X CNS-4)	F_6
2.	Cobb	F57-735 X D58-3358	F_6
3.	Co73-400	Hampton 266 X Bragg	
4.	Co73-410	Hampton 266 X Bragg	
5.	Co73-456	Hutton X N63-858	
6.	Co74-478	Hampton 266 X Bragg	
7.	Co74-517	Hampton 266 X N63-1206	
8.	Co74-542	N63-858 X Bragg	
9.	Co74-574	Hutton X N63-858	
10.	Co74-581	Coker 208 X N63-858	
11.	D73-9168	Lee 68(2) X (Hill X PI 274454)	F_5
12.	F68-1180	Bragg(3) X D60-7965	F_4
13.	F71-1370	Bragg(3) X D60-7965	F_6
14.	F71-2693	Bragg(2) X F59-2496	F_6
15.	F71-2867	F61-3118 X [Bragg(2) X F59-2496]	F_5
16.	F72-6745	Bragg(3) X D60-7965	F_7
17.	F73-4792	Bragg(3) X D60-7965	F_7
18.	F73-4810	Bragg(3) X D60-7965	F_7
19.	F73-4813	Bragg(3) X D60-7965	F_7
20.	F73-4826	Bragg(3) X D60-7965	F_7
21.	F73-4971	Bragg(3) X D60-7965	F_7
22.	F73-5793	F59-1505 X [Bragg(3) x D60-7965]	F_6
23.	F73-6000	F59-1505 X [Bragg(3) X PI 96035]	F_6
24.	F73-6041	F59-1505 x [Bragg(3) X PI 96035]	F_6
25.	F73-7009	Bragg X Semmes	F_{10}
26.	F73-7377	F59-1505 X [Bragg(3) X PI 96035]	F_6
27.	F73-7382	F59-1505 X [Bragg(3) X PI 96035]	F_6
28.	F73-7393	F61-3118 X [Bragg(2) X F59-2496]	F_6
29.	F73-7402	F61-3118 X [Bragg(2) X F59-2496]	F_6
30.	F73-7446	F63-3999 X (F61-3118 X D60-7965)	F_5
31.	F73-7496	F63-3999 X (F61-3118 X D60-7965)	F_5
32.	F73-7571	F63-3999 X (F61-3118 X D60-7965)	F_5
33.	Ga70-527	Jackson X Hood	
34.	Ts74-44	Semmes X Hardee	F_6
35.	Ts74-52	D69-6094 X D61-4269	F_4
36.	Ts74-62	D64-4716 X Hardee	F_4

Table 58 - General summary of performance for the strains in Preliminary Group VIII, 1975

