

1997 Kentucky Soybean Performance Tests

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The Kentucky Soybean Performance Tests are conducted to provide an unbiased, objective estimate of the relative performance of soybean varieties in Kentucky. This information may be used by growers and seedsmen to aid in selecting varieties that will give the highest total production in a specific situation.

Eight soybean tests were planted in 1997 in Kentucky. The test locations are shown below. Soil types, planting dates, and other information are shown in Table 1.

Methods

All tests were planted in a randomized complete block design. The conventional and double-crop tests had two replications (plots) of each variety, and the soybean cyst nematode (SCN) tests had three replications. The individual plots of the

conventional tests (excluding the Daviess Co. site) and the Carlisle Co. SCN test were 20 feet long and 4 rows wide with 30 inches between rows (seeding rate eight to ten viable seeds per foot of row). The plots at the double-crop test and the Daviess Co. tests (SCN and conventional) were 20 feet long and 6 rows wide with 15 inches between rows (seeding rate five to six viable seeds per foot of row). All plots were treated with herbicides and maintained as weed-free as possible.

The two SCN tests were planted at sites infested with soybean cyst nematode. Only varieties with some genetic resistance to SCN and susceptible check varieties were tested at these sites.

Harvesting was done with a small plot combine according to maturity; thus, several harvests were made at each location. Sixteen feet of the center rows were harvested from the plots. No allowances were made for soybeans that may have been lost because of combining or shattering.

Yield—Yield is reported in bushels per acre adjusted to 13 percent moisture.

Lodging—Lodging is rated on a scale of 1 to 5, where 1 = almost all plants erect; 2 = all plants over slightly or a few down; 3 = all plants over moderately or 25 percent down; 4 = all plants over considerably or 50 to 80 percent down; 5 = all plants over badly.

Maturity date—A variety is considered mature when 95 percent of the pods have turned their normal mature color. One to two weeks of good drying weather will be needed beyond the date given before the beans will be ready to combine. Maturity dates were recorded at the Fayette Co., Ballard Co., and Caldwell Co. locations.

Plant height—Plant height was measured in inches from the soil surface to the tip of the main stem.

Pod height—Height of the lowest pod was measured in inches from the soil surface to the point of attachment of the lowest pod on the plant.

Location of the 1997 Kentucky Soybean Tests

1. Daviess County
2. Hardin County
3. Caldwell County
4. Ballard County
5. Fayette County
6. Warren County
7. Carlisle County

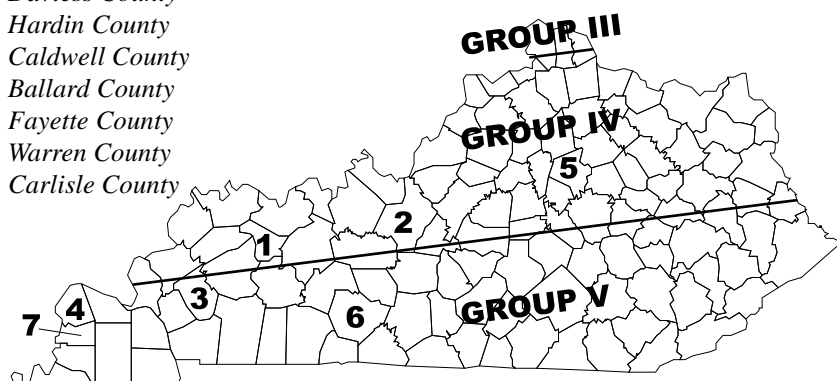


Table 1. Location, planting data, and climatic data for the 1997 Soybean Performance Tests.

	Farmer	Extension Agent	Soil Type	Date of Planting	Soil Test	Fertilizer Applied²	50% Chance of Killing Frost³
Daviess Co.	Terry Joe Payne Woodlawn Farms	Wayne Mattingly	McGary Silt Loam	6/23	P 200+ K 387 pH 6.9	none	10/25
Hardin Co.	Frank Brown	Rod Grusy	Crider Silt Loam	5/23	P 75 K 270 pH 6.9	none	10/20
Caldwell Co.	Princeton Exp. Station		Crider Silt Loam	6/19	P 164 K 243 pH 6.8	none	10/19
Ballard Co.	Lynn Denton	Kenny Perry	Grenada Silt Loam	7/3	P 96 K 307 pH 5.8	none	10/19
Fayette Co.	Lexington Exp. Station		Maury Silt Loam	5/15	P 300 K 230 pH 6.7	75 lb KCL	10/26
Warren Co.¹ Double-crop	Bill Jenkins	Luther Smith	Pembroke Silt Loam	7/10	P 78 K 350 pH 6.4	none	10/23
Daviess Co. SCN⁴	Joe Elliott and Sons	Wayne Mattingly	Calloway Silt Loam	6/24	P 110 K 165 pH 6.3	none	10/25
Carlisle Co. SCN	Roger & Jeff Davis	Michael Williams	Adler Silt Loam	6/27	P 164 K 243 pH 6.8	none	10/19

¹ No-till double cropped after wheat.

² Amount per acre.

³ Based on 30 year average

⁴ Not harvested

Soybean cyst nematode (SCN)—SCN populations were determined at planting and at harvest by measuring SCN egg densities in plots. Egg densities, reported as the number of eggs/100 cubic centimeters of soil (about 1/4 pint of soil), were determined from soil samples consisting of ten 6-inch deep soil probes from the center two rows of each plot. Soil was thoroughly mixed. Cysts were extracted from two 100-cubic centimeter soil samples from each plot by wet sieving. Eggs were freed from cysts by crushing the cysts. Eggs were then stained and counted. The two egg counts from each plot were averaged to give a single egg density per plot. These data were provided by Don Hershman and Debbie Morgan of the Soybean Cyst Nematode Laboratory at Princeton, Kentucky.

Interpretation

An important step in profitable soybean production is selecting good quality seed of the best varieties for your management system. The Kentucky Soybean Performance Tests are conducted to provide information useful in making this selection.

Performance of soybean varieties is affected by many factors including year, location, soil type, and time of planting. A particular soybean variety is adapted for full-season growth in a band approximately 100 miles wide from north to south (see

map, page 1). Thus, the best variety in northern Kentucky may not be the best in southern areas. For this reason, the Kentucky Soybean Performance Tests are conducted at several locations in the major soybean-producing areas of the state. The yields as reported in this publication should be used for relative comparisons; actual yields on a grower's farm may be different.

Performance of the soybean varieties will vary from year to year and location to location, depending on adaptability, weather conditions, and management. The performance data presented in Table 3 have been averaged across years and locations. Performance of a variety across a period of years and at several locations in the state is the best indicator of its production potential. (See *Agronomy Notes*, Volume 21, No. 3, "Using Performance Test Results in Soybean Variety Selection in Kentucky.")

Small differences in yield are usually of little importance. The yield of two varieties at a single location can differ because of chance factors (difference in soil characteristics, fertility, or availability of moisture), although the inherent yielding ability is the same. To decide if an observed yield difference is real, use the LSD (least significant difference) values cited at the bottom of the tables. The significance level used in the tables is 0.10. If the difference in yield is greater than the LSD value, you can be reasonably certain that the entries actu-

ally do differ in yielding ability. “N.S.” in the tables indicates that no statistically significant differences were determined.

Yield is only one factor to consider in selecting a variety for your production system. Maturity, lodging resistance, disease resistance, and time and equipment availability are other factors that need to be considered.

The data provided have been divided into maturity groups. Due to weather patterns at a location, maturity alone can affect yield; this will be reflected by large differences in the maturity group averages. Selecting varieties from several maturity groups can reduce the impact of these maturity group fluctuations. (See *Agronomy Notes*, Volume 25, No. 3, “Growing Soybean Varieties from Multiple Maturity Groups Can Reduce Yearly Yield Volatility.”)

The date of a 50-percent chance of a fall killing frost is important in determining which variety you select to plant. The dates presented in Table 1 are average dates over a long term. Actual dates will vary from year to year. For the date of a one-year-out-of-ten chance of a fall killing frost, subtract 13 to 18 days from the dates in Table 1. For maximum yield, a variety must mature before the first killing frost in the fall. Maturity dates of varieties are listed for the Fayette Co. and Caldwell Co. locations and in the combined summary table.

If you have soybean cyst nematode problems, a resistant variety should be used in your production system with a recommended crop rotation program. (See Kentucky Cooperative Extension Service publication PPA-3, *Soybean Cyst Nematode*, available at your county Extension office.) The level of SCN infestation as well as the SCN race can be determined through the SCN laboratory at Princeton. Contact your county Extension office for more information on collecting and submitting samples. The importance of resistant varieties has in-

creased as the number of acres affected by SCN has increased. When evaluating the performance of resistant varieties in the SCN-infested location, note the change in cyst numbers as well as the yield presented in the SCN table.

All of the varieties in the SCN test except for Hartwig (which is resistant to all SCN races) were susceptible to the SCN population in the field (race 4). This is why SCN reproduced (increased) on all “resistant” varieties except for Hartwig. Given similar SCN Pf-Pi values for “resistant” and susceptible varieties, some SCN-”resistant” varieties yielded better than susceptible varieties. This is either due to some tolerance of those resistant varieties to SCN damage, or it may be the result of higher built-in yield potentials for those varieties. Initial SCN levels in the test were very high.

Growing Conditions

Wet soil conditions early in the growing season delayed planting dates at all locations except Fayette Co. and Hardin Co. Poor planting conditions caused poor emergence at the Daviess Co. SCN test. Inadequate summer rainfall reduced growth at the Daviess Co. conventional test and SCN test. The Daviess Co. SCN test was subsequently not harvested.

Soybean Production Information

The Kentucky Cooperative Extension Service has a series of publications, “Soybean Production in Kentucky,” which contains a more detailed discussion of soybean production practices: Part I. *Status, Uses, and Planning* (AGR-128); Part II. *Seed Selection, Variety Selection, and Fertilization* (AGR-129); Part III. *Planting Practices and Double Cropping* (AGR-130);

Table 2. Soybean Planting Guide

Row spacing (inches)	7	15	20	30	36
Seeding Rate (seeds per ft. of row)	2-3	5-6	6-8	8-10	9-11
Viable seeds per poundPounds of Seed per Acre.....				
2000	80-110	85-105	78-104	70-87	65-80
2200	73-100	77-95	71-95	64-79	59-72
2400	66-93	71-88	65-87	58-73	54-66
2600	61-86	65-81	60-80	54-67	50-61
2800	57-80	61-75	56-75	50-62	46-56
3000	53-75	57-70	52-70	46-58	43-53
3200	50-70	53-66	49-65	44-54	41-49
3400	47-66	50-62	46-61	41-51	38-46
3600	44-62	47-58	44-58	39-48	36-44
3800	42-59	45-55	41-55	37-46	34-42
4000	40-56	43-53	39-52	35-44	33-40

and Part IV. *Weed, Disease, and Insect Control* (AGR-131). A soybean planting rate guide, reproduced from this series, is provided below for your convenience (Table 2).

