



1999 Kentucky Soybean Performance Tests

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New Web site feature: selection key to create subsets of summary Table 3—[description on page 4](#).

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 1999 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 by maturity group. The conventional tests (all entries, Tables 4-7) had two replications (plots) of each variety. The soybean cyst nematode (SCN) and Roundup Ready (Roundup Ready is a registered trademark of Monsanto Company) tests

had three replications. The individual plots 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 SCN test was planted at a site infested with soybean cyst nematode. Only varieties with some genetic resistance to SCN and susceptible check varieties were tested at this site.

No preplant herbicides were used on the Roundup Ready test. This test was treated three times with Roundup Ultra in order to control yellow nutsedge.

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% 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% down; 4 = all plants over considerably or 50 to 80% down; 5 = all plants over badly.

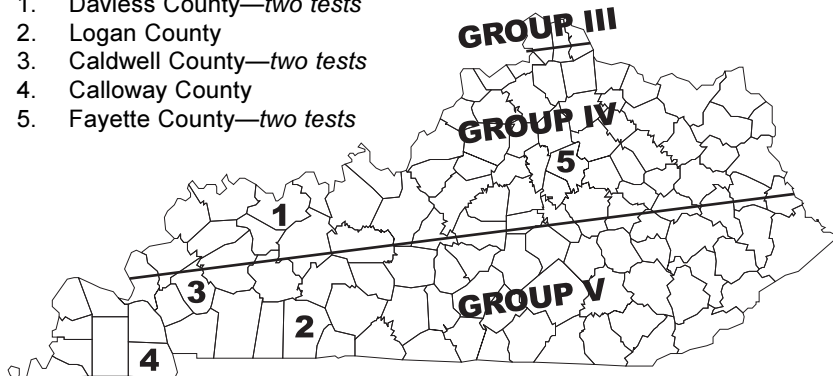
Maturity date—A variety is considered mature when 95% of the pods have turned their normal mature color. One to two weeks of good drying weather will be needed beyond the date given before the beans will be ready to combine. Maturity dates were recorded at the Fayette County and Caldwell County locations.

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

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 ¼ 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

Location of the 1999 Kentucky Soybean Tests

1. Daviess County—two tests
2. Logan County
3. Caldwell County—two tests
4. Calloway County
5. Fayette County—two tests



Web Site:

<<http://www.ca.uky.edu/agg/pubs/respubs.htm>>
Scroll down the list to "PR-424."

TABLE 1. LOCATION, PLANTING DATA, AND CLIMATIC DATA FOR THE 1999 SOYBEAN PERFORMANCE TESTS.

Test	Farmer	Extension Agent	Soil Type	Date of Planting	Soil Test	Fertilizer Applied ²	50% Chance of Killing Frost ³
Daviess Co. Conventional	Joe Stephen	Wayne Mattingly	Calloway Silt Loam	6/8	P -- K -- pH --	300 lb 0-23-30	10/25
Caldwell Co.⁴ Conventional	Princeton Exp. Station		Crider Silt Loam	5/26	P 140 K 543 pH 6.6	none	10/19
Calloway Co.⁴ Conventional	Jim Kelly	Gerald Claywell	Calloway Silt Loam	5/24	P 60 K 243 pH 6.8	none	10/19
Fayette Co. Conventional	Lexington Exp. Station		Lanton Silt Loam	5/28	P 330 K 250 pH 6.7	100 lb KCl	10/26
Logan Co. Conventional	Richard Moore	Rodney Haines	Elk Silt Loam	5/20	P 200 K 491 pH 6.5	128 lb 18-46-0 87 lb 0-0-62 2 tons lime	10/23
Caldwell Co.¹ Double Crop	Princeton Exp. Station		Crider Silt Loam	6/22	P 140 K 543 pH 6.6	none	10/19
Fayette Co. Roundup Ready	Lexington Exp. Station		Maury Silt Loam	5/11	P 372 K 197 pH 6.2	100 lb KCl	10/26
Daviess Co. SCN	Joe Elliott and Sons	Wayne Mattingly	Calloway Silt Loam	5/26	P 112 K 151 pH 7.0	200 lb 6-15-40	10/25

¹ No-till double cropped after wheat

² Amount per acre.

³ Based on 30-year average

⁴ Data not published due to excessive variability caused by the drought.

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 has 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 least significant difference (LSD) 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 actually do differ in yielding ability. Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

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. Weed control and the economic management of weeds is an additional factor to consider with the advent of Roundup Ready soybeans.

The data provided have been divided into maturity groups. Due to weather patterns at a location, maturity alone can affect yield; this impact 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% 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 County and Caldwell County 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 *Soybean Cyst Nematode* (PPA-3), 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. **Test your fields.** Contact your county Extension office for more information on collecting and submitting samples. The importance of resistant varieties has increased as the number of acres affected by SCN has increased. SCN occurs in 32 western Kentucky counties representing 90% of the soybean acreage. Low levels of SCN show few visible symptoms but can cause yield losses of up to 25%. When evaluating the performance of resistant varieties in the SCN-infested location, note the change in SCN egg numbers as well as the yield presented in the SCN table.

Soybean mosaic virus (SMV) may cause yield loss if soybean plants are infected prior to flowering. Due to the timing of insect populations which transmit the disease, double-cropped soybeans are more likely to be affected in Kentucky. Planting SMV-resistant varieties will prevent this possible yield loss. Contact individual seed companies for the SMV resistance ratings of their varieties.

Growing Conditions and Special Circumstances

Growing conditions across Kentucky in 1999 can be summed up in one word: drought. On June 5 the three soybean-growing regions of Kentucky were already classified as being in mild or moderate drought. All three regions entered the severe drought category between August 14 and 28, with the central and Bluegrass areas reaching the extreme drought category between September 4 and 11. From April 1 to the end of the growing season Kentucky locations ranged from 4 to 15 inches below normal rainfall. As a consequence, test yields were low and the variability across

a field was heightened. Variability was further increased by rapid and erratic shattering. **Test and/or individual maturity group data at a location are not presented if the coefficient of variation was greater than 20%.**

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); Part IV. *Weed, Disease, and Insect Control* (AGR-131); and Part V. *A Soybean Planting Rate Guide*, which is reproduced from this series and provided 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 10. 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 (1) kind and variety for each agricultural seed component present in excess of 5% of the whole and (2) 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.

TABLE 2. SOYBEAN PLANTING GUIDE.

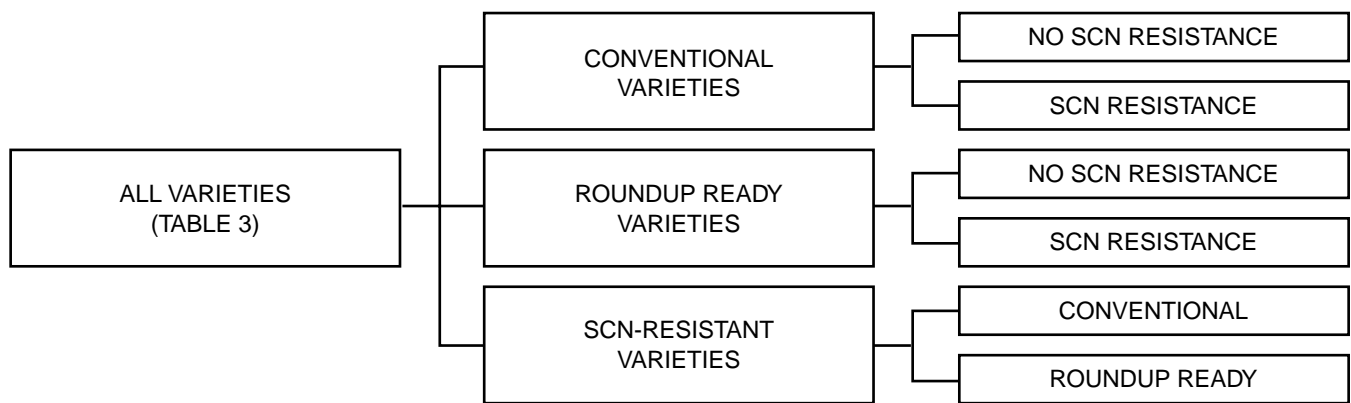
Row spacing (inches)	7	15	20	30	36
Seeding rate (seeds per ft. of row)	2-3	5-6	6-8	8-10	9-11
Viable seeds per pound Pounds of Seed per Acre				
2000	80-110	85-105	78-104	70-87	65-80
2200	73-100	77-95	71-95	64-79	59-72
2400	66-93	71-88	65-87	58-73	54-66
2600	61-86	65-81	60-80	54-67	50-61
2800	57-80	61-75	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

Acknowledgments

In addition to the county agents and farm cooperators mentioned in Table 1, Thomas R. Stefaniak, David Pilcher, and Brenda Ward have contributed greatly to the production of this publication. Also the SCN lab at Princeton, Debbie Morgan and Don Hershman were important in the production of this publication.

Selection Key: <http://www.ca.uky.edu/agc/pubs/pr/pr424/pr424.pdf>

This new feature of the 1999 Kentucky Soybean Performance Test Web site allows subsets of Table 3, “Summary: Variety Test Tables 4-7.” This sorting of the data in Table 3 provides alternative views of the data to show those varieties that are selected by basic questions a soybean producer might ask. For example: if a soybean producer is interested in Roundup Ready SCN-resistant varieties, click the ‘Roundup Ready’ box connected to the SCN variety box.