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	P.R.	R.K.
Hutton	38.7	10-24	34	20.1	42.6	1.5	1.0	2.0
Cobb	39.1	+5	37	20.6	40.1-	2.5	1.0	2.0
Co73-400	41.1	+2	30	22.0+	40.5-	1.5	1.0	4.0
Co73-410	44.3	+1	35	21.8+	39.2-	1.5	1.5	4.0
Co73-456	36.1	+2	32	19.8	41.2-	1.5	1.0	3.0
Co74-478	39.6	+1	34	21.4+	39.5-	1.5	1.0	3.0
Co74-517	37.9	+3	35	21.4+	39.6-	1.5	2.5	3.0
Co74-542	39.4	+3	30	20.3	41.0-	2.0	2.0	3.0
Co74-574	39.0	-3	30	20.0	42.2	2.0	1.0	2.0
Co74-581	38.1	-2	31	19.2-	44.7+	2.0	2.5	4.0
D73-9168	31.3-	+5	35	19.6	41.9	2.0	1.0	5.0
F68-1180	40.2	-3	30	19.9	41.3-	1.5	1.0	2.0
F71-1370	39.4	-1	33	20.4	42.4	1.0	1.0	2.5
F71-2693	36.3	+2	39	18.5-	44.0+	1.0	1.0	2.0
F71-2867	38.6	+4	40	20.6	40.9-	2.0	1.0	1.0
F72-6745	42.1	-4	30	20.4	42.1	2.0	1.0	2.0
F73-4792	37.2	+1	34	20.2	41.7-	1.5	1.0	1.0
F73-4810	37.4	0	33	20.1	42.0	1.0	1.0	1.5
F73-4813	39.6	-2	32	20.1	40.9-	1.5	1.0	3.0
F73-4826	39.7	-1	33	20.5	40.9-	2.0	1.0	1.5
F73-4971	39.8	+1	38	20.4	41.7-	1.5	1.0	2.0
F73-5793	36.8	-1	32	20.5	40.9-	2.0	1.0	2.0
F73-6000	39.2	+1	34	20.2	40.3-	2.0	1.0	1.0
F73-6041	39.8	-3	33	21.0+	40.4-	2.0	1.0	1.0
F73-7009	35.2	-1	36	19.1-	42.3	1.0	1.0	1.5
F73-7377	42.5	0	34	20.8+	40.6-	2.0	1.0	2.0
F73-7382	38.4	-2	33	20.3	42.1	2.0	2.5	2.0
F73-7393	37.4	+3	38	20.2	41.2-	2.0	3.5	2.0
F73-7402	40.5	+1	38	20.9+	40.2-	2.0	1.5	2.0
F73-7446	33.9	+2	37	19.6	41.8	1.0	1.0	3.0
F73-7496	37.0	0	36	19.2-	42.0	1.5	1.0	3.0
F73-7571	40.8	-1	33	19.9	41.7-	1.5	2.0	3.0
Ga70-527	39.5	-2	34	20.7+	39.7-	2.0	2.0	4.0
Gs74-44	32.6-	-4	29	20.7+	41.5-	3.0	2.0	4.0
Ts74-52	37.1	-1	33	21.2+	40.4-	2.0	1.0	5.0
Ts74-62	35.6	+1	37	20.3	42.9	1.5	1.0	5.0
L.S.D.(.05)	5.8			0.6	0.9			
L.S.D.(.01)	N.S.			0.7	1.2			

Table 59 - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1975

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Beaumont, Texas	Stone-ville, Miss.
Hutton	35.9	41.4	51.0	37.2	28.0	41.6	35.7
Cobb	41.7+	37.2	47.2	51.1+	29.2	33.3	34.3
Co73-400	28.6-	40.8	47.0	39.4	30.7	65.9+	35.6
Co73-410	39.5	44.8	55.0	44.5	47.3+	48.8	30.4-
Co73-456	42.4+	35.7	30.5-	39.1	28.8	41.9	34.4
Co74-478	32.3	41.3	48.0	33.1	36.7	50.6	35.5
Co74-517	32.5	40.9	45.4	38.3	33.3	44.7	30.2-
Co74-542	41.3+	39.1	52.3	34.4	23.9	49.3	35.5
Co74-574	34.5	44.2	45.3	39.0	26.5	48.5	35.3
Co74-581	38.5	40.3	44.2	39.3	31.8	44.6	28.3-
D73-9168	32.4	22.9-	38.2-	38.2	30.6	26.5	30.2-
F68-1180	34.6	36.8	54.8	48.9+	20.1	49.9	36.5
F71-1370	30.2-	38.5	59.2	47.1+	28.0	35.3	37.8
F71-2693	32.1	42.7	45.6	34.2	33.3	36.6	29.8-
F71-2867	32.2	30.4	52.2	37.3	30.7	52.6	35.2
F72-6745	35.0	41.7	56.6	47.7+	26.1	53.3	34.6
F73-4792	37.0	31.9	53.6	39.7	23.9	39.9	34.2
F73-4810	39.3	35.7	54.5	34.4	18.9	42.2	37.2
F73-4813	36.8	38.6	51.7	33.9	32.2	48.1	36.2
F73-4826	36.7	41.1	52.6	42.5	31.8	38.2	35.3
F73-4971	41.6+	42.4	50.5	39.1	26.9	41.3	37.0
F73-5793	34.6	38.9	50.1	40.6	25.0	32.9	35.5
F73-6000	39.2	30.4	53.4	42.1	36.7	37.2	35.5
F73-6041	34.6	39.5	51.3	34.2	26.9	51.8	40.2+
F73-7009	34.5	39.3	40.6-	33.3	26.5	38.7	33.3
F73-7377	39.3	48.3	56.8	35.6	37.5	45.2	34.6
F73-7382	37.5	41.2	50.8	37.0	28.8	40.1	33.3
F73-7393	39.1	43.1	47.8	39.8	32.9	38.5	20.7-
F73-7402	35.3	38.9	51.1	42.6	31.8	47.0	36.8
F73-7446	39.4	22.9-	42.3	40.0	18.2	39.7	34.7
F73-7496	33.7	36.9	47.3	43.8	20.5	40.7	36.1
F73-7571	37.7	41.5	55.3	33.7	31.4	55.7	30.6-
Ga70-527	37.4	36.2	49.7	40.5	28.4	55.3	29.0-
Ts74-44	22.7-	20.4-	44.9	16.3-	38.6	52.1	33.6
Ts74-52	33.8	33.4	47.5	35.6	29.9	47.6	33.1
Ts74-62	33.5	33.1	47.7	35.0	30.7	37.4	31.9
L.S.D.(.05)	4.7	11.2	9.4	9.1	12.6	16.9	4.3
C.V.	8%	15%	9%	12%	21%	18%	6%