Oil and Protein Data

The protein and oil concentration data for all soybean varieties entered in the Kentucky Soybean Performance Tests are presented in Table 11. The Federal Grain Inspection Service is offering soybean oil and protein testing as official criteria for grade. At this time, the testing is optional. Soybean varieties differ in their protein and oil concentrations, which are influenced by the production environments. Because soybeans are grown primarily for oil and protein, these data are provided to indicate differences that exist between varieties produced in Kentucky.

Kentucky State Seed Law

The Kentucky State Seed Law requires all seed exposed, offered for sale, or sold in Kentucky to be labeled as to kind and variety for each agricultural seed component present in excess of 5 percent of the whole and the percentage by weight of each component. All soybean seed blends should be labeled as to the percentage of each variety that makes up the mixture. The term “variety unknown” may no longer be used in place of a variety designation for soybeans, as all soybean seed must be labeled by variety name.

Acknowledgments

In addition to the county agents and farm cooperators mentioned in Table 1, Tom Stefaniak, David Pilcher, and Julie Scollin have contributed greatly to the production of this publication.

Sources of Seed

The seed planted in the 1997 Soybean Performance Tests was acquired from the following sources:

Agratech Seeds Inc.

5559 N. 500 W.
McCordsville, IA 46055
AGRATECH AT 425
AGRATECH AT 460

Asgrow Seed Company

P.O. Box 109
Matthews, MO 63867
ASGROW A3904
ASGROW A4341
ASGROW A4922
ASGROW A4715
ASGROW A5547
ASGROW A5403

Callahan Seeds

P.O. Box 367
1122 E. 169th Street
Westfield, IN 46074-0367
CALLAHAN 3484
CALLAHAN 7417
CALLAHAN 6435
CALLAHAN 6440

Caverndale Farms, Inc.

1921 Bluegrass Road
Danville, KY 40422
CAVERNDALE CF 461
CAVERNDALE CF 492
CAVERNDALE CF 478

Crow's Hybrid Corn Co.

P.O. Box 306
Milford, IL 60953
CROW'S 38004
CROW'S 39007
CROW'S 45001

DeKalb Genetics Corp.

3100 Sycamore Road
DeKalb, IL 60115-9600
DEKALB CX434
DEKALB CX478
DEKALB CX450C
DEKALB CX470C
DEKALB CX420C

Delta and Pine Land Co.

P.O. Box 157
Scott, MS 38772
DELTA PINE DP 3478
DELTA PINE DP 3519S

Delta King Seed Co.

P.O. Box 970
McCrary, AR 72101
DELTA KING 5850
DELTA KING 5263
DELTA KING 5664
DELTA KING 4860
DELTA KING 5961RR
DELTA KING 4762

Gateway Seed Co.

P.O. Box 337
Ridgeway, IL 62979
GATEWAY 470
GATEWAY 493

Golden Harvest

P.O. Box 257
R.R. 3
Clinton, IL 61727
GOLDEN HARVEST H-1383
GOLDEN HARVEST H-1454
GOLDEN HARVEST H-1485
GOLDEN HARVEST H-1487
GOLDEN HARVEST H-1500

Kentucky for Progress

1105 S. Long Grove Road
Glendale, KY 42740
KFP 462
KFP 403
KFP 35003JRR

Kentucky Foundation Seed Project

P.O. Box 11950
Lexington, KY 40579
ACCOMAC
CALHOUN
CHARLESTON
CLIFFORD
DELISOY 4710
HARTWIG
HOLLADAY
HUTCHESON
KS 4694
KS 5292
MACON
MANOKIN
OMAHA
PHARAOH
PROBST
STRESSLAND
TN 4-86
TN 4-94
TN 5-95
WICOMICO

LG Seeds

P.O. Box 457
3200 N. State Route 213
Windfall, IN 46076
LG SEEDS LG 6437C
LG SEEDS LG 6462C
LG SEEDS LG 6484

Miles Farm Supply Inc.

P.O. Box 22879
Owensboro, KY 42304-2879
SOUTHERN CROSS JOSHUA
SOUTHERN CROSS DAVID
SOUTHERN CROSS EXODUS
SOUTHERN CROSS SAMUEL
SOUTHERN CROSS SAUL

Mycogen Seeds

3600 N. Columbia
Plainview, TX 79072
MYCOGEN 470
MYCOGEN 5430

Novartis Seeds

410 Woodbridge Drive
Somerville, TN 38068
NK BRAND S 39-11
NK BRAND S 36-Q6
NK BRAND S 38-L5
NK BRAND S 28-T3
NK BRAND S 42-60
NK BRAND S 46-44
NK BRAND S 48-14
NK BRAND 3474
NK BRAND S 43-B5

Pioneer Hi-Bred Int. Inc.

6767 Old Madison Pike #110
Huntsville, AL 35806
PIONEER VARIETY 9395
PIONEER VARIETY 94B01
PIONEER VARIETY 94B41
PIONEER VARIETY 9452
PIONEER VARIETY 9481
PIONEER VARIETY 9482
PIONEER VARIETY 9492

Scott Seeds Co.

709 East 4th Street
New Albany, IN 47150
SCOTT SEEDS RT 446RR
SCOTT SEEDS RT 346RR

Southern States Cooperative

P.O. Box 26234
Richmond, VA 23260
S. STATES FFR-365
S. STATES SS-HT-381-STS
S. STATES FFR-396
S. STATES FFR-439
S. STATES FFR-478
S. STATES FFR-493
S. STATES SS-HT-551-STS
S. STATES FFR-542

Terra International

P.O. Box 171376
Memphis, TN 38187
RIVERSIDE 529 I
RIVERSIDE 549
RIVERSIDE ROBIN 5
RIVERSIDE 490
RIVERSIDE 520

TABLE 3. 1997 COMBINED SUMMARY, ALL LOCATIONS (EXCEPT THE SCN TEST)

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT ^A HEIGHT (IN) 1997	MATURITY ^B DATE 1997	POD ^B HEIGHT (IN) 1997
	1997	96-97	95-97	1997	96-97	95-97			
EARLY (GROUP III)									
GOLDEN HARVEST H-1383	53.1	53.9		1.0	1.4		28	9/29	5
PIONEER VARIETY 9395	52.6	50.9		1.1	1.5		30	9/25	3
ASGROW A3904**	52.3			1.2			31	9/26	4
CROW'S 39007	51.8			1.1			28	9/27	5
CROW'S 38004	51.6			1.0			29	9/24	5
MACON	50.7	49.2	46.1	1.1	1.3	1.4	27	9/25	4
S. STATES SS-HT-381-STS	49.9	49.9	46.6	1.3	1.7	1.8	32	9/26	6
SCOTT SEEDS RT 346RR	49.8			1.0			29	9/23	4
CHARLESTON	49.8	47.0		1.2	1.6		21	9/22	4
NK BRAND S 38-L5	48.7			1.0			28	9/24	4
NK BRAND S 36-Q6	48.6			1.0			24	9/24	3
PROBST	47.4	45.9	44.0	1.4	1.7	1.7	28	9/20	4
S. STATES FFR-365	47.1	45.4	45.2	1.0	1.1	1.2	30	9/23	4
NK BRAND S 28-T3	45.5			1.0			24	9/17	3
NK BRAND S 39-11**	45.5	47.1	45.4	1.3	1.7	1.9	34	9/25	6
SOUTHERN CROSS SAUL**	44.4	43.7	43.2	1.0	1.4	1.4	30	9/25	5
S. STATES FFR-396	44.2	46.4	44.5	1.0	1.3	1.3	25	9/24	4
GROUP III AVERAGE	49.0	47.9	45.0	1.1	1.5	1.5	28	9/24	4
MID-SEASON (GROUP IV)									
LG SEEDS LG 6484	54.9	52.1		1.3	2.0		36	10/3	4
CALLAHAN 3484	53.9	51.8	49.5	1.7	2.0	2.1	38	10/6	6
GOLDEN HARVEST H-1485	53.7	50.8		1.3	1.8		34	10/3	5
PIONEER VARIETY 9482	53.3	53.0		1.3	1.6		36	10/4	5
DELTA PINE DP 3478	53.2	52.7	50.7	1.5	1.8	2.0	35	10/4	5
NK BRAND S 48-14	52.7			1.1			36	10/7	6
GATEWAY 470	52.6	50.7	49.7	1.5	1.9	1.9	35	10/4	6
SOUTHERN CROSS JOSHUA	52.3	50.3	48.6	1.4	1.8	2.0	35	10/4	5
MYCOGEN 470	52.0	51.6	49.3	1.4	2.0	2.1	35	10/3	5
LG SEEDS LG 6437C**	51.8			1.2			36	9/30	6
DEKALB CX470C*	51.3			1.3			36	10/11	6
NK BRAND 3474	51.3	50.5	48.8	1.4	1.7	1.9	33	10/6	5
KFP 403	51.1			1.2			28	9/28	4
STRESSLAND	50.7	50.6	49.0	1.4	1.7	1.9	35	9/27	6
S. STATES FFR-493	50.6	49.2	47.1	1.2	1.6	1.6	39	10/8	6
ASGROW A4922**	50.5	47.8	46.5	1.1	1.7	1.8	38	10/7	6
SOUTHERN CROSS EXODUS	50.4			1.4			32	10/5	5
NK BRAND S 46-44**	50.3	50.2	47.1	1.1	1.5	1.6	33	9/30	6
S. STATES FFR-439	50.3	51.3	48.7	1.3	1.5	1.6	39	10/1	6
PIONEER VARIETY 9452	50.3	49.8	45.7	1.1	1.5	1.6	25	10/1	4
CALHOUN	50.2	48.2	46.6	1.0	1.3	1.4	24	10/1	5
ASGROW A4341	50.2	50.7	49.1	1.1	1.3	1.4	29	10/1	4
CALLAHAN 7417	49.9			1.1			26	9/28	4
NK BRAND S 43-B5	49.9			1.0			29	10/2	5
CAVERNDALE CF 461	49.9	48.3	46.9	1.5	1.9	2.1	37	10/2	4
KS 4694	49.9	48.7	47.5	1.2	1.6	1.7	32	10/5	4
GOLDEN HARVEST H-1454**	49.8			1.2			35	9/30	5
CAVERNDALE CF 492	49.8	49.8	48.1	1.5	2.1	2.0	25	10/9	6
NK BRAND S 42-60	49.7	48.5	46.6	1.3	1.8	1.8	32	9/28	5
RIVERSIDE 490	49.6			2.4			42	10/15	9
CAVERNDALE CF 478**	49.5			1.5			35	10/8	7
DELTA KING 4762**	49.2			1.2			40	10/9	6
AGRATECH AT 460**	48.9	49.3		1.1	1.6		33	10/3	5
CALLAHAN 6435**	48.8			1.1			37	10/2	5
GATEWAY 493*	48.7			2.3			35	10/9	9
DEKALB CX450C*	48.6	47.8		1.5	1.8		36	10/1	6
PIONEER VARIETY 9492**	48.5			1.1			34	10/5	5