Sources of Seeds

The seed planted in the 1999 Soybean Performance Tests was acquired from the following sources:

Agribiotech Inc.

120 Corporate Park Drive
Henderson, NV 89014
HYTEST HTS4301 RR
HYTEST HTS4800 RR
HYTEST HTS4725 RR
HYTEST HTS5426 RR

Agro Distribution

P.O. Box 171376
Memphis, TN 38187
TERRA TS4792
TERRA TS490
TERRA TS520
TERRA TS466RR
TERRA TS556RR
TERRA TS558RR
TERRA RVS77
TERRA RVSROBIN 5
TERRA RVS549
TERRA RVS499
TERRA TS438c
TERRA TS397RR

Asgrow Seed Company

P.O. Box 359
Marion, AR 72364
ASGROW A 3904
ASGROW A 4341
ASGROW A 4604
ASGROW A 4922
ASGROW A 5404
ASGROW A 5547
ASGROW AG 3701
ASGROW AG 3901
ASGROW AG 4101
ASGROW AG 4301
ASGROW AG 4402
ASGROW AG 4501
ASGROW AG 4602
ASGROW AG 4702
ASGROW AG 4901
ASGROW AG 4902
ASGROW AG 5001
ASGROW AG 5401
ASGROW AG 5602

Caverndale Farms Inc.
1921 Bluegrass Road
Danville, KY 40422
CAVERNDALE CF 461
CAVERNDALE CF 492
CAVERNDALE CF 486
CAVERNDALE CF 443nRR
CAVERNDALE CF 465nRR
CAVERNDALE CF 481nRR

Deltapine Seed
P.O. Box 157
Scott, MS 38772
DELTAPINE DP 4344 RR
DELTAPINE DP 4750 RR
DELTAPINE DP 4909

Delta King Seed Company
P.O. Box 970
522 Poplar
McCrary, AR 72101
DELTA KING 4868 RR
DELTA KING 4965 RR
DELTA KING XTJ 784
DELTA KING 4762 RR
DELTA KING 5661 RR
DELTA KING 5762 RR
DELTA KING 5580
DELTA KING 5664 RR
DELTA KING 5995

Gateway Seed Company
5517 Van Buren Road
Nashville, IL 62263
GATEWAY 4R453
GATEWAY 433
GATEWAY 5R515
GATEWAY 470

Golden Harvest
RR 3 Box 257
Clinton, IL 61727
GOLDEN HARVEST H-3960RR
GOLDEN HARVEST H-3943RR
GOLDEN HARVEST H-4404RR
GOLDEN HARVEST H-4115
GOLDEN HARVEST H-4516
GOLDEN HARVEST H-4459STS

Hartz Seed—A Unit of Monsanto
901 N. Park Ave.
Stuttgart, AR 72160
HARTZ VARIETY H 4252RR

Hornbeck Seed Company Inc.
P.O. Box 472
210 Drier Road
DeWitt, AR 72042-0472
HORNBECK HBK 4890
HORNBECK HBK 4891
HORNBECK HBK R4660
HORNBECK HBK R4855
HORNBECK HBK R5588

Kentucky American Seeds Inc.
205 Means Avenue
P.O. Box 1104
Hopkinsville, KY 42241-1104
EXCEL8382NRR
EXCEL 8422 RR
EXCEL8461 RR
EXCEL 8510NRR
KAS CHEROKEE 516

KY Foundation Seed Project
P.O. Box 11950
Lexington, KY 40579
ANAND
CALHOUN
HOLLADAY
HUTCHESON
KS 5292
MACON
MANOKIN
PHARAOH
STRESSLAND

LG Seeds/Callahan Seeds
1122 East 169th Street
Westfield, IN 46074
LG 6430 RR
LG 6457 C STS
LG 6485 RR
CALLAHAN 9454
CALLAHAN 9474
CALLAHAN 8437RR
CALLAHAN 9440RR
CALLAHAN 9480RR
CALLAHAN 9390RR

Miles Farm Supply Inc.
P.O. Box 22879
Owensboro, KY 42304-2879
SOUTHERN CROSS JAMES
SOUTHERN CROSS TIMOTHY
SOUTHERN CROSS EXODUS
SOUTHERN CROSS MICAH

Monsanto Global Seed Group
3100 Sycamore Road
Dekalb, IL 60115
DEKALB CX405RR
DEKALB CX414cRR
DEKALB CX433RR
DEKALB CX444cRR

Novartis Seed
535 Pennyrite Drive
Madisonville, KY 42431
NK BRAND S43-B5
NK BRAND S42-M1
NK BRAND S53-Q7
NK BRAND 3474
NK BRAND S39-D9
NK BRAND S39-11
NK BRAND S46-W8
NK BRAND S51-T1

Pioneer Hi-Bred Int. Inc.
6767 Old Madison Pike
Suite 110
Huntsville, AL 35086
PIONEER VARIETY 93B53
PIONEER VARIETY 93B82
PIONEER VARIETY 93B84
PIONEER VARIETY 94B01
PIONEER VARIETY 94B22
PIONEER VARIETY 94B53
PIONEER VARIETY 9492
PIONEER VARIETY 95B32
PIONEER VARIETY 95B41
PIONEER VARIETY 9482

Southern States Cooperative
P.O. Box 26234
Richmond, VA 23260
SOUTHERN STATES FFR-493
SOUTHERN STATES FFR-4985-ST5
SOUTHERN STATES RT-517N
SOUTHERN STATES HT-551-ST5
SOUTHERN STATES RT-540N
SOUTHERN STATES RT-5485
SOUTHERN STATES RT-557
SOUTHERN STATES HT-381-ST5
SOUTHERN STATES RT-386
SOUTHERN STATES RT-3975
SOUTHERN STATES FFR-439
SOUTHERN STATES RT-446N
SOUTHERN STATES RT-447
SOUTHERN STATES RT-EXP 88401
SOUTHERN STATES RT-560

Stine Seed Company
225 Laredo Trail
Adel, IA 50003
STINE 4702-2
STINE 4790
STINE 4001-4

UAP Mid-South/Tri-State Delta Chem.
57 Germantown Court, Suite 200
Cordova, IN 38018
DYNA-GRO 3442 N RR
DYNA-GRO 3468 N RR

UniSouth Genetics Inc.
2640-C Nolensville Road
Nashville, TN 37211
UNISOUTH GENETICS USG 7478RR
UNISOUTH GENETICS USG 7528RR
UNISOUTH GENETICS USG 7548RR
UNISOUTH GENETICS USG 7547RR
UNISOUTH GENETICS USG 7557RR
UNISOUTH GENETICS USG 7577RR
UNISOUTH GENETICS USG 7499

Wilfarm L.L.C.
5401 North Oak Trafficway
Gladstone, MO 64118
WILFARM WF 480RR
WILFARM WF 370 RR
WILFARM SF 477 RR
WILFARM WF 290 RR

TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7.

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
PIONEER VARIETY 93B82	41.8			2.4		
ASGROW A 3904**	38.8	45.9	48.6	1.8	2.0	1.7
~ PIONEER VARIETY 93B53	38.5			1.9		
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ WILFARM WF 290 RR	36.5			2.3		
SOUTHERN STATES HT-381-STS	36.2	38.5	43.4	2.3	2.3	1.9
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ SOUTHERN STATES RT-386	35.3			2.4		
~ WILFARM WF 370 RR	35.1			1.8		
~ PIONEER VARIETY 93B84	34.9			1.8		
MACON	34.7	42.5	46.0	2.2	2.1	1.7
~ TERRA TS397RR**	34.4			2.7		
~ SOUTHERN STATES RT-3975	33.6			2.0		
~ NK BRAND S39-D9	33.4			1.8		
NK BRAND S39-11**	33.4			2.5		
~ GOLDEN HARVEST H-3943RR	31.1			1.6		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.5	42.3	46.0	2.1	2.1	1.8
LSD (0.10)	2.8	2.6	1.9	0.2	0.3	0.1
MIDSEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
ASGROW A 4341	40.7	49.6	49.9	2.3	1.9	1.5
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
HORNBECK HBK 4891	38.1			2.6		
~ DEKALB CX405RR	37.9			2.4		
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
GOLDEN HARVEST H-4115**	37.2			2.3		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
DELTA KING XTJ 784	36.7			2.4		
STRESSLAND	36.6	45.0	47.6	2.6	2.5	2.0
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
ASGROW A 4604**	35.9	42.3		2.4	2.9	
~ STINE 4001-4	35.8			2.8		
~ DELTA KING 4868 RR	35.6			2.1		
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
NK BRAND S43-B5	34.9	46.5	48.0	2.6	2.5	1.8
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
~ LG 6430 RR	34.6			2.4		
SOUTHERN STATES FFR-439	34.6	43.7	46.7	1.9	2.2	1.8
PIONEER VARIETY 94B22**	34.4			2.5		

(continued on next page)

TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7 (continued).