Table 60 - Oil percentages for the strains in Preliminary Group VIII, 1975

Strain	Blackville, S.C.	Live Oak, Fla.	Jay, Fla.	Beaumont, Texas	Stoneville, Miss.
Hutton	20.7	21.0	20.2	19.1	19.3
Cobb	20.6	22.2	19.5	20.2	20.3
Co73-400	21.6	23.7	21.4	22.0	21.5
Co73-410	21.7	22.8	22.3	21.2	20.9
Co73-456	19.9	21.5	20.4	18.6	18.6
Co74-478	21.4	22.9	21.4	21.0	20.5
Co74-517	21.4	22.4	21.7	20.6	21.0
Co74-542	20.5	21.2	20.1	19.2	20.5
Co74-574	19.3	21.4	19.7	19.6	19.9
Co74-581	19.0	19.9	18.9	19.2	18.9
D73-9168	19.2	20.6	20.1	18.4	19.7
F68-1180	19.5	21.8	19.3	19.2	19.6
F71-1370	20.5	22.0	19.6	19.2	20.5
F71-2693	19.1	19.2	17.6	18.4	18.4
F71-2867	21.1	21.8	20.3	19.8	20.0
F72-6745	20.4	21.9	20.1	19.7	19.7
F73-4792	20.2	21.7	20.6	19.3	19.1
F73-4810	20.2	21.7	19.9	19.4	19.5
F73-4813	20.0	21.3	20.0	20.0	19.1
F73-4826	20.8	22.1	20.4	19.5	19.7
F73-4971	21.2	22.0	19.7	19.2	20.1
F73-5793	20.4	22.0	20.4	20.1	19.7
F73-6000	20.0	21.6	20.2	19.7	19.7
F73-6041	21.1	22.3	20.4	20.9	20.1
F73-7009	18.5	21.0	18.2	19.3	18.5
F73-7377	20.9	22.7	20.8	19.8	20.0
F73-7382	21.2	21.3	20.1	19.8	19.2
F73-7393	20.5	21.8	19.6	20.2	19.1
F73-7402	20.9	22.4	19.9	20.7	20.8
F73-7446	19.6	20.8	18.9	19.5	19.2
F73-7496	19.0	20.3	19.2	18.4	19.0
F73-7571	20.4	21.1	19.7	19.3	18.8
Ga70-527	20.1	22.2	19.9	20.8	20.4
Ts74-44	21.4	21.4	19.6	20.4	20.9
Ts74-52	21.3	22.2	20.7	20.7	21.2
Ts74-62	20.3	21.3	19.2	20.1	20.5