TABLE 3. 1997 COMBINED SUMMARY, ALL LOCATIONS (EXCEPT THE SCN TEST) *continued*

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT ^A HEIGHT (IN)	MATURITY ^B DATE	POD ^B HEIGHT (IN)
	1997	96-97	95-97	1997	96-97	95-97	1997	1997	1997
PHARAOH**	48.5	44.8	42.9	2.2	2.5	2.5	35	10/8	9
SOUTHERN CROSS DAVID**	48.5	49.5		1.1	1.5		34	10/2	4
OMAHA	48.5	45.7		1.2	1.6		29	9/27	5
MANOKIN*	48.1	49.4	48.0	3.0	2.9	2.8	34	10/14	8
PIONEER VARIETY 9481**	48.1	47.4	45.1	1.5	1.9	1.9	37	10/2	5
TN 4-94**	48.1	46.7		1.5	1.9		41	10/12	7
DEKALB CX478	47.7			1.3			36	10/1	6
LG SEEDS LG 6462C**	47.7	48.3	47.3	1.5	1.6	1.6	38	9/27	6
PIONEER VARIETY 94B41**	47.5			1.0			33	9/30	5
SCOTT SEEDS RT 446RR**	47.5			1.1			33	10/2	5
TN 4-86**	47.4	44.0	42.5	1.5	1.9	2.0	41	10/3	6
KFP 462**	47.4	48.2		1.3	1.7		39	10/3	6
ASGROW A4715**	47.3	48.4	46.5	1.1	1.5	1.5	34	10/5	6
DELISOY 4710**	47.2	45.8	44.2	2.0	2.4	2.3	38	10/8	6
DELTA KING 4860**	47.0	48.0		1.1	1.4		34	10/2	5
CALLAHAN 6440**	46.8	46.9		1.3	1.6		38	10/3	6
DEKALB CX434	46.7			1.0			32	9/30	5
DEKALB CX420C*	46.4			1.3			34	9/28	6
MYCOGEN 5430	46.4			1.0			28	9/29	5
PIONEER VARIETY 94B01**	46.4			1.0			33	9/27	5
S. STATES FFR-478*	46.3	47.5		1.1	1.5		34	10/6	5
AGRATECH AT 425*	44.4			1.0			34	9/25	4
KFP 35003JRR	39.3			1.2			33	9/25	5
GROUP IV AVERAGE	49.3	49.0	47.3	1.3	1.8	1.9	34	10/3	6
LATE (GROUP V)									
CLIFFORD	51.5	46.9	46.2	2.7	2.6	2.6	36	10/18	7
S. STATES SS-HT-551-ST5	50.6	48.9	47.6	2.0	2.1	2.1	35	10/18	8
HOLLADAY	50.5	50.0	49.1	2.0	2.3	2.1	31	10/13	8
RIVERSIDE 520	49.9			1.6			38	10/12	5
DELTA PINE DP 3519S**	49.7	48.7		2.4	2.4		36	10/18	7
ASGROW A5403**	49.2	48.0	46.7	2.0	2.2	2.2	36	10/19	8
GOLDEN HARVEST H-1500*	48.6	47.9		1.9	2.2		33	10/11	8
SOUTHERN CROSS SAMUEL**	47.9	48.0	46.8	2.0	2.2	2.2	31	10/18	6
ASGROW A5547**	47.6	48.6		2.9	2.8		34	10/20	8
HUTCHESON	47.6	47.8	47.8	2.3	2.4	2.3	34	10/17	7
S. STATES FFR-542N**	47.3	46.2	45.2	1.9	2.1	2.1	37	10/18	7
KS 5292*	47.0	46.3	44.8	1.9	2.1	2.1	34	10/17	7
TN 5-95**	45.7	46.0		2.7	2.7		38	10/17	9
DELTA KING 5263**	45.4			1.8			31	10/16	6
DELTA KING 5850**	45.0	45.9		3.6	3.3		37	10/19	8
RIVERSIDE 529 I	44.7			2.5			41	10/18	8
ACCOMAC*	44.7	44.4	44.3	3.1	2.9	2.7	40	10/21	9
WICOMICO*	44.5	45.2		2.6	2.7		37	10/13	7
RIVERSIDE 549	44.1	44.1		2.4	2.3		35	10/18	8
RIVERSIDE ROBIN 5	42.6	43.1		2.1	2.3		30	10/22	9
DELTA KING 5961RR**	38.4			2.8			36	10/25	7
DELTA KING 5664**	37.8			2.0			36	10/22	8
GROUP V AVERAGE	46.4	46.8	46.5	2.3	2.4	2.3	35	10/18	8
GRAND MEAN	48.6	48.3	46.7	1.5	1.9	1.9	33		6
LSD (0.10)	3.0	2.2	1.7	0.2	0.2	0.1	2		1

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

^A Data based on observations in Fayette Co., Caldwell Co., and Ballard Co.

^B Data based on observations in Fayette Co., and Caldwell Co.

TABLE 4. 1997 FAYETTE CO. VARIETY TEST

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN) 1997	MATURITY DATE 1997	POD HEIGHT (IN) 1997
	1997	96-97	95-97	1997	96-97	95-97			
EARLY (GROUP III)									
PIONEER VARIETY 9395	64.4	60.9		1.0	2.1		30	9/21	3
GOLDEN HARVEST H-1383	63.1	64.5		1.0	1.5		28	9/24	4
CROW'S 38004	62.8			1.3			31	9/19	5
CROW'S 39007	61.3			1.3			29	9/22	5
CHARLESTON	61.1	61.8		1.5	2.0		23	9/18	3
NK BRAND S 38-L5	60.1			1.0			30	9/21	4
MACON	59.8	58.3	56.3	1.0	1.3	1.4	26	9/21	3
NK BRAND S 36-Q6	59.4			1.3			26	9/20	2
SCOTT SEEDS RT 346RR	59.1			1.0			30	9/19	2
S. STATES FFR-396	58.3	59.5	56.3	1.0	1.3	1.3	29	9/21	4
NK BRAND S 28-T3	57.7			1.3			25	9/11	2
S. STATES FFR-365	57.3	57.3	54.2	1.0	1.3	1.3	27	9/21	3
S. STATES SS-HT-381-ST5	56.7	58.7	54.5	1.8	1.9	2.1	35	9/24	5
PROBST	56.1	61.2	56.4	1.8	2.4	2.3	28	9/18	3
ASGROW A3904**	54.3			1.3			33	9/23	3
NK BRAND S 39-11**	53.9	56.8	55.4	1.5	2.3	2.5	33	9/22	5
SOUTHERN CROSS SAUL**	52.6	52.6	52.4	1.0	1.5	1.5	31	9/22	5
GROUP III AVERAGE	58.7	59.2	55.1	1.2	1.8	1.8	29	9/20	4
MID-SEASON (GROUP IV)									
CALLAHAN 7417	66.8			1.3			29	9/25	4
GOLDEN HARVEST H-1454**	61.7			1.3			39	9/26	5
NK BRAND S 43-B5	61.0			1.3			32	9/28	4
KFP 403	61.0			1.3			28	9/24	4
MYCOGEN 470	60.8	60.0	53.8	1.8	2.5	2.8	39	9/29	4
STRESSLAND	60.4	62.2	56.6	2.0	2.6	2.8	38	9/24	6
DEKALB CX470C*	59.8			2.0			36	10/14	6
MYCOGEN 5430	59.4			1.3			29	9/28	5
CALLAHAN 3484	58.9	59.8	56.3	2.0	2.4	2.7	35	10/2	4
ASGROW A4341	58.5	60.1	58.0	1.5	1.6	1.8	30	9/25	3
CALHOUN	58.1	56.1	53.9	1.0	1.4	1.5	28	9/28	5
PIONEER VARIETY 94B41**	57.7			1.3			35	9/29	5
SOUTHERN CROSS DAVID**	57.7	59.2		1.0	1.5		30	9/29	3
S. STATES FFR-493	57.4	55.5	50.3	1.3	2.3	2.1	41	10/5	5
OMAHA	57.4	60.0		1.3	1.8		31	9/24	3
GOLDEN HARVEST H-1485	57.3	58.5		2.0	2.3		40	9/30	6
LG SEEDS LG 6484	57.2	57.5		1.8	2.6		36	9/30	3
LG SEEDS LG 6437C**	56.9			1.0			35	9/28	6
CAVERNDAL CF 461	56.8	56.9	52.1	2.0	2.5	2.8	39	9/30	3
DELTA KING 4762**	56.4			1.5			42	10/7	5
DEKALB CX420C*	56.3			2.0			37	9/26	6
NK BRAND S 46-44**	56.1	61.3	55.2	1.5	1.9	2.1	36	9/26	6
LG SEEDS LG 6462C**	56.1	55.1	53.3	1.8	1.9	1.9	42	9/23	6
DELTA KING 4860**	56.0	56.7		1.5	1.9		37	9/29	5
PIONEER VARIETY 9452	55.3	56.3	53.5	1.5	2.0	2.1	26	9/29	5
SCOTT SEEDS RT 446RR**	55.0			1.5			35	9/29	5
SOUTHERN CROSS EXODUS	54.9			1.5			31	9/30	4
NK BRAND S 48-14	54.7			1.3			36	10/1	5
CALLAHAN 6435**	54.6			1.0			36	9/26	4
KS 4694	54.4	58.0	56.2	2.0	2.3	2.1	33	10/3	4
ASGROW A4715**	54.3	55.1	52.9	1.5	2.0	2.0	35	9/30	6
NK BRAND 3474	54.3	59.1	54.7	1.8	2.1	2.4	32	9/30	4
DEKALB CX450C*	54.1	54.3		2.0	2.0	2.3	36	9/26	6
S. STATES FFR-439	54.1	57.9	54.1	1.8	1.9	2.1	40	9/27	6
SOUTHERN CROSS JOSHUA	54.1	59.7	53.7	1.8	2.1	2.3	36	10/1	5
DEKALB CX478	54.1			2.0			39	9/28	6