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
CAVERNDALE CF 486**	34.3			2.5		
GATEWAY 470	34.1	37.0	44.2	2.5	2.9	2.2
~ CALLAHAN 8437RR	34.0			2.6		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ HORNBECK HBK R4855	33.8			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ DELTAPINE DP 4750 RR	33.4			2.4		
CALLAHAN 9474	33.3			2.4		
~ EXCEL 8422 RR*	33.3			2.5		
SOUTHERN CROSS JAMES**	33.1			2.6		
~ ASGROW AG 4602**	33.1			2.4		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ HYTEST HTS4725 RR	32.9			2.5		
~ ASGROW AG 4101*	32.8			2.6		
SOUTHERN CROSS EXODUS	32.8	37.7	43.5	2.8	3.0	2.3
~ DEKALB CX433RR	32.7			2.1		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
STINE 4790	32.6			2.6		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
SOUTHERN STATES RT-447	32.3			2.4		
~ HORNBECK HBK R4660**	32.3			1.9		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
~ CAVERNDALE CF 481nRR**	32.2			2.6		
NK BRAND 3474	31.9	42.0	46.3	2.4	3.1	2.3
HORNBECK HBK 4890	31.8			1.8		
CAVERNDALE CF 492	31.6	43.5	46.4	2.5	1.9	1.7
~ SOUTHERN CROSS MICAH**	31.5			2.0		
PIONEER VARIETY 9482	31.4	41.0	46.7	2.1	2.6	2.0
~ WILFARM SF 477 RR**	31.2			2.1		
CAVERNDALE CF 461	31.1	42.3	45.8	2.1	2.6	2.1
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8
~ DEKALB CX414cRR*	30.2			2.4		
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
~ CAVERNDALE CF 465nRR**	30.0			2.0		
~ DELTAPINE DP 4344 RR	29.7			2.1		
~ CALLAHAN 9480RR	29.6			2.3		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
SOUTHERN STATES FFR-493	29.6	44.4	47.3	1.6	1.8	1.5
CALHOUN	29.3	43.9	46.8	1.8	1.5	1.3
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ LG 6485 RR	28.5			2.1		
~ EXCEL 8461 RR*	27.8			2.6		
SOUTHERN STATES FFR-4985-ST5	27.4	33.2		2.4	3.3	
UNISOUTH GENETICS USG 7499	27.4	36.2	43.4	2.4	2.1	1.7
DELTAPINE DP 4909	26.4			1.5		
TERRA TS490	26.0	31.1	39.6	2.4	2.7	2.6
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
TERRA RVS499	18.1			2.0		
GROUP IV AVERAGE	33.2	39.7	44.7	2.3	2.5	2.0
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2

(continued on next page)

TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7 (continued).

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
HUTCHESON	34.0	38.0	42.1	1.9	2.4	2.4
~ ASGROW AG 5001	33.3			1.9		
~ SOUTHERN STATES RT-540N**	32.8			1.7		
HOLLADAY	32.1	40.8	45.0	2.2	3.1	2.6
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
~ TERRA TS556RR**	31.3			1.9		
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
~ EXCEL 8510NRR*	30.3			1.7		
~ SOUTHERN CROSS TIMOTHY	30.2			1.8		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
ANAND**	29.4	36.5		1.7	2.3	
~ SOUTHERN STATES RT-560	29.1			2.1		
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
TERRA RVS77	28.9	34.1		2.0	2.8	
~ HYTEST HTS5426 RR**	28.7			2.0		
~ UNISOUTH GENETICS USG 7547RR	28.6			2.0		
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
~ UNISOUTH GENETICS USG 7528RR	28.2			1.9		
SOUTHERN STATES HT-551-STS	28.2	31.8	39.9	1.5	2.1	2.1
~ UNISOUTH GENETICS USG 7577RR	28.1			2.0		
~ HORNBECK HBK R5588	28.1			2.2		
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ UNISOUTH GENETICS USG 7557RR	27.6			1.9		
~ ASGROW AG 5401**	27.4			2.2		
TERRA RVS549	27.2			1.8		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ TERRA TS558RR	24.5			2.2		
TERRA TS520	24.1	30.7	38.9	1.9	2.4	2.1
~ NK BRAND S51-T1*	23.5			2.0		
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	28.6	34.8	40.2	1.9	2.5	2.3
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	32.2	38.6	43.8	2.2	2.4	2.0

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard counties

TABLE 4. 1999 FAYETTE CO. VARIETY TEST — ALL ENTRIES.

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING			PLANT HEIGHT (IN) 1999	MATURITY DATE 1999
	1999	98-99	97-99	1999	98-99	97-99		
EARLY (GROUP III)								
ASGROW A 3904**	24.2	37.5	43.1	1.0	2.5	2.1	27	9/18
PIONEER VARIETY 93B82	24.2			1.0			26	9/24
~ PIONEER VARIETY 93B53	23.5			1.0			25	9/20
~ SOUTHERN STATES RT-386	23.4			1.0			27	9/24
~ ASGROW AG 3901**	23.1			1.0			28	9/22
~ ASGROW AG 3701*	23.0			1.0			25	9/22
~ CALLAHAN 9390RR**	22.9			1.0			29	9/20
~ GOLDEN HARVEST H-3943RR	21.4			1.0			23	9/24
MACON	21.1	36.7	44.4	1.0	2.5	2.0	24	9/22
~ PIONEER VARIETY 93B84	20.7			1.0			28	9/20
SOUTHERN STATES HT-381-STS	20.7	30.9	39.5	1.0	2.6	2.3	26	9/24
NK BRAND S39-11**	20.2			1.0			30	9/24
~ TERRA TS397RR**	19.9			1.0			26	9/18
~ GOLDEN HARVEST H-3960RR*	19.8			1.0			28	9/22
~ WILFARM WF 370 RR	19.8			1.0			24	9/20
~ WILFARM WF 290 RR	19.8			1.0			27	9/16
~ NK BRAND S39-D9	19.5			1.0			26	9/20
~ SOUTHERN STATES RT-3975	18.6			1.0			26	9/20
~ EXCEL 8382NRR**	18.0			1.0			23	9/24
GROUP III AVERAGE	21.3	35.0	42.3	1.0	2.5	2.1	26	9/22
LSD (0.10)	2.2	6.2	4.4		0.4	0.3	2	
MIDSEASON (GROUP IV)								
GOLDEN HARVEST H-4516*	26.4			1.0			32	9/27
TERRA TS438c**	26.2			1.0			32	9/24
LG 6457 C STS**	25.7			1.0			31	9/28
GOLDEN HARVEST H-4115**	25.5			1.0			29	9/28
~ ASGROW AG 4301**	25.2			1.0			28	9/29
GOLDEN HARVEST H-4459STS**	25.0			1.0			31	10/2
NK BRAND S43-B5	24.9	36.0	44.3	1.0	2.5	2.1	28	9/24
CALLAHAN 9454**	24.8	33.9		1.0	2.3		31	9/29
~ WILFARM WF 480 RR**	24.8			1.0			28	10/4
HORNBECK HBK 4890	24.6			1.0			31	10/5
GATEWAY 470	24.5	28.9	35.9	1.0	2.8	2.4	31	9/28
~ UNISOUTH GENETICS USG 7478RR**	24.3			1.0			36	10/3
~ SOUTHERN STATES RT-EXP 88401**	24.2			1.0			22	9/26
PHARAOH**	24.2	29.8	36.3	1.0	2.5	2.6	34	10/5
~ ASGROW AG 4902*	24.1			1.0			28	9/30
GATEWAY 433**	24.1			1.0			30	9/27
HORNBECK HBK 4891	24.0			1.0			30	9/26
~ DELTA KING 4965 RR**	24.0			1.0			25	10/1
TERRA TS4792**	23.9	26.0		1.0	2.4		32	9/30
DELTA KING XTJ 784	23.8			1.0			29	9/28
ASGROW A 4341	23.5	39.5	45.8	1.0	1.8	1.7	26	9/24
CALLAHAN 9474	23.4			1.0			33	9/27
~ DYNA-GRO 3468 N RR**	23.4			1.0			26	9/29
~ DELTA KING 4868 RR	23.3			1.0			27	9/30
~ LG 6430 RR	23.2			1.0			31	9/26
STRESSLAND	23.2	33.7	42.6	1.0	2.3	2.2	28	9/27
ASGROW A 4604**	23.1	31.0		1.0	2.1		32	9/26
~ DELTAPINE DP 4750 RR	23.0			1.0			32	9/30
~ NK BRAND S46-W8**	22.9			1.0			31	9/28
~ STINE 4001-4	22.6			1.0			27	9/23
~ DELTAPINE DP 4344 RR	22.5			1.0			33	9/29
~ ASGROW AG 4402*	22.3			1.0			26	9/27
PIONEER VARIETY 94B22**	22.3			1.0			30	9/30

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TABLE 4. 1999 FAYETTE CO. VARIETY TEST — ALL ENTRIES (continued).