Table 61 - Protein percentages for the strains in Preliminary Group VIII,1975

Strain	Blackville, S.C.	Live Oak, Fla.	Jay, Fla.	Beaumont, Texas	Stoneville, Miss.
Hutton	42.0	42.1	43.1	44.4	41.5
Cobb	39.6	39.8	41.3	41.8	37.9
Co73-400	39.6	39.7	42.9	41.2	39.0
Co73-410	38.6	38.8	39.9	40.7	38.1
Co73-456	39.9	41.3	41.1	42.9	40.8
Co74-478	38.5	39.2	41.3	40.4	38.2
Co74-517	38.4	40.2	40.4	40.8	38.1
Co74-542	39.9	40.9	42.0	43.3	38.9
Co74-574	42.4	41.3	43.7	43.8	39.8
Co74-581	42.7	44.8	45.6	47.2	43.2
D73-9168	41.7	43.4	42.2	42.4	39.6
F68-1180	41.1	40.9	41.5	43.2	39.9
F71-1370	41.6	42.3	43.7	44.0	40.3
F71-2693	43.1	44.9	45.0	44.5	42.4
F71-2867	40.3	40.8	42.2	42.0	39.1
F72-6745	41.0	41.6	43.3	43.6	40.8
F73-4792	40.4	42.4	40.8	43.6	41.4
F73-4810	41.1	42.1	42.1	43.3	41.4
F73-4813	40.2	40.8	42.2	41.5	39.8
F73-4826	40.0	41.0	41.1	42.3	40.2
F73-4971	40.5	40.9	42.4	43.8	40.8
F73-5793	40.4	41.3	41.7	41.3	39.7
F73-6000	40.0	41.6	40.8	41.7	37.4
F73-6041	39.0	41.3	41.6	41.1	39.2
F73-7009	42.9	41.6	43.6	42.3	41.3
F73-7377	40.2	40.0	40.9	43.6	38.5
F73-7382	41.0	42.8	43.2	42.0	41.7
F73-7393	41.1	40.8	42.9	41.5	39.9
F73-7402	40.6	39.5	42.0	41.2	37.7
F73-7446	41.1	42.5	42.2	42.7	40.5
F73-7496	41.8	42.6	41.9	43.8	39.9
F73-7571	40.3	42.8	42.3	42.8	40.4
Ga70-527	39.8	39.1	41.2	40.5	38.1
Ts74-44	40.8	42.3	43.1	42.6	38.8
Ts74-52	39.2	40.2	41.5	41.9	39.3
Ts74-62	41.3	43.9	44.9	43.4	40.8

Table 62 - Plant height for the strains in Preliminary Group VIII, 1975

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.	Beaumont, Texas	Stoneville, Miss.
Hutton	29	36	42	25	36	36
Cobb	35	40	45	26	37	40
Co73-400	22	31	42	15	36	32
Co73-410	30	39	48	25	36	33
Co73-456	23	33	39	28	30	30
Co74-478	29	40	41	21	36	34
Co74-517	29	36	46	25	39	32
Co74-542	20	36	40	28	29	25
Co74-574	27	31	42	21	28	28
Co74-581	26	32	41	26	34	25
D73-9168	31	40	45	19	36	37
F68-1180	22	31	38	29	29	29
F71-1370	24	29	41	36	33	34
F71-2693	33	39	52	28	40	42
F71-2867	30	47	50	29	44	41
F72-6745	25	32	37	18	36	33
F73-4792	26	36	42	30	36	32
F73-4810	25	32	43	29	36	34
F73-4813	23	30	43	30	36	31
F73-4826	27	35	45	21	33	36
F73-4971	31	38	50	30	39	38
F73-5793	26	34	42	25	33	33
F73-6000	27	42	43	25	36	33
F73-6041	26	36	45	20	36	36
F73-7009	33	39	49	21	35	39
F73-7377	32	36	41	19	37	36
F73-7382	29	39	46	21	34	31
F73-7393	35	44	47	25	40	34
F73-7402	35	37	49	24	37	44
F73-7446	32	41	47	20	39	42
F73-7496	34	39	47	17	41	39
F73-7571	31	36	43	25	34	28
Ga70-527	26	36	45	31	36	32
Ts74-44	19	29	38	28	34	25
Ts74-52	26	36	37	29	33	34
Ts74-62	29	42	45	24	37	42