TABLE 4. 1997 FAYETTE CO. VARIETY TEST *continued*

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN) 1997	MATURITY DATE 1997	POD HEIGHT (IN) 1997
	1997	96-97	95-97	1997	96-97	95-97			
CAVERNDALE CF 492	53.6	54.1	50.9	2.0	3.0	2.8	27	10/6	4
AGRATECH AT 425*	53.5			1.0			35	9/21	3
PIONEER VARIETY 9492**	53.0			1.8			36	10/4	5
PIONEER VARIETY 9482	52.9	59.4		1.8	2.3		37	9/29	4
TN 4-94**	52.7	54.6		2.5	2.8		41	10/6	6
NK BRAND S 42-60	52.3	54.8	53.5	2.3	2.6	2.4	33	9/25	5
DELTA PINE DP 3478	51.9	58.4	54.6	1.8	2.4	2.5	34	9/29	5
PIONEER VARIETY 9481**	51.9	56.0	51.6	2.0	2.5	2.8	40	9/29	4
TN 4-86**	51.7	51.0	47.7	2.0	2.4	2.6	42	9/29	5
ASGROW A4922**	51.2	53.1	49.6	1.5	2.3	2.3	40	10/4	6
AGRATECH AT 460**	50.4	56.0		1.5	2.0		32	9/29	5
KFP 35003JRR	50.3			1.5			36	9/21	5
S. STATES FFR-478*	50.3	53.6		1.5	1.8		34	10/3	5
GATEWAY 470	50.0	55.1	51.0	1.8	2.3	2.3	37	9/30	5
PIONEER VARIETY 94B01**	49.9			1.0			31	9/25	3
CAVERNDALE CF 478**	49.6			1.8			35	10/3	6
PHARAOH**	49.4	48.4	45.9	2.8	3.1	3.4	37	10/6	8
KFP 462**	49.1	51.3		1.3	2.4		40	9/29	5
CALLAHAN 6440**	48.9	52.4		2.0	2.3		40	9/29	4
MANOKIN*	48.8	48.4	45.3	3.8	3.9	3.8	39	10/9	5
DEKALB CX434	48.0			1.0			30	9/26	5
RIVERSIDE 490	47.6			2.5			43	10/8	8
DELSOY 4710**	47.3	48.5	47.0	2.0	2.8	2.8	39	10/1	7
GATEWAY 493*	45.9			2.5			38	10/6	9
GROUP IV AVERAGE	54.5	56.1	52.5	1.7	2.3	2.4	36	9/30	5
LATE (GROUP V)									
CLIFFORD	52.1	48.8	46.6	3.5	3.6	3.3	39	10/15	7
SOUTHERN CROSS SAMUEL**	51.2	50.2	46.9	2.5	2.9	2.8	33	10/13	5
DELTA KING 5263**	49.7			3.0			34	10/15	5
KS 5292*	49.7	52.8	49.8	2.5	3.0	3.2	34	10/11	5
RIVERSIDE 520	48.6			1.8			43	10/8	5
HUTCHESON	47.5	45.3	45.1	3.5	3.4	3.2	38	10/17	7
ASGROW A5403**	47.3	45.7	43.4	2.8	3.0	3.1	38	10/15	8
S. STATES FFR-542N**	47.3	48.5	46.3	2.8	2.9	2.8	40	10/14	7
GOLDEN HARVEST H-1500*	47.3	49.3		2.5	2.9		34	10/8	7
DELTA PINE DP 3519S**	47.1	44.4		3.0	3.3		37	10/14	5
HOLLADAY	45.5	48.8	46.6	3.0	3.4	3.0	32	10/7	6
RIVERSIDE ROBIN 5	43.5	41.2		3.0	2.9		32	10/20	9
S. STATES SS-HT-551-STS	43.1	41.0	39.8	2.5	2.8	2.5	35	10/14	6
ASGROW A5547**	43.0	44.5		3.3	3.8		35	10/16	7
ACCOMAC*	42.2	42.2	41.1	3.8	3.3	3.2	44	10/17	7
WICOMICO*	40.9	43.9		3.8	3.6		41	10/10	5
DELTA KING 5850**	40.6	43.3		4.3	4.0		38	10/16	7
DELTA KING 5664**	39.9			3.3			33	10/19	7
TN 5-95**	39.8	44.8		3.3	3.1		42	10/13	8
RIVERSIDE 549	39.5	41.5		3.3	3.0		38	10/17	8
RIVERSIDE 529 I	39.4			3.0			43	10/14	8
DELTA KING 5961RR**	36.9			3.8			37	10/24	5
GROUP V AVERAGE	44.6	45.7	45.1	3.1	3.2	3.0	37	10/14	7
GRAND MEAN	53.0	53.8	51.3	1.9	2.4	2.5	35		5
LSD (0.10)	5.9	3.2	2.8	0.4	0.4	0.3	4		2

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

TABLE 5. 1997 BALLARD CO. VARIETY TEST

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN)
	1997	96-97	95-97	1997	96-97	95-97	1997
EARLY (GROUP III)							
MACON	56.7	46.5	44.8	1.5	1.3	1.2	24
CROW'S 39007	53.6			1.0			24
GOLDEN HARVEST H-1383	53.6	45.6		1.0	1.0		25
CROW'S 38004	53.0			1.0			23
ASGROW A3904**	52.4			1.0			30
CHARLESTON	52.1	39.1		1.0	1.0		19
SOUTHERN CROSS SAUL**	52.0	44.6	40.6	1.0	1.0	1.0	28
S. STATES FFR-365	51.6	41.2	44.1	1.0	1.0	1.0	28
NK BRAND S 39-11**	50.2	42.6	43.6	1.5	1.3	1.2	36
NK BRAND S 36-Q6	49.9			1.0			22
SCOTT SEEDS RT 346RR	49.5			1.0			26
PIONEER VARIETY 9395	49.4	42.9		1.5	1.3		28
PROBST	48.4	37.6	38.0	2.5	1.8	1.5	26
S. STATES SS-HT-381-STS	46.9	39.3	40.5	1.5	1.3	1.2	29
NK BRAND S 38-L5	46.6			1.0			27
NK BRAND S 28-T3	43.8			1.0			21
S. STATES FFR-396	43.0	35.6	35.1	1.0	1.0	1.0	22
GROUP III AVERAGE	50.2	41.5	41.0	1.2	1.2	1.2	26
MID-SEASON (GROUP IV)							
NK BRAND 3474	63.1	49.3	49.9	1.0	1.0	1.0	35
CALLAHAN 3484	61.8	48.4	49.4	2.0	1.5	1.3	34
DELTA KING 4762**	61.6			1.0			36
PIONEER VARIETY 9482	61.2	47.7		1.0	1.0		34
NK BRAND S 46-44**	58.4	45.7	44.7	1.0	1.0	1.0	30
DEKALB CX478	58.1			1.0			37
SOUTHERN CROSS DAVID**	57.1	47.8		1.5	1.3		37
LG SEEDS LG 6437C**	56.9			1.5			34
DELTA PINE DP 3478	56.5	45.3	47.0	1.0	1.0	1.0	33
S. STATES FFR-439	56.2	46.3	45.4	1.0	1.0	1.0	38
TN 4-94**	55.7	42.1		1.5	1.3		38
CALLAHAN 6435**	55.6			1.5			36
SOUTHERN CROSS EXODUS	55.5			1.5			30
DEKALB CX434	55.1			1.0			33
SOUTHERN CROSS JOSHUA	55.0	45.1	46.2	1.0	1.0	1.0	31
LG SEEDS LG 6484	55.0	47.2		1.0	1.0		31
SCOTT SEEDS RT 446RR**	54.9			1.0			32
DEKALB CX470C*	54.7			1.5			33
ASGROW A4341	54.7	45.5	44.5	1.0	1.0	1.0	28
GOLDEN HARVEST H-1454**	54.4			1.0			34
NK BRAND S 48-14	54.2			1.5			35
PIONEER VARIETY 94B41**	54.1			1.0			31
CAVERNDALE CF 461	53.8	45.5	47.8	1.0	1.0	1.0	35
CAVERNDALE CF 492	53.6	43.3	43.9	1.0	1.0	1.0	19
ASGROW A4715**	53.5	46.4	46.1	1.0	1.0	1.0	30
PIONEER VARIETY 94B01**	53.5			1.0			33
TN 4-86**	53.3	45.1	43.7	1.5	1.3	1.2	41
KS 4694	53.2	43.6	44.9	1.0	1.0	1.0	31
CAVERNDALE CF 478**	53.1			2.5			31
S. STATES FFR-493	53.0	42.7	44.2	1.0	1.0	1.0	35
MYCOGEN 470	52.8	44.0	46.5	1.5	1.3	1.2	33
GATEWAY 470	52.5	43.3	49.8	1.0	1.0	1.0	34
GOLDEN HARVEST H-1485	52.5	43.5		1.0	1.0		27
DEKALB CX450C*	52.4	38.4		1.5	1.3		34
PIONEER VARIETY 9452	52.3	43.5	38.7	1.0	1.0	1.0	23
CALHOUN	52.2	42.0	42.7	1.0	1.0	1.0	20
CALLAHAN 6440**	52.0	42.6		1.5	1.3		35

TABLE 5. 1997 BALLARD CO. VARIETY TEST *continued*

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN)
	1997	96-97	95-97	1997	96-97	95-97	1997
KFP 403	51.7			1.5			25
MANOKIN*	51.7	45.5	45.8	3.0	2.0	1.7	27
OMAHA	51.1	40.7		1.5	1.3		25
AGRATECH AT 460**	51.0	43.2		1.0	1.0		32
PIONEER VARIETY 9481**	51.0	42.2	43.5	1.0	1.0	1.0	36
NK BRAND S 42-60	50.5	43.3	44.2	1.5	1.3	1.2	29
ASGROW A4922**	50.0	41.0	41.0	1.0	1.0	1.0	37
MYCOGEN 5430	49.6			1.0			25
PIONEER VARIETY 9492**	49.6			1.0			34
LG SEEDS LG 6462C**	49.5	44.3	45.0	1.0	1.0	1.0	35
S. STATES FFR-478*	48.4	38.6		1.0	1.0		36
PHARAOH**	48.0	36.0	38.0	3.0	2.0	1.7	29
KFP 35003JRR	47.4			1.5			33
DELSOY 4710**	46.7	42.2	43.7	2.0	1.5	1.3	35
GATEWAY 493*	46.5			2.5			29
RIVERSIDE 490	46.3			4.0			39
AGRATECH AT 425*	46.3			1.0			34
NK BRAND S 43-B5	46.2			1.0			25
KFP 462**	45.5	42.9		1.5	1.3		37
DEKALB CX420C*	44.0			1.5			33
STRESSLAND	43.5	38.8	42.9	1.5	1.3	1.2	34
DELTA KING 4860**	40.4	40.8		1.0	1.0		32
CALLAHAN 7417	39.3			1.0			23
GROUP IV AVERAGE	52.3	43.6	44.8	1.4	1.2	1.1	32
LATE (GROUP V)							
S. STATES SS-HT-551-ST5	59.9	47.4	49.4	1.5	1.3	1.2	32
KS 5292*	57.9	44.0	45.2	2.0	1.5	1.3	29
HUTCHESON	55.2	50.3	50.1	3.0	2.0	1.7	29
GOLDEN HARVEST H-1500*	53.3	41.6		1.5	1.3		28
SOUTHERN CROSS SAMUEL**	52.9	46.8	46.9	2.5	1.8	1.5	27
CLIFFORD	52.8	45.9	44.5	3.0	2.0	1.7	33
WICOMICO*	50.6	43.0		2.5	1.8		31
DELTA PINE DP 3519S**	49.9	42.0		2.0	1.5		30
RIVERSIDE 520	49.9			2.0			32
TN 5-95**	49.1	41.6		2.0	1.5		29
S. STATES FFR-542N**	48.2	40.5	42.4	1.5	1.3	1.2	32
DELTA KING 5850**	47.9	45.2		4.0	2.5		33
ASGROW A5403**	47.4	43.6	45.1	2.0	1.5	1.3	34
HOLLADAY	45.8	44.3	46.2	1.5	1.3	1.2	25
ACCOMAC*	45.4	40.8	45.1	3.5	2.3	1.8	36
ASGROW A5547**	44.0	43.8		3.5	2.3		29
RIVERSIDE 529 I	43.7			3.5			39
RIVERSIDE ROBIN 5	42.1	39.0		2.0	1.5		25
DELTA KING 5664**	40.3			1.0			35
DELTA KING 5961RR**	39.6			3.0			33
RIVERSIDE 549	38.4	38.2		2.0	1.5		33
DELTA KING 5263**	36.4			1.0			26
GROUP V AVERAGE	47.8	43.4	46.1	2.3	1.7	1.4	31
GRAND MEAN	50.9	43.2	44.4	1.5	1.3	1.2	31
LSD (0.10)	8.1	4.6	4.6	0.7	0.3	0.2	4