VARIETY / BRAND	YIELD (BU/AC) ^a			LODGING			PLANT HEIGHT (IN) 1999	MATURITY DATE 1999
	1999	98-99	97-99	1999	98-99	97-99		
~ PIONEER VARIETY 94B01**	22.2	36.8	41.2	1.0	2.0	1.7	31	9/23
~ DEKALB CX433RR	22.2			1.0			30	9/24
~ HYTEST HTS4301 RR**	22.2			1.0			30	9/27
~ HYTEST HTS4800 RR**	22.2			1.0			33	10/1
~ GATEWAY 4R453**	22.2			1.0			29	9/28
~ HORNBECK HBK R4660**	22.1			1.0			29	10/3
~ CALLAHAN 9440RR**	22.0			1.0			29	9/28
~ DYNA-GRO 3442 N RR**	22.0			1.0			27	9/26
~ ASGROW AG 4702**	21.9			1.0			27	10/2
~ DELTA KING 4762 RR**	21.8	27.8	37.3	1.0	2.3	2.0	31	10/3
~ SOUTHERN CROSS MICAH**	21.8			1.0			30	10/4
~ SOUTHERN STATES RT-446N*	21.7			1.0			25	10/3
~ PIONEER VARIETY 9492**	21.4	31.3	38.5	1.0	1.8	1.8	26	9/27
~ CAVERNDALE CF 443nRR**	21.4			1.0			27	9/26
~ CAVERNDALE CF 481nRR**	21.4			1.0			27	10/1
~ CALLAHAN 9480RR	21.3			1.0			29	9/27
~ HYTEST HTS4725 RR	21.3			1.0			31	9/28
~ ASGROW AG 4501**	21.2			1.0			34	10/5
~ ASGROW AG 4901**	21.0			1.0			32	10/2
~ SOUTHERN CROSS JAMES**	20.8			1.0			25	9/24
~ HORNBECK HBK R4855	20.8			1.0			30	9/24
~ EXCEL 8422 RR*	20.8			1.0			26	9/26
~ DEKALB CX405RR	20.7			1.0			30	9/23
~ NK BRAND 3474	20.7	38.4	43.7	1.0	2.6	2.3	29	10/2
~ CAVERNDALE CF 465nRR**	20.6			1.0			32	10/3
~ PIONEER VARIETY 9482	20.6	34.8	40.8	1.0	2.1	2.0	31	10/1
~ DEKALB CX444cRR**	20.5			1.0			27	9/29
~ STINE 4790	20.5			1.0			30	10/4
~ PIONEER VARIETY 94B53**	20.4			1.0			30	9/29
~ WILFARM SF 477 RR**	20.4			1.0			28	10/9
~ LG 6485 RR	20.3			1.0			31	10/3
~ NK BRAND S42-M1**	20.3			1.0			32	9/23
~ STINE 4702-2**	20.3			1.0			27	10/3
~ CALLAHAN 8437RR	20.2			1.0			26	9/27
~ TERRA TS466RR**	20.1			1.0			30	10/3
~ SOUTHERN STATES RT-447	20.0			1.0			31	9/28
~ SOUTHERN CROSS EXODUS	19.8	26.6	36.0	1.0	2.8	2.3	26	9/28
~ DEKALB CX414cRR*	19.8			1.0			27	10/2
~ ASGROW AG 4602**	19.7			1.0			25	10/3
~ CAVERNDALE CF 486**	19.6			1.0			29	9/24
~ GOLDEN HARVEST H-4404RR**	19.5			1.0			28	9/24
~ CAVERNDALE CF 461	19.5	37.5	43.9	1.0	2.5	2.3	30	9/24
~ EXCEL 8461 RR*	19.3			1.0			24	9/29
~ SOUTHERN STATES FFR-439	19.2	33.1	40.1	1.0	2.5	2.3	31	9/30
~ ASGROW A 4922**	19.0	28.2	35.9	1.0	2.4	2.1	27	9/29
~ ASGROW AG 4101*	18.9			1.0			26	10/2
~ CALHOUN	18.9	33.4	41.6	1.0	1.9	1.6	26	9/24
~ CAVERNDALE CF 492	18.0	28.7	37.0	1.0	2.3	2.2	25	10/20
~ HARTZ VARIETY H 4252RR**	17.8			1.0			28	9/30
~ SOUTHERN STATES FFR-493	17.6	29.2	38.6	1.0	1.6	1.5	28	10/3
~ TERRA TS490	16.6	20.6	29.6	1.0	2.0	2.2	31	10/23
~ UNISOUTH GENETICS USG 7499	15.4	23.5	32.6	1.0	1.8	1.7	28	10/13
~ DELTAPINE DP 4909	15.2			1.0			29	10/20
~ MANOKIN*	15.1	21.1	30.3	1.0	3.0	3.3	32	10/23
~ SOUTHERN STATES FFR-4985-ST5	10.9	16.5		1.0	2.5		31	10/21
~ TERRA RVS499	8.8			1.0			31	10/23
~ GROUP IV AVERAGE	21.4	30.3	38.6	1.0	2.3	2.1	29	9/30
~ LSD (0.10)	3.0	3.9	3.4		0.3	0.3	3	

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TABLE 4. 1999 FAYETTE CO. VARIETY TEST — ALL ENTRIES (continued).

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING			PLANT HEIGHT (IN) 1999	MATURITY DATE 1999
	1999	98-99	97-99	1999	98-99	97-99		
LATE (GROUP V)								
~ EXCEL 8510NRR*	22.9			1.0			33	10/21
~ SOUTHERN STATES RT-540N**	21.1			1.0			35	10/23
~ ASGROW AG 5001	20.0			1.0			30	10/19
HUTCHESON	19.7	21.7	30.3	1.0	2.4	2.8	34	10/23
KS 5292*	19.6	24.5	32.9	1.0	2.5	2.5	34	10/21
HOLLADAY	19.3	31.8	36.3	1.0	2.1	2.4	29	10/21
ASGROW A 5547**	19.2	20.0	27.7	1.3	2.5	2.8	36	10/23
ASGROW A 5404*	18.9			1.0			35	10/21
~ GATEWAY 5R515**	18.2			1.0			37	10/21
~ UNISOUTH GENETICS USG 7548RR**	17.7			1.3			35	10/23
~ SOUTHERN CROSS TIMOTHY	17.6			1.0			35	10/23
~ UNISOUTH GENETICS USG 7528RR	17.6			1.0			35	10/23
~ PIONEER VARIETY 95B41*	17.5			1.0			36	10/23
~ NK BRAND S53-Q7**	17.3			1.0			37	10/23
TERRA RVS549	17.3			1.0			31	10/23
~ SOUTHERN STATES RT-517N**	17.0			1.3			35	10/19
~ UNISOUTH GENETICS USG 7577RR	16.8			1.5			36	10/23
~ PIONEER VARIETY 95B32**	16.8			1.0			30	10/23
~ SOUTHERN STATES RT-560	16.7			1.3			35	10/23
DELTA KING 5580**	16.6			1.0			36	10/23
SOUTHERN STATES HT-551-ST5	16.3	16.3	25.2	1.0	2.5	2.5	33	10/23
~ TERRA TS556RR**	16.2			1.0			36	10/23
ANAND**	16.0	20.7		1.0	2.1		25	10/23
KAS CHEROKEE 516*	15.5	22.5		1.0	2.4		34	10/21
~ HYTEST HTS5426 RR**	15.1			1.3			33	10/21
~ SOUTHERN STATES RT-5485**	14.7			1.3			38	10/23
~ SOUTHERN STATES RT-557**	14.2			1.0			36	10/23
~ ASGROW AG 5401**	14.0			1.5			34	10/23
~ NK BRAND S51-T1*	14.0			1.0			36	10/23
~ DELTA KING 5661 RR**	13.9			1.0			34	10/23
~ HORNBECK HBK R5588	13.8			1.8			38	10/23
DELTA KING 5995**	13.6			1.0			38	10/23
~ UNISOUTH GENETICS USG 7557RR	13.5			1.3			36	10/23
~ DELTA KING 5664 RR**	13.2	18.2	25.4	1.0	2.1	2.5	36	10/23
~ UNISOUTH GENETICS USG 7547RR	13.0			1.5			38	10/23
~ ASGROW AG 5602**	11.5			2.0			35	10/23
TERRA TS520	11.3	17.3	27.7	1.0	2.0	1.9	30	10/23
TERRA RVSROBIN 5*	10.5			1.0			25	10/23
~ TERRA TS558RR	10.4			1.0			29	10/23
~ DELTA KING 5762 RR**	9.0			1.0			35	10/23
TERRA RVS77	8.3	19.7		1.0	2.5		33	10/23
GROUP V AVERAGE	15.8	21.3	29.4	1.1	2.3	2.5	34	10/22
LSD (0.10)	3.5	2.6	2.2	0.2	0.2	0.2	2	
GRAND MEAN	19.6	28.2	36.8	1.0	2.3	2.2	29.8	

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 5. 1999 LOGAN CO. VARIETY TEST — ALL ENTRIES^A.