Table 63 - Seed quality scores for the strains in Preliminary Group VIII, 1975

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Beaumont, Texas	Stone-ville, Miss.
Hutton	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Cobb	1.0	1.5	1.0	1.0	2.0	1.0	2.0
Co73-400	2.0	1.0	2.0	2.5	4.0	1.0	2.0
Co73-410	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Co73-456	2.0	1.0	1.5	2.5	1.0	1.0	2.0
Co74-478	2.0	2.0	2.5	1.5	3.0	1.0	2.0
Co74-517	2.0	1.5	2.0	1.5	2.0	1.0	2.0
Co74-542	2.0	1.5	2.0	3.5	5.0	2.0	2.0
Co74-574	3.0	1.0	3.0	4.0	4.0	1.0	2.0
Co74-581	2.0	1.5	2.0	2.5	3.0	2.0	2.0
D73-9168	3.0	1.5	1.0	1.5	2.0	1.0	2.0
F68-1180	2.0	1.0	1.0	3.0	2.0	1.0	2.0
F71-1370	2.0	1.0	1.5	3.5	2.0	1.0	2.0
F71-2693	2.0	1.5	1.0	1.5	2.0	1.0	2.0
F71-2867	2.0	1.5	1.0	1.5	1.0	1.0	2.0
F72-6745	2.0	1.5	2.5	5.0	5.0	1.0	2.0
F73-4792	2.0	1.5	2.0	1.5	2.0	1.0	2.0
F73-4810	2.0	1.5	2.0	1.5	3.0	2.0	2.0
F73-4813	2.0	1.0	1.0	1.5	2.0	1.0	2.0
F73-4826	1.0	1.0	1.0	1.0	2.0	1.0	2.0
F73-4971	2.0	1.0	1.5	2.5	3.0	1.0	2.0
F73-5793	3.0	1.5	2.5	3.0	2.0	1.0	2.0
F73-6000	2.0	1.5	1.0	2.0	2.0	1.0	2.0
F73-6041	3.0	1.0	2.0	3.0	3.0	1.0	2.0
F73-7009	2.0	1.5	2.0	4.0	2.0	1.0	2.0
F73-7377	2.0	1.5	2.0	1.5	3.0	2.0	2.0
F73-7382	2.0	1.5	2.5	4.0	3.0	2.0	2.0
F73-7393	1.0	1.0	1.5	3.0	2.0	1.0	2.0
F73-7402	3.0	1.5	2.0	2.0	2.0	1.0	2.0
F73-7446	1.0	1.0	1.0	1.0	2.0	1.0	2.0
F73-7496	1.0	1.0	1.0	2.0	2.0	1.0	2.0
F73-7571	2.0	1.0	1.0	3.5	1.0	1.0	2.0
Ga70-527	2.0	1.5	2.0	3.0	3.0	1.0	2.0
Ts74-44	2.0	1.5	3.0	5.0	4.0	1.0	2.0
Ts74-52	3.0	2.0	2.5	4.5	4.0	1.0	2.0
Ts74-62	2.0	1.5	2.0	2.5	4.0	1.0	2.0