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

TABLE 6. 1997 DAVIESS CO. VARIETY TEST^A

VARIETY / BRAND	YIELD (BU/AC)			LODGING		
	1997	96-97	95-97	1997	96-97	95-97
EARLY (GROUP III)						
ASGROW A3904**	55.4			1.3		
S. STATES SS-HT-381-STS	53.9	44.0	39.7	1.0	1.0	1.3
PIONEER VARIETY 9395	53.2	43.4		1.0	1.0	
CROW'S 39007	51.8			1.0		
NK BRAND S 28-T3	50.9			1.0		
SCOTT SEEDS RT 346RR	50.2			1.0		
CHARLESTON	49.5	38.2		1.0	1.0	
CROW'S 38004	48.8			1.0		
NK BRAND S 36-Q6	48.2			1.0		
S. STATES FFR-396	48.0	40.5	36.7	1.0	1.0	1.2
NK BRAND S 38-L5	47.3			1.0		
MACON	45.4	35.1	27.5	1.0	1.0	1.3
SOUTHERN CROSS SAUL**	45.3	38.0	34.9	1.0	1.0	1.3
GOLDEN HARVEST H-1383	42.7	35.5		1.0	1.0	
S. STATES FFR-365	42.4	30.9	29.5	1.0	1.0	1.1
NK BRAND S 39-11**	42.0	41.0	36.5	1.0	1.0	1.7
PROBST	41.1	33.1	29.7	1.0	1.0	1.3
GROUP III AVERAGE	48.0	38.0	33.5	1.0	1.0	1.3
MID-SEASON (GROUP IV)						
GATEWAY 470	65.7	51.1	47.1	2.0	1.5	1.7
GOLDEN HARVEST H-1485	62.1	46.2		1.3	1.1	
CALLAHAN 7417	59.8			1.0		
LG SEEDS LG 6484	59.7	45.5		1.0	1.0	
MYCOGEN 470	59.3	47.2	43.4	1.8	1.4	1.6
DELTA PINE DP 3478	57.9	48.7	45.9	2.0	1.5	2.0
PIONEER VARIETY 9482	57.1	45.6		1.8	1.4	
SOUTHERN CROSS JOSHUA	57.0	43.3	42.4	1.5	1.3	1.7
NK BRAND 3474	56.4	43.5	43.0	1.5	1.3	1.8
CAVERNDAL CF 492	56.4	43.4	42.6	1.0	1.0	1.3
GATEWAY 493*	55.5			2.5		
NK BRAND S 42-60	55.5	42.4	38.8	1.0	1.0	1.3
PHARAOH**	55.0	44.6	40.4	2.5	2.5	2.5
MANOKIN*	54.7	44.6	43.6	2.8	2.4	2.4
KFP 403	54.3			1.0		
CALHOUN	54.2	42.8	37.6	1.0	1.1	1.3
DEKALB CX420C*	53.7			1.0		
KS 4694	53.4	38.9	39.2	1.0	1.0	1.3
AGRATECH AT 460**	53.3	48.4		1.0	1.1	
SOUTHERN CROSS EXODUS	53.0			1.5		
ASGROW A4922**	53.0	43.6	42.1	1.0	1.0	1.5
DELLOY 4710**	52.9	43.2	41.1	2.0	1.5	1.6
RIVERSIDE 490	52.8			1.3		
NK BRAND S 46-44**	52.8	46.8	41.0	1.0	1.0	1.2
STRESSLAND	52.8	43.5	38.4	1.0	1.0	1.1
PIONEER VARIETY 9481**	52.5	39.5	37.2	1.5	1.3	1.5
LG SEEDS LG 6437C**	52.4			1.3		
KFP 462**	52.1	45.1		1.3	1.1	
GOLDEN HARVEST H-1454**	51.5			1.3		
NK BRAND S 48-14	50.5			1.0		
CALLAHAN 6435**	50.3			1.0		
DELTA KING 4860**	50.2	44.0		1.0	1.0	
NK BRAND S 43-B5	49.7			1.0		
LG SEEDS LG 6462C**	49.5	42.0	40.5	1.8	1.4	1.5
DELTA KING 4762**	49.0			1.0		
CALLAHAN 3484	48.5	39.7	39.4	1.0	1.0	1.5
DEKALB CX450C*	47.9	42.1		1.0	1.0	

TABLE 6. 1997 DAVIESS CO. VARIETY TEST^A continued

VARIETY / BRAND	YIELD (BU/AC)			LODGING		
	1997	96-97	95-97	1997	96-97	95-97
MYCOGEN 5430	47.7			1.0		
CAVERNDALE CF 461	47.6	37.0	36.7	1.8	1.4	1.6
OMAHA	47.4	33.5		1.0	1.0	
AGRATECH AT 425*	47.3			1.3		
DEKALB CX470C*	46.8			1.0		
TN 4-94**	46.6	43.1		1.0	1.0	
PIONEER VARIETY 9492**	46.5			1.0		
S. STATES FFR-478*	45.9	43.1		1.0	1.0	
CAVERNDALE CF 478**	45.7			1.0		
PIONEER VARIETY 9452	45.5	35.4	33.2	1.0	1.0	1.3
S. STATES FFR-439	45.3	40.0	39.3	1.3	1.1	1.4
ASGROW A4341	44.7	35.6	34.3	1.0	1.0	1.2
ASGROW A4715**	44.2	42.8	42.8	1.0	1.0	1.3
TN 4-86**	43.9	35.3	35.2	1.5	1.3	1.7
SOUTHERN CROSS DAVID**	43.2	41.9		1.0	1.0	
PIONEER VARIETY 94B41**	41.1			1.0		
CALLAHAN 6440**	41.0	36.6		1.0	1.0	
S. STATES FFR-493	40.8	36.3	35.6	1.0	1.0	1.3
DEKALB CX434	39.3			1.0		
SCOTT SEEDS RT 446RR**	38.7			1.0		
DEKALB CX478	37.4			1.0		
PIONEER VARIETY 94B01**	33.6			1.0		
KFP 35003JRR	27.4			1.0		
GROUP IV AVERAGE	49.8	42.3	40.0	1.3	1.2	1.5
LATE (GROUP V)						
ASGROW A5403**	63.2	53.5	50.1	1.3	1.8	1.8
CLIFFORD	59.7	40.9	39.6	3.0	2.0	2.3
S. STATES SS-HT-551-ST5	59.3	48.7	45.5	2.0	1.6	1.9
HOLLADAY	59.0	46.2	44.1	1.3	1.1	1.3
ASGROW A5547**	58.5	50.3		1.5	1.8	
RIVERSIDE 549	58.0	44.3		2.8	1.9	
DELTA KING 5263**	57.5			1.3		
DELTA PINE DP 3519S**	57.3	45.7		2.5	1.9	
RIVERSIDE 520	56.0			1.3		
DELTA KING 5850**	55.9	45.7		4.0	3.4	
TN 5-95**	53.5	47.2		2.3	2.6	
SOUTHERN CROSS SAMUEL**	52.1	49.0	44.4	2.0	1.8	1.8
S. STATES FFR-542N**	51.4	41.2	40.6	1.3	1.1	1.4
RIVERSIDE ROBIN 5	49.3	44.2		2.0	1.6	
KS 5292*	49.1	42.6	39.0	1.0	1.0	1.3
GOLDEN HARVEST H-1500*	49.0	45.2		1.5	1.5	
ACCOMAC*	46.2	41.4	40.9	1.5	2.1	2.4
RIVERSIDE 529 I	44.4			2.0		
WICOMICO*	42.3	42.9		2.5	2.8	
HUTCHESON	32.2	34.1	36.5	2.0	1.6	1.8
DELTA KING 5961RR**	31.9			2.3		
DELTA KING 5664**	31.3			2.3		
GROUP V AVERAGE	50.8	44.9	42.3	2.0	1.9	1.8
GRAND MEAN	49.7	42.3	39.4	1.4	1.3	1.5
LSD (0.10)	7.8	5.5	4.4	0.5	0.4	0.3

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

^A 1995 and 1996 data are from McLean Co., and the 1997 data are from Daviess Co..

TABLE 7. 1997 CALDWELL CO. VARIETY TEST

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN) 1997	MATURITY DATE 1997	POD HEIGHT (IN) 1997
	1997	96-97	95-97	1997	96-97	95-97			
EARLY (GROUP III)									
CROW'S 38004	60.7			1.0			33	9/29	5
GOLDEN HARVEST H-1383	59.7	63.0		1.0	1.0		32	10/4	5
PIONEER VARIETY 9395	58.3	55.6		1.0	1.0		33	9/29	4
CROW'S 39007	57.3			1.5			30	10/3	5
MACON	56.3	53.2	52.4	1.0	1.0	1.0	30	9/29	6
S. STATES FFR-365	55.9	51.5	50.2	1.0	1.0	1.0	34	9/26	5
PROBST	53.5	49.6	49.5	1.0	1.0	1.0	29	9/22	6
S. STATES SS-HT-381-ST5	53.2	53.2	48.5	1.0	1.0	1.0	33	9/29	6
NK BRAND S 38-L5	53.1			1.0			28	9/28	4
ASGROW A3904**	51.6			1.0			31	9/29	5
SCOTT SEEDS RT 346RR	49.7			1.0			30	9/27	5
NK BRAND S 36-Q6	46.6			1.0			26	9/28	5
SOUTHERN CROSS SAUL**	46.1	43.8	45.6	1.0	1.0	1.0	30	9/27	5
CHARLESTON	45.2	42.5		1.0	1.0		21	9/26	5
NK BRAND S 39-11**	44.0	46.8	46.2	1.0	1.0	1.0	32	9/29	6
NK BRAND S 28-T3	42.3			1.0			25	9/23	4
S. STATES FFR-396	42.0	46.0	45.5	1.0	1.0	1.0	26	9/27	5
GROUP III AVERAGE	51.5	50.5	48.3	1.0	1.0	1.0	30	9/28	5
MID-SEASON (GROUP IV)									
CALLAHAN 3484	67.1	57.0	52.9	2.0	1.8	1.5	45	10/11	9
NK BRAND S 48-14	66.0			1.0			37	10/14	7
S. STATES FFR-493	64.3	61.9	57.0	1.0	1.0	1.0	41	10/11	7
PIONEER VARIETY 9452	64.0	61.0	52.7	1.0	1.0	1.0	27	10/3	4
DELTA PINE DP 3478	61.9	59.2	54.8	1.0	1.0	1.0	40	10/8	6
CAVERNDAL CF 478**	60.7			1.0			40	10/13	8
LG SEEDS LG 6484	60.7	57.1		1.5	1.5		41	10/7	6
PIONEER VARIETY 9482	60.3	56.3		1.0	1.0		37	10/8	6
RIVERSIDE 490	60.0			3.0			43	10/22	10
ASGROW A4341	59.9	55.9	54.0	1.0	1.0	1.0	29	10/7	5
S. STATES FFR-439	59.8	56.6	53.8	1.0	1.0	1.0	40	10/5	6
DEKALB CX470C*	58.6			1.0			39	10/8	6
NK BRAND S 43-B5	58.6			1.0			32	10/7	6
ASGROW A4922**	58.5	53.0	50.3	1.0	1.0	1.0	38	10/11	6
AGRATECH AT 460**	58.2	55.9		1.0	1.3		34	10/7	6
DEKALB CX434	58.2			1.0			35	10/3	6
GATEWAY 470	57.6	51.4	49.3	1.0	1.0	1.0	36	10/8	7
LG SEEDS LG 6437C**	57.4			1.0			39	10/2	7
GOLDEN HARVEST H-1485	56.7	53.7		1.0	1.0		36	10/7	5
DEKALB CX450C*	56.3	52.4		1.5	1.3		37	10/5	6
SOUTHERN CROSS JOSHUA	55.8	54.0	50.2	1.0	1.0	1.0	37	10/7	6
DELTA KING 4762**	55.4			1.0			41	10/11	8
PIONEER VARIETY 94B41**	54.9			1.0			34	10/2	5
CALLAHAN 6440**	54.4	48.4		1.0	1.0		40	10/6	9
PIONEER VARIETY 94B01**	54.1			1.0			37	9/30	7
KFP 462**	54.1	52.1		1.5	1.3		40	10/7	7
SOUTHERN CROSS EXODUS	53.9			1.0			35	10/10	5
OMAHA	53.8	42.9		1.0	1.0		30	9/29	7
PIONEER VARIETY 9492**	53.7			1.0			33	10/7	5
MYCOGEN 5430	53.4			1.0			29	10/1	5
CAVERNDAL CF 492	52.9	54.7	51.7	2.0	1.5	1.3	29	10/12	8
CAVERNDAL CF 461	52.6	50.5	48.6	1.0	1.3	1.2	37	10/5	5
NK BRAND S 46-44**	52.5	53.3	51.7	1.0	1.0	1.0	35	10/4	6
MYCOGEN 470	52.3	55.4	51.9	1.0	1.5	1.3	34	10/8	6
CALLAHAN 7417	51.6			1.0			26	10/1	4
CALLAHAN 6435**	51.5			1.0			39	10/7	6