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
PIONEER VARIETY 93B82	53.8			4.5		
~ WILFARM WF 290 RR	53.2			4.0		
~ CALLAHAN 9390RR**	52.6			3.5		
~ GOLDEN HARVEST H-3960RR*	52.3			4.0		
~ WILFARM WF 370 RR	52.2			3.3		
~ ASGROW A 3904**	52.0	53.0	52.5	3.0	2.8	2.2
~ PIONEER VARIETY 93B53	51.8			3.8		
~ ASGROW AG 3901**	51.2			4.5		
~ NK BRAND S39-D9	50.5			3.5		
~ ASGROW AG 3701*	49.9			3.8		
~ SOUTHERN STATES HT-381-STS	49.8	46.4	46.3	4.0	3.4	2.6
~ SOUTHERN STATES RT-3975	48.1			4.0		
~ PIONEER VARIETY 93B84	47.4			3.3		
~ TERRA TS397RR**	47.0			4.8		
~ NK BRAND S39-11**	46.2			4.0		
~ MACON	46.2	46.2	45.7	4.0	3.4	2.6
~ GOLDEN HARVEST H-3943RR	46.1			2.5		
~ SOUTHERN STATES RT-386	44.7			4.3		
~ EXCEL 8382NRR**	42.0			3.5		
GROUP III AVERAGE	49.3	48.5	48.2	3.8	3.2	2.5
LSD (0.10)	6.0	2.2	1.6	0.6	0.9	0.5
MIDSEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	58.6			3.8		
~ ASGROW A 4341	57.8	58.7	52.7	3.5	3.0	2.3
~ GATEWAY 433**	56.0			4.0		
~ GOLDEN HARVEST H-4516*	55.0			3.5		
~ DEKALB CX405RR	55.0			3.8		
~ LG 6457 C STS**	54.0			4.0		
~ HORNBECK HBK 4891	52.2			4.3		
~ ASGROW AG 4402*	52.1			4.3		
~ CALLAHAN 9454**	52.1	47.3		3.8	3.5	
~ TERRA TS438c**	51.3			4.3		
~ ASGROW AG 4501**	50.9			3.3		
~ DYNA-GRO 3468 N RR**	50.9			3.3		
~ SOUTHERN STATES FFR-439	50.0	47.8	45.8	2.8	2.5	2.0
~ STRESSLAND	50.0	52.4	50.6	4.3	3.9	2.9
~ ASGROW AG 4301**	49.7			3.5		
~ DELTA KING XTJ 784	49.6			3.8		
~ CAVERNDALE CF 486**	49.1			4.0		
~ NK BRAND S42-M1**	49.1			3.8		
~ PIONEER VARIETY 9492**	49.0	43.6	42.6	3.3	3.0	2.3
~ STINE 4001-4	49.0			4.5		
~ GATEWAY 4R453**	49.0			3.0		
~ GOLDEN HARVEST H-4115**	48.9			3.5		
~ ASGROW A 4604**	48.8	49.2		4.3	3.8	
~ CALLAHAN 9440RR**	48.5			3.3		
~ DYNA-GRO 3442 N RR**	48.4			4.5		
~ SOUTHERN STATES RT-EXP 88401**	48.0			3.3		
~ DELTA KING 4868 RR	48.0			3.3		
~ CALLAHAN 8437RR	47.9			4.3		
~ ASGROW AG 4702**	47.7			2.8		
~ HORNBECK HBK R4855	46.9			4.0		
~ ASGROW AG 4101*	46.7			4.3		
~ ASGROW AG 4902*	46.6			3.5		
~ PIONEER VARIETY 94B22**	46.6			4.0		

(continued on next page)

TABLE 5. 1999 LOGAN CO. VARIETY TEST — ALL ENTRIES^A (continued).

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
~ ASGROW AG 4602**	46.5			3.8		
~ DEKALB CX444cRR**	46.3			3.3		
~ NK BRAND S46-W8**	46.3			4.0		
~ GOLDEN HARVEST H-4404RR**	46.3			3.5		
~ SOUTHERN STATES RT-446N*	46.1			3.3		
~ LG 6430 RR	46.0			3.8		
SOUTHERN CROSS EXODUS	45.9	45.6	46.0	4.5	3.8	2.9
STINE 4702-2**	45.9			3.8		
~ EXCEL 8422 RR*	45.8			4.0		
PIONEER VARIETY 94B53**	45.7			2.8		
SOUTHERN CROSS JAMES**	45.5			4.3		
~ PIONEER VARIETY 94B01**	45.3	48.1	44.8	2.5	2.6	2.1
~ HYTEST HTS4301 RR**	45.3			3.3		
CAVERNDALE CF 492	45.3	48.0	46.3	4.0	2.9	2.3
NK BRAND S43-B5	45.0	52.8	49.4	4.3	3.9	2.9
~ WILFARM WF 480 RR**	44.8			4.3		
~ SOUTHERN STATES RT-447	44.7			3.8		
STINE 4790	44.6			4.3		
~ HYTEST HTS4725 RR	44.5			4.0		
~ HYTEST HTS4800 RR**	44.1			3.8		
SOUTHERN STATES FFR-4985-ST5	43.9	38.8		3.8	3.9	
~ DELTAPINE DP 4750 RR	43.9			3.8		
~ DELTA KING 4965 RR**	43.9			4.0		
GATEWAY 470	43.6	42.6	42.6	4.0	3.4	2.6
~ CAVERNDALE CF 443nRR**	43.4			4.5		
CALLAHAN 9474	43.2			3.8		
~ DEKALB CX433RR	43.1			3.3		
NK BRAND 3474	43.1	48.8	46.3	3.8	3.8	2.8
~ CAVERNDALE CF 481nRR**	42.9			4.3		
CAVERNDALE CF 461	42.8	46.0	44.9	3.3	3.3	2.6
~ HORNBECK HBK R4660**	42.6			2.8		
PIONEER VARIETY 9482	42.3	45.7	47.4	3.3	3.3	2.5
~ WILFARM SF 477 RR**	42.0			3.3		
SOUTHERN STATES FFR-493	41.7	45.1	45.4	2.3	2.5	2.0
~ HARTZ VARIETY H 4252RR**	41.4			4.0		
ASGROW A 4922**	41.3	31.8	34.2	3.0	3.1	2.4
~ SOUTHERN CROSS MICAH**	41.2			3.0		
~ UNISOUTH GENETICS USG 7478RR**	41.2			2.8		
~ DEKALB CX414cRR*	40.6			3.8		
PHARAOH**	40.4	39.2	42.8	2.8	2.5	2.0
CALHOUN	39.7	48.6	46.8	2.5	1.9	1.6
~ DELTA KING 4762 RR**	39.5	29.7	31.3	2.8	2.6	2.1
~ CAVERNDALE CF 465nRR**	39.5			3.0		
UNISOUTH GENETICS USG 7499	39.5	40.3	41.8	3.8	3.1	2.4
HORNBECK HBK 4890	39.0			2.5		
~ CALLAHAN 9480RR	37.9			3.5		
DELTAPINE DP 4909	37.6			2.0		
~ ASGROW AG 4901**	37.4			3.5		
TERRA TS466RR**	37.4			2.5		
~ DELTAPINE DP 4344 RR	36.9			3.3		
~ LG 6485 RR	36.7			3.3		
TERRA TS4792**	36.4	34.6		3.5	3.3	
~ EXCEL 8461 RR*	36.4			4.3		
TERRA TS490	35.4	33.2	37.2	3.8	3.3	2.6
MANOKIN*	35.2	36.3	40.4	3.0	2.9	2.6
TERRA RVS499	27.4			3.0		
GROUP IV AVERAGE	45.1	43.9	44.0	3.6	3.2	2.4
LSD (0.10)	5.7	2.6	3.5	0.5	0.2	0.3

(continued on next page)

TABLE 5. 1999 LOGAN CO. VARIETY TEST — ALL ENTRIES^A (continued).

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
~ ASGROW AG 5001	37.7			3.8		
HUTCHESON	37.5	38.1	42.6	3.8	3.4	2.8
KAS CHEROKEE 516*	37.0	37.6		3.3	3.0	
TERRA RVS77	36.9	34.4		4.0	3.8	
ASGROW A 5404*	36.5			4.5		
DELTA KING 5995**	36.4			4.0		
~ SOUTHERN STATES RT-517N**	36.3			3.3		
~ TERRA TS556RR**	35.5			3.8		
~ SOUTHERN STATES RT-560	35.4			4.0		
~ SOUTHERN STATES RT-540N**	35.3			3.0		
~ HORNBECK HBK R5588	34.9			3.8		
~ UNISOUTH GENETICS USG 7547RR	34.4			3.5		
DELTA KING 5580**	33.5			4.3		
ASGROW A 5547**	33.3	36.4	38.7	3.5	3.3	2.8
~ PIONEER VARIETY 95B32**	33.2			3.3		
~ DELTA KING 5762 RR**	33.2			4.0		
~ SOUTHERN STATES RT-557**	33.0			4.0		
~ SOUTHERN CROSS TIMOTHY	33.0			3.3		
~ HYTEST HTS5426 RR**	32.7			3.8		
~ UNISOUTH GENETICS USG 7528RR	32.6			3.8		
~ PIONEER VARIETY 95B41*	32.4			4.0		
~ ASGROW AG 5401**	32.3			4.0		
~ UNISOUTH GENETICS USG 7557RR	31.7			3.5		
~ DELTA KING 5664 RR**	31.6	33.8	37.4	3.0	2.8	2.3
KS 5292*	31.1	30.7	33.6	3.5	2.9	2.3
~ UNISOUTH GENETICS USG 7548RR**	30.8			3.3		
~ NK BRAND S53-Q7**	30.7			3.5		
~ UNISOUTH GENETICS USG 7577RR	30.4			3.5		
~ DELTA KING 5661 RR**	30.2			3.8		
SOUTHERN STATES HT-551-STS	30.2	31.2	36.6	2.5	2.1	1.8
~ ASGROW AG 5602**	29.6			3.0		
ANAND**	29.0	33.9		3.0	3.0	
~ NK BRAND S51-T1*	28.9			4.0		
~ TERRA TS558RR	28.9			4.5		
~ EXCEL 8510NRR*	28.1			3.0		
HOLLADAY	28.1	34.6	38.9	4.5	4.0	3.1
TERRA RVSROBIN 5*	27.5			4.5		
TERRA TS520	27.4	33.4	36.5	3.8	3.4	2.6
TERRA RVS549	25.8			3.3		
~ SOUTHERN STATES RT-5485**	23.9			3.8		
~ GATEWAY 5R515**	22.9			3.5		
GROUP V AVERAGE	31.9	34.4	37.8	3.7	3.2	2.5
LSD (0.10)	5.4	3.0	2.3	0.7	0.5	0.4
GRAND MEAN	42.0	41.7	42.9	3.6	3.2	2.4

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A 1997 and 1998 data are from Hardin Co., and the 1999 data are from Logan Co.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 6. 1999 DAVIESS CO. VARIETY TEST — ALL ENTRIES.