TABLE 7. 1997 CALDWELL CO. VARIETY TEST *continued*

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN)	MATURITY DATE	POD HEIGHT (IN)
	1997	96-97	95-97	1997	96-97	95-97	1997	1997	1997
NK BRAND S 42-60	51.5	48.9	48.1	1.0	1.0	1.0	33	10/2	6
NK BRAND 3474	51.3	54.0	51.5	1.5	1.3	1.2	34	10/12	6
KFP 403	51.0			1.0			31	10/2	5
STRESSLAND	51.0	51.8	51.8	1.0	1.0	1.0	33	9/30	6
DELTA KING 4860**	50.9	49.8		1.0	1.0		34	10/6	5
DEKALB CX478	50.7			1.0			32	10/5	6
DELSOY 4710**	50.0	45.0	42.8	2.5	2.3	1.8	42	10/14	6
ASGROW A4715**	49.5	48.1	46.1	1.0	1.0	1.0	37	10/11	6
MANOKIN*	49.4	56.5	54.3	3.5	2.5	2.0	36	10/20	10
CALHOUN	49.3	50.8	49.2	1.0	1.0	1.0	26	10/4	6
PHARAOH**	49.2	52.2	47.5	1.5	1.3	1.2	39	10/10	10
TN 4-86**	49.0	43.0	42.5	1.0	1.3	1.2	41	10/7	6
TN 4-94**	48.6	46.9		1.5	1.5		45	10/19	9
KS 4694	48.5	45.7	43.9	1.0	1.0	1.0	32	10/7	4
GOLDEN HARVEST H-1454**	48.1			1.0			33	10/3	5
SCOTT SEEDS RT 446RR**	47.7			1.0			33	10/4	6
GATEWAY 493*	47.0			2.5			39	10/12	10
AGRATECH AT 425*	46.5			1.0			33	9/29	5
PIONEER VARIETY 9481**	46.0	48.7	45.4	1.0	1.0	1.0	36	10/5	7
SOUTHERN CROSS DAVID**	45.5	47.4		1.0	1.0		34	10/6	6
DEKALB CX420C*	45.0			1.0			33	9/29	6
LG SEEDS LG 6462C**	43.8	48.1	46.2	1.0	1.0	1.0	37	10/2	6
S. STATES FFR-478*	42.8	44.2		1.0	1.0		31	10/8	6
KFP 35003JRR	40.2			1.0			31	9/29	6
GROUP IV AVERAGE	53.6	52.0	49.9	1.2	1.2	1.1	36	10/7	6
LATE (GROUP V)									
HOLLADAY	59.5	55.2	55.6	2.5	1.8	1.5	38	10/19	9
ASGROW A5547**	59.2	55.5		3.5	2.3		39	10/23	9
RIVERSIDE 520	58.5			2.0			41	10/16	6
HUTCHESON	58.1	56.6	56.7	1.5	1.5	1.3	36	10/16	6
CLIFFORD	54.8	50.0	51.0	1.5	1.3	1.2	36	10/21	7
DELTA PINE DP 3519S**	54.5	58.4		2.0	1.5		41	10/21	9
S. STATES FFR-542N**	54.5	53.8	50.6	2.0	1.5	1.3	39	10/22	7
RIVERSIDE 529 I	53.0			2.0			42	10/22	9
TN 5-95**	53.0	51.9		3.0	2.0		42	10/22	10
S. STATES SS-HT-551-ST5	50.1	53.8	52.6	2.0	1.5	1.3	39	10/23	10
ACCOMAC*	49.6	48.9	48.2	3.5	2.3	1.8	41	10/25	11
RIVERSIDE ROBIN 5	49.1	51.1		1.0	1.3		34	10/24	9
SOUTHERN CROSS SAMUEL**	48.6	46.5	47.5	1.0	1.0	1.0	34	10/22	7
ASGROW A5403**	48.3	49.2	49.3	1.0	1.0	1.0	38	10/23	9
GOLDEN HARVEST H-1500*	47.5	45.3		1.5	1.3		38	10/15	10
RIVERSIDE 549	47.2	49.9		1.0	1.3		35	10/19	8
DELTA KING 5263**	47.1			1.0			34	10/17	8
KS 5292*	46.9	48.7	48.1	2.5	1.8	1.5	38	10/23	9
DELTA KING 5961RR**	46.3			3.0			39	10/25	10
WICOMICO*	46.3	43.7		2.5	1.8		39	10/16	8
DELTA KING 5850**	44.9	48.6		2.5	2.3		42	10/22	9
DELTA KING 5664**	41.4			1.0			40	10/25	9
GROUP V AVERAGE	50.8	51.0	51.1	2.0	1.6	1.3	38	10/21	9
GRAND MEAN	52.6	51.5	49.9	1.3	1.3	1.2	35		6
LSD (0.10)	10.0	7.0	4.4	0.8	0.5	0.4	3		1

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

TABLE 8. 1997 HARDIN CO. VARIETY TEST

VARIETY / BRAND	YIELD (BU/AC)			LODGING		
	1997	96-97	95-97	1997	96-97	95-97
EARLY (GROUP III)						
ASGROW A3904**	51.6			1.0		
GOLDEN HARVEST H-1383	48.8	55.7		1.0	1.9	
NK BRAND S 39-11**	47.5	50.1	48.2	1.0	2.0	2.2
PIONEER VARIETY 9395	46.5	50.4		1.0	2.0	
S. STATES SS-HT-381-STC	46.2	53.1	49.7	1.0	2.1	2.4
CHARLESTON	45.8	52.5		1.0	2.8	
SCOTT SEEDS RT 346RR	45.6			1.0		
MACON	44.7	51.8	50.1	1.0	1.8	1.8
NK BRAND S 36-Q6	44.4			1.0		
CROW'S 39007	42.5			1.0		
CROW'S 38004	42.1			1.0		
NK BRAND S 38-L5	42.0			1.0		
PROBST	41.1	46.0	45.5	1.0	1.9	1.8
S. STATES FFR-396	38.8	47.2	47.7	1.0	1.5	1.5
NK BRAND S 28-T3	38.3			1.0		
SOUTHERN CROSS SAUL**	36.5	37.8	39.2	1.0	1.9	1.8
S. STATES FFR-365	33.4	43.7	45.9	1.0	1.4	1.4
GROUP III AVERAGE	43.3	48.8	46.6	1.0	1.9	1.8
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-1485	51.1	53.7		1.0	2.4	
PIONEER VARIETY 9482	50.8	58.6		1.0	2.0	
GATEWAY 493*	50.1			1.0		
PHARAOH**	50.0	46.6	43.7	1.0	2.6	3.3
LG SEEDS LG 6484	49.6	53.1		1.0	2.9	
PIONEER VARIETY 9481**	49.0	53.0	51.1	1.3	2.4	2.5
MANOKIN*	48.5	53.1	51.9	2.0	3.0	3.4
NK BRAND S 42-60	48.1	50.9	47.4	1.0	2.3	2.5
DEKALB CX470C*	47.8			1.0		
TN 4-86**	47.2	45.2	45.1	1.0	2.0	2.3
LG SEEDS LG 6437C**	47.0			1.0		
STRESSLAND	47.0	51.2	51.8	1.0	1.9	2.6
SOUTHERN CROSS EXODUS	46.7			1.3		
OMAHA	46.4	49.9		1.0	1.6	
S. STATES FFR-493	46.0	49.5	47.5	1.0	1.9	2.1
KFP 403	45.8			1.0		
LG SEEDS LG 6462C**	45.8	49.6	50.1	1.5	2.4	2.3
MYCOGEN 470	45.7	49.5	48.0	1.0	2.3	2.4
SCOTT SEEDS RT 446RR**	45.4			1.0		
RIVERSIDE 490	45.3			1.3		
KS 4694	45.2	53.6	50.7	1.0	2.3	2.3
DELTA PINE DP 3478	45.1	50.7	51.6	1.0	2.0	2.5
CALLAHAN 6440**	45.0	51.1		1.0	1.9	
DELTA KING 4860**	44.4	46.0		1.0	2.1	
TN 4-94**	44.2	48.1		1.0	2.0	
KFP 462**	44.0	49.0		1.0	2.0	
S. STATES FFR-478*	43.9	51.2		1.0	2.3	
SOUTHERN CROSS JOSHUA	43.8	47.6	46.8	1.0	2.5	2.9
DEKALB CX450C*	43.6	49.9		1.0	2.0	
CALHOUN	43.1	48.4	47.4	1.0	1.4	1.8
CAVERNDALE CF 492	43.1	53.4	50.9	1.0	2.8	2.7
DEKALB CX478	43.0			1.0		
GOLDEN HARVEST H-1454**	42.8			1.0		
CAVERNDALE CF 461	42.8	45.4	46.3	1.3	2.4	2.9
PIONEER VARIETY 9452	42.8	50.7	49.0	1.0	2.1	2.2
NK BRAND S 43-B5	42.6			1.0		
GATEWAY 470	42.6	47.4	47.8	1.0	2.3	2.5

TABLE 8. 1997 HARDIN CO. VARIETY TEST *continued*

VARIETY / BRAND	YIELD (BU/AC)			LOGGING		
	1997	96-97	95-97	1997	96-97	95-97
DELSOY 4710**	42.2	48.8	45.6	1.0	2.9	2.9
NK BRAND S 46-44**	42.0	47.7	44.9	1.0	2.1	2.2
NK BRAND S 48-14	41.9			1.0		
CALLAHAN 3484	41.9	52.1	48.7	1.0	2.4	2.6
S. STATES FFR-439	41.7	52.8	48.6	1.0	1.6	1.6
DEKALB CX420C*	41.6			1.0		
PIONEER VARIETY 94B41**	41.5			1.0		
AGRATECH AT 460**	41.3	47.8		1.0	2.1	
NK BRAND 3474	41.2	49.0	46.6	1.0	2.1	2.4
PIONEER VARIETY 9492**	40.8			1.0		
CAVERNDAL CF 478**	40.7			1.0		
ASGROW A4341	40.6	52.6	52.5	1.0	1.6	1.8
ASGROW A4715**	40.1	46.7	44.6	1.0	2.3	2.0
ASGROW A4922**	39.0	43.9	46.3	1.0	2.5	2.7
SOUTHERN CROSS DAVID**	38.8	46.5		1.0	2.3	
AGRATECH AT 425*	38.6			1.0		
PIONEER VARIETY 94B01**	38.1			1.0		
DEKALB CX434	36.6			1.0		
CALLAHAN 7417	36.3			1.0		
DELTA KING 4762**	34.7			1.0		
KFP 35003JRR	34.6			1.0		
CALLAHAN 6435**	34.5			1.0		
MYCOGEN 5430	32.3			1.0		
GROUP IV AVERAGE	43.3	49.8	48.2	1.0	2.2	2.5
LATE (GROUP V)						
HUTCHESON	51.7	52.6	51.9	1.8	2.6	2.8
DELTA PINE DP 3519S**	48.8	51.0		2.0	3.0	
ASGROW A5403**	48.5	49.8	48.5	1.5	2.5	2.7
GOLDEN HARVEST H-1500*	48.1	53.2		1.3	2.4	
HOLLADAY	47.7	51.7	50.8	1.3	2.3	2.4
S. STATES SS-HT-551-ST5	47.4	47.1	47.9	1.3	2.1	2.7
DELTA KING 5263**	47.2			1.0		
WICOMICO*	47.2	47.4		1.5	2.8	
RIVERSIDE 549	46.5	48.0		1.5	2.3	
CLIFFORD	45.5	43.8	45.3	1.5	2.9	3.3
TN 5-95**	45.3	43.8		2.0	2.9	
SOUTHERN CROSS SAMUEL**	45.1	48.5	48.6	1.0	2.3	2.9
DELTA KING 5664**	44.6			1.5		
DELTA KING 5850**	44.5	46.6		1.8	2.9	
ACCOMAC*	43.9	46.0	44.4	1.5	2.9	3.2
ASGROW A5547**	43.4	48.5		1.8	2.6	
DELTA KING 5961RR**	43.3			1.5		
RIVERSIDE 520	42.9			1.0		
RIVERSIDE ROBIN 5	42.5	41.0		1.8	2.8	
S. STATES FFR-542N**	42.4	45.3	45.1	1.0	2.3	2.6
RIVERSIDE 529 I	39.2			2.0		
KS 5292*	39.2	45.6	44.5	1.0	2.0	2.3
GROUP V AVERAGE	45.2	47.6	47.4	1.5	2.6	2.8
GRAND MEAN	43.7	49.1	47.7	1.1	2.2	2.4
LSD (0.10)	5.2	4.3	3.7	0.2	0.4	0.4

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

TABLE 9. 1997 CARLISLE CO. SOYBEAN CYST NEMATODE TEST^c

VARIETY / BRAND	YIELD (BU/AC)		LODGING		PLANT HEIGHT (IN) 1997	1997 SCN EGG DENSITIES/100CC SOIL		1997 REPORTED SCN RESISTANCE ^b	
	1997	96-97	95-97	1997		96-97	95-97		PLANTING(Pi)
EARLY (GROUP III)									
ASGROW A3904**	33.1			1.0	27	2380	20853	+18473	3,14
SOUTHERN CROSS SAUL **	32.2			1.0	24	3440	23053	+19613	3,14
NK BRAND S 39-11**	31.6	38.9	35.6	1.0	28	3740	15733	+11993	3,14
MACON	25.3	27.2		1.0	24	5650	19173	+13523	SUS
GROUP III AVERAGE									
	30.6	33.1	35.6	1.0	26				
MID-SEASON (GROUP IV)									
SOUTHERN CROSS DAVID**	45.9	41.9		1.0	31	2490	17507	+15017	3,14
CAVERNDAL CF 478**	44.9	49.2		1.0	29	2820	11693	+8873	3,14
GOLDEN HARVEST H-1487**	43.7			1.0	28	2260	8067	+5807	3,14
ASGROW A4922**	43.0	45.6		1.0	34	3440	9787	+6347	3,14
DELROY 4710**	42.6	43.0	41.6	2.0	35	2240	19120	+16880	3,14
PIONEER VARIETY 9481**	41.7	42.7	39.4	1.0	34	4650	18733	+14083	3,14
PENNYRILE	40.7	26.8	28.9	1.0	33	2330	16653	+14323	SUS
CALLAHAN 6435**	39.2			1.0	30	2630	19960	+17330	3,14
NK BRAND S 46-44**	37.7	43.0	38.0	1.0	31	1350	10907	+9557	3,14
CALHOUN	37.6	27.7	26.1	1.0	18	3830	18427	+14597	SUS
MANOKIN*	36.9	42.9	41.0	1.0	26	4220	33080	+28860	3
TN 4-86**	36.3	39.2	37.0	1.0	32	4730	22147	+17417	3,14
AGRATECH AT 425*	34.5	34.6	32.9	1.0	30	2440	29413	+26973	3
KY. FOR PROGRESS KFP 462**	33.4	34.0		1.0	32	4160	17227	+13067	3,14
S. STATES FFR-478*	31.3	39.5		1.0	26	2660	15867	+13207	3
CROW'S 45001*	30.8			1.0	29	5560	28267	+22707	3
TN 4-94**	30.7	37.7		1.0	31	4990	22747	+17757	3,14
PHARAOH**	28.5	36.6	36.9	1.0	27	2690	34853	+32163	3,14
CALLAHAN 6440**	25.6	32.6	34.0	1.0	31	1750	34280	+32530	3,14
GROUP IV AVERAGE									
	37.1	38.6	35.6	1.1	30				

TABLE 9. 1997 CARLISLE CO. SOYBEAN CYST NEMATODE TEST^c continued

VARIETY / BRAND	YIELD (BU/AC)			LODGING			PLANT HEIGHT (IN) 1997	1997 SCN EGG DENSITIES/100CC SOIL		1997 REPORTED SCN RESISTANCE ^b	
	1997	96-97 95-97		1997	96-97 95-97			PLANTING(Pi)	HARVEST(Pf)		Pf-Pi ^a
		96-97	95-97		96-97	95-97					
LATE (GROUP V)											
SOUTHERN CROSS SAMUEL**	42.8	38.8		1.0	1.2		24	2630	19187	+16557	3,14
TN 5-95**	42.6	46.3		1.3	2.5		31	4640	26427	+21787	3,14
HARTWIG**	41.8	42.7	40.1	1.7	2.8	2.6	31	2850	720	-2130	ALL
S. STATES FFR-542N**	36.3	41.7		1.0	1.7		30	3250	25413	+22163	3,14
WICOMICO*	36.2	43.2		1.3	2.3		27	2550	16707	+14157	3
HUTCHESON	35.8	35.3		1.0	1.1		25	2660	34173	+31513	SUS
ASGROW A5547**	34.2			1.0			27	3380	15013	+11633	3,14
DELTAPINE DP3519S**	31.5	38.5		1.0	2.0		29	3030	37547	+34517	3,14
KS 5292*	30.9	39.3	36.3	1.0	1.8	1.6	27	3620	43213	+39593	3
ACCOMAC*	27.2	36.6	38.3	1.0	2.4	2.5	33	3450	51040	+47590	3
GROUP V AVERAGE	35.9	40.3	38.2	1.1	2.0	2.2	28.4				
GRAND MEAN	36.0	38.7	36.2	1.1	1.5	1.7	30				
LSD (0.10)	7.8	5.3	3.1	0.3	0.3	0.3	3				

^a Pf-Pi represents SCN reproduction during the growing season. Changes in SCN populations are best gauged by following SCN egg development through the season. Pf is the SCN egg count at the end of the season. Pi is the number of eggs present at planting. A positive number indicates an increase in the SCN population while a negative number indicates a decrease in the SCN population.

^b Resistance to cyst nematode races are indicated for race 3 and race 14, the predominant races in Kentucky.

SUS - susceptible to SCN

ALL - Hartwig was developed using a different source of SCN resistance which, so far, provides resistance to all known races of SCN.

Note: Yield loss in soybeans caused by SCN is determined by the SCN population at planting - not the population at harvest.

^c A race test indicated that the field was infested with SCN Race 4.

1995 and 1996 data are from McLean County, and the 1997 data are from Carlisle County.