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III) This maturity group data (average 13.5 bu/ac) dropped due to excessive variability caused by the drought.						
MIDSEASON (GROUP IV) This maturity group data (average 19.9 bu/ac) dropped due to excessive variability caused by the drought.						
LATE (GROUP V)						
HOLLADAY	49.0	56.4	57.2	1.0	2.3	1.9
HUTCHESON	44.9	57.8	49.3	1.0	2.3	2.2
ASGROW A 5547**	43.8	55.7	56.6	1.0	2.3	2.0
ANAND**	43.4	56.4		1.0	2.0	
~ ASGROW AG 5001	42.3			1.0		
~ TERRA TS556RR**	42.3			1.0		
~ SOUTHERN STATES RT-540N**	42.0			1.0		
TERRA RVS77	41.4	51.8		1.0	2.3	
~ SOUTHERN STATES RT-5485**	41.4			1.0		
DELTA KING 5580**	41.0			1.0		
DELTA KING 5995**	40.7			1.0		
~ SOUTHERN CROSS TIMOTHY	39.9			1.0		
~ EXCEL 8510NRR*	39.9			1.0		
KS 5292*	39.5	49.0	49.0	1.0	2.0	1.7
~ PIONEER VARIETY 95B41*	39.4			1.0		
~ NK BRAND S53-Q7**	39.4			1.0		
~ PIONEER VARIETY 95B32**	39.1			1.0		
~ GATEWAY 5R515**	39.0			1.0		
~ UNISOUTH GENETICS USG 7548RR**	38.8			1.0		
TERRA RVS549	38.6			1.0		
~ UNISOUTH GENETICS USG 7547RR	38.4			1.0		
~ HYTEST HTS5426 RR**	38.4			1.0		
SOUTHERN STATES HT-551-ST5	38.2	52.7	54.9	1.0	1.8	1.8
ASGROW A 5404*	37.7			1.0		
~ ASGROW AG 5602**	37.6			1.0		
~ UNISOUTH GENETICS USG 7557RR	37.5			1.0		
~ UNISOUTH GENETICS USG 7577RR	37.2			1.0		
~ SOUTHERN STATES RT-557**	36.6			1.0		
~ ASGROW AG 5401**	36.0			1.0		
~ SOUTHERN STATES RT-517N**	35.5			1.0		
~ HORNBECK HBK R5588	35.5			1.0		
~ SOUTHERN STATES RT-560	35.4			1.0		
~ DELTA KING 5762 RR**	34.5			1.0		
~ TERRA TS558RR	34.4			1.0		
~ DELTA KING 5664 RR**	34.3	49.9	43.7	1.0	2.0	2.1
~ UNISOUTH GENETICS USG 7528RR	34.3			1.0		
TERRA TS520	33.8	45.6	49.0	1.0	2.3	1.9
~ DELTA KING 5661 RR**	33.0			1.0		
KAS CHEROKEE 516*	32.9	44.4		1.0	1.8	
TERRA RVSROBIN 5*	29.0			1.0		
~ NK BRAND S51-T1*	27.8			1.0		
GROUP V AVERAGE	38.1	52.0	51.4	1.0	2.1	1.9
LSD (0.10)	5.8	4.6	3.2		0.3	0.3

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 7. 1999 CALDWELL CO. DOUBLE CROP VARIETY TEST — ALL ENTRIES.

VARIETY / BRAND	YIELD (BU/AC) ^A 1999	LODGING 1999
EARLY (GROUP III)		
PIONEER VARIETY 93B82	47.6	1.8
ASGROW A 3904**	40.4	1.5
~ PIONEER VARIETY 93B53	40.2	1.0
~ CALLAHAN 9390RR**	38.4	1.5
~ ASGROW AG 3701*	38.2	1.0
SOUTHERN STATES HT-381-STS	38.1	1.8
~ SOUTHERN STATES RT-386	37.8	2.0
~ ASGROW AG 3901**	37.0	2.0
MACON	37.0	1.5
~ WILFARM WF 290 RR	36.6	2.0
~ PIONEER VARIETY 93B84	36.5	1.0
~ TERRA TS397RR**	36.2	2.3
~ GOLDEN HARVEST H-3960RR*	34.0	1.8
~ SOUTHERN STATES RT-3975	34.0	1.0
NK BRAND S39-11**	33.9	2.5
~ WILFARM WF 370 RR	33.4	1.0
~ GOLDEN HARVEST H-3943RR	31.8	1.3
~ EXCEL 8382NRR**	30.5	1.5
~ NK BRAND S39-D9	30.2	1.0
GROUP III AVERAGE	36.4	1.6
LSD (0.10)	5.3	0.4
MIDSEASON (GROUP IV) This maturity group data (average 24.8 bu/ac) dropped due to excessive variability caused by the drought.		
LATE (GROUP V) This maturity group data (average 15.4 bu/ac) dropped due to excessive variability caused by the drought.		

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 8. 1999 FAYETTE CO. ROUNDUP READY VARIETY TEST.

VARIETY / BRAND	YIELD (BU/AC) ^A		LODGING		PLANT HEIGHT (IN)	MATURITY DATE
	1999	98-99	1999	98-99	1999	1999
EARLY (GROUP III)						
ASGROW AG 3701*	23.2		1.0		24	9/16
SOUTHERN STATES RT-386	21.9	28.4	1.0	2.3	25	9/21
PIONEER VARIETY 93B53	21.3		1.0		22	9/15
GOLDEN HARVEST H-3960RR*	20.0		1.0		23	9/18
CALLAHAN 9390RR**	19.8		1.0		27	9/15
ASGROW AG 3901**	19.7		1.0		24	9/17
EXCEL 8382NRR**	19.5	29.8	1.0	2.4	21	9/16
TERRA TS397RR**	19.5		1.0		26	9/17
NK BRAND S39-D9	19.4		1.0		21	9/15
PIONEER VARIETY 93B84	19.3		1.0		24	9/18
SOUTHERN STATES RT-3975	18.7	28.7	1.0	2.3	26	9/16
WILFARM WF 290 RR	18.2		1.0		25	9/7
WILFARM WF 370 RR	17.0		1.0		21	9/15
GOLDEN HARVEST H-3943RR	16.6		1.0		22	9/17
GROUP III AVERAGE	19.6	28.9	1.0	2.3	24	9/16
LSD (0.10)	2.1	2.4		0.1	2	
MIDSEASON (GROUP IV)						
NK BRAND S46-W8**	24.4	28.1	1.0	2.3	28	9/22
CALLAHAN 8437RR	23.8	31.8	1.0	1.9	26	9/22
EXCEL 8422 RR*	23.3	29.4	1.0	1.8	25	9/22
GATEWAY 4R453**	22.8		1.0		30	9/23
HORNBECK HKB R4855	22.6		1.0		28	9/23
HYTEST HTS4301 RR**	22.1		1.0		27	9/21
PIONEER VARIETY 94B01**	20.6	25.6	1.0	1.8	25	9/23
LG 6430 RR	20.5		1.0		28	9/23
CAVERNDALE CF 443nRR**	20.0		1.0		27	9/23
DELTAPINE DP 4344 RR	19.3	21.5	1.0	2.4	34	9/24
STINE 4001-4	19.3		1.0		23	9/20
CAVERNDALE CF 465nRR**	19.0		1.0		30	9/23
DEKALB CX414cRR*	19.0	26.7	1.0	2.2	24	9/23
EXCEL 8461 RR*	18.8		1.0		25	9/23
DYNA-GRO 3468 N RR**	18.7		1.0		24	9/25
DEKALB CX405RR	18.3		1.0		28	9/18
DEKALB CX433RR	17.8		1.0		30	9/22
ASGROW AG 4101*	17.6		1.0		25	9/23
TERRA TS466RR**	17.6	19.6	1.0	2.0	29	9/27
ASGROW AG 4702**	17.2	26.1	1.0	1.9	27	9/24
DYNA-GRO 3442 N RR**	17.2		1.0		24	9/24
HYTEST HTS4725 RR	17.2		1.0		27	9/23
PIONEER VARIETY 9492**	17.1	23.8	1.0	1.9	24	9/25
DEKALB CX444cRR**	17.0	27.9	1.0	2.1	25	6/27
NK BRAND S42-M1**	16.8	25.5	1.0	2.1	27	9/24
SOUTHERN STATES RT-446N*	16.8		1.0		26	9/24
WILFARM SF 477 RR**	16.8		1.0		25	9/28
HYTEST HTS4800 RR**	16.6	24.3	1.0	2.3	29	9/25
SOUTHERN CROSS MICAH**	16.6		1.0		30	9/24
LG 6485 RR	16.4		1.0		26	9/26
CALLAHAN 9480RR	16.3	24.5	1.0	2.3	25	9/23
DELTA KING 4762 RR**	16.3		1.0		27	9/27
ASGROW AG 4602**	16.2	25.2	1.0	2.1	26	9/25

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TABLE 8. 1999 FAYETTE CO. ROUNDUP READY VARIETY TEST (continued).