TABLE 10. 1997 WARREN CO. DOUBLE CROP VARIETY TEST^A

VARIETY / BRAND	YIELD (BU/AC)			LODGING		
	1997	96-97	95-97	1997	96-97	95-97
EARLY (GROUP III)						
GOLDEN HARVEST H-1383	50.6	58.9		1.0	2.1	
ASGROW A3904**	48.4			1.8		
CHARLESTON	45.2	47.6		1.5	2.0	
SCOTT SEEDS RT 346RR	44.7			1.0		
CROW'S 39007	44.3			1.0		
PIONEER VARIETY 9395	44.2	52.5		1.0	1.9	
PROBST	44.1	47.8	45.1	1.3	2.4	2.3
NK BRAND S 36-Q6	43.5			1.0		
NK BRAND S 38-L5	43.1			1.0		
S. STATES SS-HT-381-ST5	42.9	51.0	46.8	1.5	3.1	3.2
CROW'S 38004	42.3			1.0		
S. STATES FFR-365	42.0	48.0	47.2	1.0	1.3	1.4
MACCON	41.7	50.2	45.3	1.0	1.8	1.9
NK BRAND S 28-T3	39.9			1.0		
NK BRAND S 39-11**	35.8	45.3	42.6	1.5	2.9	2.9
S. STATES FFR-396	35.1	49.5	45.9	1.0	1.8	1.8
SOUTHERN CROSS SAUL**	34.1	45.6	46.3	1.0	1.9	1.8
GROUP III AVERAGE	42.5	49.6	45.6	1.2	2.1	2.2
MID-SEASON (GROUP IV)						
ASGROW A4922**	51.6	52.5	49.6	1.3	2.4	2.2
STRESSLAND	49.8	56.1	52.4	1.8	2.6	2.8
PIONEER VARIETY 94B01**	49.2			1.3		
NK BRAND S 48-14	48.7			1.0		
SOUTHERN CROSS DAVID**	48.7	54.4		1.3	1.9	
SOUTHERN CROSS JOSHUA	48.3	52.4	52.5	2.0	3.0	3.1
PIONEER VARIETY 9492**	47.7			1.0		
GATEWAY 470	47.4	55.9	53.1	2.0	3.1	2.8
LG SEEDS LG 6484	47.4	52.5		1.8	3.0	
GATEWAY 493*	47.3			2.8		
CAVERNDALE CF 478**	47.2			1.8		
S. STATES FFR-478*	46.8	54.3		1.3	2.0	
CALLAHAN 6435**	46.4			1.3		
DELTA PINE DP 3478	46.3	53.9	50.3	2.3	3.0	2.9
CAVERNDALE CF 461	45.9	54.3	50.0	2.3	3.0	3.2
CALLAHAN 7417	45.8			1.3		
CALLAHAN 3484	45.6	53.7	50.6	2.0	2.9	2.8
RIVERSIDE 490	45.5			2.3		
KS 4694	44.8	52.1	50.2	1.0	2.4	2.4
S. STATES FFR-439	44.5	54.0	50.8	1.5	2.5	2.4
DELSOY 4710**	44.4	47.1	45.0	2.3	3.6	3.3
CALHOUN	44.3	49.4	48.8	1.0	2.1	2.0
SCOTT SEEDS RT 446RR**	43.3			1.0		
KFP 403	43.0			1.3		
ASGROW A4341	43.0	54.5	51.5	1.0	1.5	1.5
DEKALB CX434	42.9			1.0		
DEKALB CX478	42.9			2.0		
GOLDEN HARVEST H-1485	42.8	49.4		1.5	2.8	
ASGROW A4715**	42.4	51.3	46.5	1.0	2.0	1.8
S. STATES FFR-493	42.2	49.4	47.8	1.8	2.8	2.4
PIONEER VARIETY 9452	42.1	51.8	47.1	1.0	2.1	1.9
NK BRAND 3474	41.6	48.1	47.3	1.5	2.6	2.7
MYCOGEN 470	41.4	53.7	52.2	1.5	3.3	3.1
LG SEEDS LG 6462C**	41.4	50.9	49.0	1.8	2.0	1.8
NK BRAND S 43-B5	41.2			1.0		
TN 4-94**	40.9	45.3		1.5	2.8	
DELTA KING 4860**	40.5	51.0		1.0	1.6	
LG SEEDS LG 6437C**	40.5			1.3		

TABLE 10. 1997 WARREN CO. DOUBLE CROP VARIETY TEST^A continued

VARIETY / BRAND	YIELD (BU/AC)			LODGING		
	1997	96-97	95-97	1997	96-97	95-97
NK BRAND S 42-60	40.5	51.0	47.6	1.3	2.4	2.6
NK BRAND S 46-44**	40.2	46.7	45.2	1.0	2.3	2.1
GOLDEN HARVEST H-1454**	40.1			1.5		
DEKALB CX470C*	39.9			1.3		
CALLAHAN 6440**	39.8	50.2		1.3	2.5	
TN 4-86**	39.7	44.2	40.8	1.8	3.1	3.1
KFP 462**	39.5	48.6		1.3	2.4	
PHARAOH**	39.3	40.9	41.7	2.5	3.6	3.3
AGRATECH AT 460**	39.2	44.2		1.0	2.3	
CAVERNDALE CF 492	39.1	50.0	48.4	2.0	3.1	2.7
SOUTHERN CROSS EXODUS	38.6			1.8		
DELTA KING 4762**	38.5			1.5		
DEKALB CX420C*	38.3			1.3		
PIONEER VARIETY 9481**	38.1	45.2	41.7	2.0	3.0	2.5
PIONEER VARIETY 9482	37.8	50.2		1.3	2.3	
DEKALB CX450C*	37.7	50.0		1.8	3.0	
KFP 35003JRR	36.1			1.0		
MYCOGEN 5430	36.1			1.0		
PIONEER VARIETY 94B41**	35.9			1.0		
MANOKIN*	35.8	48.5	47.4	2.8	3.6	3.6
OMAHA	35.3	47.3		1.5	2.8	
AGRATECH AT 425*	34.3			1.0		
GROUP IV AVERAGE	42.4	50.4	48.3	1.5	2.6	2.6
LATE (GROUP V)						
RIVERSIDE 529 I	48.9			2.5		
GOLDEN HARVEST H-1500*	46.4	52.8		3.3	3.9	
HOLLADAY	45.7	54.1	51.3	2.8	3.8	3.3
CLIFFORD	44.4	52.0	50.1	3.5	3.9	3.6
S. STATES SS-HT-551-ST5	44.0	55.7	50.3	2.8	3.4	3.0
RIVERSIDE 520	43.5			1.5		
HUTCHESON	40.9	48.1	46.4	2.3	3.3	3.0
ACCOMAC*	40.9	46.9	45.9	4.8	4.5	3.9
DELTA PINE DP 3519S**	40.8	51.0		2.8	3.4	
ASGROW A5403**	40.4	46.1	43.8	3.3	3.6	3.5
S. STATES FFR-542N**	40.2	48.2	46.0	2.8	3.5	3.3
WICOMICO*	39.9	50.5		3.0	3.8	
KS 5292*	39.1	44.4	41.9	2.3	3.4	3.1
SOUTHERN CROSS SAMUEL**	37.7	47.0	46.4	3.0	3.5	3.0
ASGROW A5547**	37.5	49.4		4.0	4.3	
DELTA KING 5850**	36.4	46.1		5.0	4.6	
RIVERSIDE 549	35.2	42.7		4.0	4.0	
DELTA KING 5263**	34.4			3.3		
TN 5-95**	33.6	46.6		3.8	3.9	
DELTA KING 5961RR**	32.8			3.3		
DELTA KING 5664**	29.6			3.3		
RIVERSIDE ROBIN 5	29.3	42.2		2.8	3.9	
GROUP V AVERAGE	39.2	48.5	46.9	3.2	3.8	3.3
GRAND MEAN	41.7	49.8	47.5	1.8	2.9	2.7
LSD (0.10)	6.1	4.3	3.6	0.5	0.5	0.4

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

^A 1995 data are from Caldwell Co., and the 1996 and 1997 data are from Warren Co..

TABLE 11. 1997 KENTUCKY SOYBEAN PERFORMANCE TEST PROTEIN AND OIL COMPOSITION^A

VARIETY/BRAND	PROTEIN%	OIL%	VARIETY/BRAND	PROTEIN%	OIL%
ACCOMAC*	34.1	17.2	LG SEEDS LG 6484	34.5	18.6
AGRATECH AT 425*	36.2	17.9	MACON	37.8	18.6
AGRATECH AT 460**	36.1	18.2	MANOKIN*	33.3	17.5
ASGROW A3904**	35.4	18.0	MYCOGEN 470	36.1	18.3
ASGROW A4341	35.3	18.1	MYCOGEN 5430	35.7	18.0
ASGROW A4715**	35.3	18.4	NK BRAND 3474	35.8	18.1
ASGROW A4922**	36.9	18.1	NK BRAND S 28-T3	36.8	18.4
ASGROW A5403**	35.1	17.2	NK BRAND S 36-Q6	34.9	18.1
ASGROW A5547**	34.5	17.2	NK BRAND S 38-L5	35.0	18.3
CALHOUN	37.5	17.6	NK BRAND S 39-11**	36.7	18.1
CALLAHAN 3484	35.4	18.3	NK BRAND S 42-60	36.6	18.6
CALLAHAN 6435**	37.3	17.3	NK BRAND S 43-B5	35.1	18.4
CALLAHAN 6440**	36.1	18.1	NK BRAND S 46-44**	35.9	17.7
CALLAHAN 7417	34.0	19.0	NK BRAND S 48-14	36.4	17.4
CAVERNDALE CF 461	36.3	17.8	OMAHA	37.5	18.8
CAVERNDALE CF 478**	35.7	18.0	PHARAOH**	36.1	17.5
CAVERNDALE CF 492	35.5	18.1	PIONEER VARIETY 9395	36.1	18.0
CHARLESTON	37.2	18.0	PIONEER VARIETY 9452	37.4	18.3
CLIFFORD	34.6	17.6	PIONEER VARIETY 9481**	35.6	18.9
CROW'S 38004	34.4	18.6	PIONEER VARIETY 9482	36.0	18.2
CROW'S 39007	32.7	19.2	PIONEER VARIETY 9492**	36.1	18.2
DEKALB CX420C*	35.9	18.1	PIONEER VARIETY 94B01**	36.1	18.6
DEKALB CX434	36.7	17.1	PIONEER VARIETY 94B41**	35.3	18.2
DEKALB CX450C*	37.3	17.4	PROBST	36.0	18.3
DEKALB CX470C*	36.7	17.5	RIVERSIDE 490	35.6	18.7
DEKALB CX478	36.2	18.1	RIVERSIDE 520	36.8	17.3
DELISOY 4710**	34.0	17.7	RIVERSIDE 529 I	36.4	17.4
DELTA KING 4762**	35.7	18.1	RIVERSIDE 549	36.8	16.9
DELTA KING 4860**	35.6	18.3	RIVERSIDE ROBIN 5	36.1	16.9
DELTA KING 5263**	35.4	16.2	S. STATES FFR-365	36.2	18.7
DELTA KING 5664**	36.6	17.2	S. STATES FFR-396	36.3	18.0
DELTA KING 5850**	33.9	16.6	S. STATES FFR-439	34.0	18.7
DELTA KING 5961RR**	36.2	17.2	S. STATES FFR-478*	36.2	18.0
DELTA PINE DP 3478	34.1	18.6	S. STATES FFR-493	36.2	17.6
DELTA PINE DP 3519S**	36.5	17.0	S. STATES FFR-542N**	35.1	17.1
GATEWAY 470	35.9	18.2	S. STATES SS-HT-381-STS	36.0	17.9
GATEWAY 493*	37.1	17.2	S. STATES SS-HT-551-STS	35.5	17.5
GOLDEN HARVEST H-1383	34.1	19.3	SCOTT SEEDS RT 346RR	38.3	18.8
GOLDEN HARVEST H-1454**	35.9	17.6	SCOTT SEEDS RT 446RR**	35.8	18.2
GOLDEN HARVEST H-1485	35.4	18.5	SOUTHERN CROSS DAVID**	36.6	17.8
GOLDEN HARVEST H-1500*	34.1	17.1	SOUTHERN CROSS EXODUS	36.0	18.4
HOLLADAY	34.5	17.4	SOUTHERN CROSS JOSHUA	34.9	18.5
HUTCHESON	35.9	18.0	SOUTHERN CROSS SAMUEL**	36.6	17.2
KFP 35003JRR	37.9	18.3	SOUTHERN CROSS SAUL**	36.0	18.1
KFP 403	37.9	18.1	STRESSLAND	38.2	17.9
KFP 462**	36.2	18.5	TN 4-86**	35.5	18.5
KS 4694	36.1	18.0	TN 4-94**	34.5	17.9
KS 5292*	34.0	18.2	TN 5-95**	34.5	16.9
LG SEEDS LG 6437C**	37.2	17.5	WICOMICO*	37.5	16.6
LG SEEDS LG 6462C**	36.4	17.8			

^A Variety protein and oil concentration was determined at the Fayette Co. location and expressed on the basis of 12% moisture. The mean protein concentration was 35.9%, and the mean oil concentration was 17.9%.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