VARIETY / BRAND	YIELD (BU/AC) ^A		LODGING		PLANT HEIGHT (IN)	MATURITY DATE
	1999	98-99	1999	98-99	1999	1999
SOUTHERN STATES RT-EXP 88401**	16.0		1.0		20	9/26
DELTA KING 4965 RR**	15.8		1.0		24	9/27
SOUTHERN STATES RT-447	15.7	23.8	1.0	2.1	26	9/21
ASGROW AG 4301**	15.5		1.0		22	9/25
CALLAHAN 9440RR**	15.5	26.6	1.0	2.0	25	9/23
DELTAPINE DP 4750 RR	15.4	23.7	1.0	2.3	29	9/26
HORNBECK HBK R4660**	15.4		1.0		31	9/27
UNISOUTH GENETICS USG 7478RR**	15.2		1.0		29	9/27
CAVERNDAL CF 481nRR**	14.8		1.0		27	9/27
ASGROW AG 4402*	14.7		1.0		26	9/24
ASGROW AG 4902*	14.6		1.0		25	9/26
HARTZ VARIETY H 4252RR**	14.6		1.0		32	9/24
WILFARM WF 480 RR**	14.4		1.0		26	9/25
ASGROW AG 4501**	13.7	24.8	1.0	2.5	26	9/27
GOLDEN HARVEST H-4404RR**	13.4		1.0		26	9/23
ASGROW AG 4901**	13.2	22.7	1.0	2.3	27	9/28
DELTA KING 4868 RR	12.7		1.0		24	9/29
GROUP IV AVERAGE	17.4	25.3	1.0	2.1	27	9/22
LSD (0.10)	3.1	3.3		0.2	2.0	

LATE (GROUP V) This maturity group data (average 8.4 bu/ac) dropped due to excessive variability caused by the drought.

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 9. 1999 DAVIESS CO. SOYBEAN CYST NEMATODE VARIETY TEST.

VARIETY / BRAND	YIELD (BU/AC) ^A		LODGING		PLANT HEIGHT (IN) 1999	1999 SCN EGG DENSITIES/100CC SOIL			1999 REPORTED SCN RESISTANCE ^C
	1999	98-99	1999	98-99		PLANTING (Pi)	HARVEST (Pf)	Pf-Pi ^B	
EARLY (GROUP III)									
ASGROW A 3904	60.0		1.8		42	2900	10127	+7227	3, MR-14
~ GOLDEN HARVEST H-3960RR	56.0		2.5		43	2840	24573	+21733	3
~ ASGROW AG 3701	54.6		1.7		37	2370	2560	+190	3, MR-14
~ TERRA TS397RR	53.9		3.2		41	1850	3187	+1337	3, 14
~ ASGROW AG 3901	52.4		2.5		40	2420	4453	+2033	3
~ NK BRAND S39-11	52.4		2.2		41	1960	2640	+680	3, 14
~ EXCEL 8382N RR	51.6		2.2		44	3490	7560	+4070	MR-3, MS-14
~ CALLAHAN 9390RR	45.6		1.7		41	2770	7213	+4443	3, 14
MACON	45.1		1.7		38	1620	5220	+3600	SUS
GROUP III AVERAGE	52.4		2.1		41				
LSD (0.10)	2.7		0.3		2				
MIDSEASON (GROUP IV)									
PIONEER VARIETY 94B53	55.2		1.7		40	4740	5973	+1233	3, 14
~ DELTA KING 4965 RR	49.9		1.2		35	8020	3507	-4513	3, 14
~ DEKALB CX444cRR	49.3		1.2		37	5360	5427	+67	3, 14
~ CAVERNDALE CF 465nRR	49.2	52.2	1.5	1.8	42	3640	2787	-853	3, 14
~ HYTEST HTS4800 RR	48.2		1.7		45	4310	4367	+57	3, 14
MANOKIN	47.6	53.2	1.2	2.2	34	4700	1030	-3670	3
~ CAVERNDALE CF 481nRR	45.1		1.7		41	5470	2200	-3270	3, 14
~ ASGROW AG 4702	45.0		1.2		37	4260	2600	-1660	3, 14
GATEWAY 433	44.3		1.5		34	4730	1360	-3370	3, 14
STINE 4702-2	44.1		1.8		45	11510	2940	-8570	3, 14
TERRA TS438c	43.9		2.3		36	7130	2587	-4543	3, 14
PIONEER VARIETY 94B22	43.5		2.2		40	3130	4587	+1457	3, 14
~ WILFARM WF 480 RR	43.2		1.5		36	4140	5780	+1640	3, MR-14
TERRA TS4792	42.6		1.5		47	6100	2020	-4080	3, 14
~ ASGROW AG 4501	42.2		1.8		40	3620	2600	-1020	MR-3, 14
~ ASGROW AG 4301	41.8		1.0		32	2780	5987	+3207	3, 14
GOLDEN HARVEST H-4516	41.7		1.8		38	3610	6313	+2703	3
~ ASGROW AG 4101	41.4		1.7		37	6990	2180	-4810	3
~ DYNA-GRO 3468 N RR	41.4		1.0		31	3570	3027	-543	3, 14
PHARAOH	41.4	47.2	1.0	1.3	26	3590	2200	-1390	3, 14
CAVERNDALE CF 486	41.3		1.3		41	3190	6960	+3080	3, 14
ASGROW A 4604	41.2		1.8		37	3930	3260	-670	3, MR-14
~ ASGROW AG 4902	40.9		1.0		33	5750	4273	-1477	3
~ SOUTHERN STATES RT-446N	40.3		1.2		35	3920	4167	+247	3
~ TERRA TS466RR	40.2		1.0		36	3190	3697	+507	3, 14
~ HARTZ VARIETY H 4252RR	40.2		1.5		38	3460	2193	-1267	3, 9, 14
~ PIONEER VARIETY 9492	40.1		1.0		33	4030	6553	+2523	3, 14
~ EXCEL 8422 RR	39.7		1.0		42	6890	8513	+1623	MS-3
~ ASGROW AG 4901	39.5		1.8		41	6970	1967	-5003	3, 14
~ CALLAHAN 9440RR	39.3		2.2		41	3460	4010	+550	3, MR-14
~ WILFARM SF 477 RR	39.3		1.0		35	5040	3547	-1493	3, 14
SOUTHERN CROSS JAMES	38.9	45.5	1.5	1.7	40	5290	2520	-2770	3, 14
~ DELTA KING 4762 RR	38.8		1.7		42	4460	7140	+2680	3, 14
~ DYNA-GRO 3442 N RR	38.8		1.8		36	5680	6500	+820	3, 14
~ NK BRAND S46-W8	38.1		1.3		37	4430	3647	-783	3, 14
~ ASGROW AG 4602	38.0		1.3		30	3550	1953	-1597	3, 4, 14
GOLDEN HARVEST H-4115	38.0		1.5		37	4690	6980	+2290	3, 14
ASGROW A 4922	38.0		1.8		42	4060	3310	-750	3, 14
~ UNISOUTH GENETICS USG 7478RR	37.9		1.3		39	3850	3200	-650	3, MR-14
~ ASGROW AG 4402	37.8		1.5		34	3880	6960	+3080	3
~ PIONEER VARIETY 94B01	37.5		1.0		33	4940	3660	-1280	3, 14
~ SOUTHERN STATES RT-EXP 88401	37.2		1.3		31	6360	1837	-4523	3, 14
~ NK BRAND S42-M1	36.9		1.2		37	2610	2340	-270	3, 14
~ CAVERNDALE CF 443nRR	36.0		1.5		38	2360	9580	+7220	3, 14
~ GOLDEN HARVEST H-4404RR	35.5		1.7		38	4190	4200	+10	3, 14
~ HORNBECK HBK R4660	33.8		1.2		37	4500	1273	-3227	3, MR-14
CALLAHAN 9454	33.7	41.2	1.7	1.5	35	4630	23313	+18683	3, 14
~ SOUTHERN CROSS MICAH	33.3		1.2		37	3540	3567	+27	3, 14
~ GATEWAY 4R453	31.9		1.0		32	5160	4980	-180	3, MR-14
GOLDEN HARVEST H-4459STS	31.6		1.2		33	7860	4420	-3440	3, 14
~ DEKALB CX414cRR	31.6		1.7		38	4440	6260	+1820	3
~ HYTEST HTS4301 RR	29.1		1.5		35	3130	5667	+2537	3, 14
LG 6457 C STS	28.7		1.2		33	4190	18320	+14130	3, 14
~ EXCEL 8461 RR	28.6		1.2		36	7480	10840	+3360	MS-3
CALHOUN	20.6	29.8	1.0	1.0	21	3930	17240	+13310	SUS
GROUP IV AVERAGE	39.5	44.8	1.4	1.6	37				
LSD (0.10)	5.9	3.5	0.4	0.0	4.0				

(continued on next page)

TABLE 9. 1999 DAVIESS CO. SOYBEAN CYST NEMATODE VARIETY TEST (continued).

VARIETY / BRAND	YIELD (BU/AC) ^A		LODGING		PLANT HEIGHT (IN) 1999	1999 SCN EGG DENSITIES/100CC SOIL			1999 REPORTED SCN RESISTANCE ^C
	1999	98-99	1999	98-99		PLANTING (Pi)	HARVEST (Pf)	Pf-Pi ^B	
LATE (GROUP V)									
~ SOUTHERN STATES RT-517N	55.3	57.7	1.8	2.1	39	2030	6460	+4430	3, 14
ASGROW A 5404	55.1		1.5		37	3760	4647	+887	3
ANAND	55.1	59.8	1.0	1.7	32	4820	5753	+933	3, 5, 14
~ ASGROW AG 5602	54.9		2.5		37	2980	2100	-880	3, 14
ASGROW A 5547	54.3		2.5		35	4570	2867	-1703	3, 14
~ UNISOUTH GENETICS USG 7548RR	52.8		2.2		41	2470	20033	+17563	3, 14
~ SOUTHERN STATES RT-540N	52.7		2.3		39	2430	3307	+877	3, 14
~ SOUTHERN STATES RT-557	52.1	54.2	3.0	2.9	44	2760	5893	+3133	3, 14
~ TERRA TS556RR	50.8		1.8		41	4290	2800	-1490	3, 14
KAS CHEROKEE 516	50.6	50.5	1.5	1.3	32	2610	2873	+263	3, 14
DELTA KING 5580	49.5		2.8		39	1900	7213	+5313	3
DELTA KING 5995	49.2		2.5		37	2970	1880	-1090	1, 3, 4, 9,
~ NK BRAND S53-Q7	47.8		1.2		33	1380	12020	+10640	3, 14
~ GATEWAY 5R515	47.7		1.7		38	3380	6293	+2913	3, 9, 14
TERRA RVSROBIN 5	47.4		2.7		36	2620	1093	-1527	3, 4, 14
~ HYTEST HTS5426 RR	47.4		2.2		41	2300	11660	+9360	3
~ DELTA KING 5664 RR	47.1		2.3		41	2870	3027	+157	3, 14
~ DELTA KING 5762 RR	45.8		3.0		42	2480	6453	+3973	3, 14
~ PIONEER VARIETY 95B32	45.7		1.7		31	3000	5440	+2440	3, 14
~ DELTA KING 5661 RR	45.1		3.0		40	2820	6600	+3780	3, MR-14
~ ASGROW AG 5401	43.8		1.7		38	1880	2720	+840	MS-3
~ EXCEL 8510NRR	43.1		1.7		46	2250	16140	+13890	3, 14
~ PIONEER VARIETY 95B41	42.1		2.3		36	1830	16153	+14323	3
KS 5292	41.6	48.4	2.3	1.8	34	2940	2947	+7	3
~ SOUTHERN STATES RT-5485	38.8		1.5		38	3290	20647	+17357	3, 14
~ NK BRAND S51-T1	35.5		2.5		47	4240	6583	+2343	3
HUTCHESON	35.3	43.2	1.0	1.3	34	3750	9897	+6147	SUS
GROUP V AVERAGE	47.7	52.3	2.1	1.9	38				
LSD (0.10)	6.3	3.6	0.5	0.3	3				
GRAND MEAN	39.3	48.5							

~ Roundup Ready variety

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

^B 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.

^C Resistance to cyst nematode races as reported by the companies. Race 3 and Race 14 are the predominant races in Kentucky.

SUS—susceptible to SCN MS—moderately susceptible MR—moderately resistant

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

A race test performed from this field in 1997 indicated the presence of SCN Race 3.

TABLE 10. 1999 KENTUCKY SOYBEAN PERFORMANCE TEST PROTEIN AND OIL COMPOSITION^A.

VARIETY / BRAND	PROTEIN%	OIL%	VARIETY / BRAND	PROTEIN%	OIL%
ANAND**	38.4	15.4	~ HYTEST HTS4800 RR**	36.8	17.9
ASGROW A 3904**	35.5	17.7	~ HYTEST HTS5426 RR**	36.8	16.3
ASGROW A 4341	35.4	18.0	KAS CHEROKEE 516*	36.5	17.1
ASGROW A 4604**	37.3	18.3	KS 5292*	35.3	17.0
ASGROW A 4922**	38.6	17.6	~ LG 6430 RR	34.2	17.9
ASGROW A 5404*	36.7	16.2	LG 6457 C STS**	35.6	17.5
ASGROW A 5547**	36.8	14.1	~ LG 6485 RR	35.1	18.1
~ ASGROW AG 3701*	35.4	18.4	MACON	35.0	18.1
~ ASGROW AG 3901**	36.9	17.0	MANOKIN*	35.9	16.8
~ ASGROW AG 4101*	37.1	18.1	NK BRAND 3474	33.5	18.7
~ ASGROW AG 4301**	37.1	18.3	NK BRAND S39-11**	37.9	17.8
~ ASGROW AG 4402*	36.5	17.9	~ NK BRAND S39-D9	35.5	17.8
~ ASGROW AG 4501**	35.5	18.2	~ NK BRAND S42-M1**	36.6	17.7
~ ASGROW AG 4602**	34.8	17.8	NK BRAND S43-B5	37.4	17.6
~ ASGROW AG 4702**	37.7	18.1	~ NK BRAND S46-W8**	35.6	16.9
~ ASGROW AG 4901**	37.7	18.0	~ NK BRAND S51-T1*	37.6	16.8
~ ASGROW AG 4902*	37.1	16.7	~ NK BRAND S53-Q7**	39.5	14.5
~ ASGROW AG 5001	36.3	17.7	PHARAOH**	36.7	18.3
~ ASGROW AG 5401**	37.5	16.0	~ PIONEER VARIETY 93B53	35.3	18.1
~ ASGROW AG 5602**	34.7	17.0	PIONEER VARIETY 93B82	36.2	18.5
CALHOUN	36.8	17.9	~ PIONEER VARIETY 93B84	36.4	19.3
~ CALLAHAN 8437RR	37.2	18.4	PIONEER VARIETY 9482	36.2	16.5
~ CALLAHAN 9390RR**	37.2	18.7	~ PIONEER VARIETY 9492**	36.4	18.6
~ CALLAHAN 9440RR**	35.1	18.0	~ PIONEER VARIETY 94B01**	37.1	18.9
CALLAHAN 9454**	35.0	17.8	PIONEER VARIETY 94B22**	35.7	18.2
CALLAHAN 9474	34.1	18.6	PIONEER VARIETY 94B53**	37.0	17.5
~ CALLAHAN 9480RR	34.7	18.3	~ PIONEER VARIETY 95B32**	37.9	15.9
~ CAVERNDALE CF 443nRR**	36.1	17.6	~ PIONEER VARIETY 95B41*	38.2	15.7
CAVERNDALE CF 461	35.0	17.8	SOUTHERN CROSS EXODUS	36.2	17.9
~ CAVERNDALE CF 465nRR**	37.4	17.2	SOUTHERN CROSS JAMES**	35.9	17.6
~ CAVERNDALE CF 481nRR**	35.3	17.1	~ SOUTHERN CROSS MICAH**	39.1	16.3
CAVERNDALE CF 486n**	35.0	18.4	~ SOUTHERN CROSS TIMOTHY	35.0	15.0
CAVERNDALE CF 492	36.6	17.6	SOUTHERN STATES FFR-439	34.8	18.0
~ DEKALB CX405RR	34.4	17.4	SOUTHERN STATES FFR-493	36.2	17.7
~ DEKALB CX414cRR*	35.4	17.9	SOUTHERN STATES FFR-4985-ST5	34.6	18.1
~ DEKALB CX433RR	33.9	18.2	SOUTHERN STATES HT-381-ST5	36.9	17.6
~ DEKALB CX444cRR**	36.0	18.4	SOUTHERN STATES HT-551-ST5	38.0	16.6
~ DELTA KING 4762 RR**	38.9	17.9	~ SOUTHERN STATES RT-386	35.7	18.5
~ DELTA KING 4868 RR	34.9	17.0	~ SOUTHERN STATES RT-3975	37.9	17.6
~ DELTA KING 4965 RR**	38.2	17.8	~ SOUTHERN STATES RT-446N*	37.1	17.5
DELTA KING 5580**	36.0	16.8	~ SOUTHERN STATES RT-447	35.0	17.2
~ DELTA KING 5661 RR**	38.0	15.5	~ SOUTHERN STATES RT-517N**	36.3	17.5
~ DELTA KING 5664 RR**	38.2	16.1	~ SOUTHERN STATES RT-540N**	38.0	14.6
~ DELTA KING 5762 RR**	35.3	16.7	~ SOUTHERN STATES RT-5485**	38.0	15.7
DELTA KING 5995**	36.5	15.8	~ SOUTHERN STATES RT-557**	35.3	17.5
DELTA KING XTJ 784	34.6	18.4	~ SOUTHERN STATES RT-560	36.6	16.6
~ DELTAPINE DP 4344 RR	36.1	17.8	~ SOUTHERN STATES RT-EXP 88401**	37.3	18.3
~ DELTAPINE DP 4750 RR	34.5	18.8	~ STINE 4001-4	34.8	18.7
DELTAPINE DP 4909	38.7	15.9	STINE 4702-2**	34.7	17.9
~ DYNA-GRO 3442 N RR**	36.2	17.6	STINE 4790	36.2	17.8
~ DYNA-GRO 3468 N RR**	35.9	17.9	STRESSLAND	37.3	18.4
~ EXCEL 8382NRR**	35.7	18.5	TERRA RVS499	35.5	17.0
~ EXCEL 8422 RR*	36.5	17.6	TERRA RVS549	39.2	15.6
~ EXCEL 8461 RR*	35.5	17.3	TERRA RVS77	37.5	18.2
~ EXCEL 8510NRR*	36.7	15.5	TERRA RVSROBIN 5*	36.8	16.2
GATEWAY 433**	36.7	17.9	~ TERRA TS397RR**	35.7	18.2
GATEWAY 470	35.0	19.0	TERRA TS438c**	36.9	17.8
~ GATEWAY 4R453**	35.4	17.3	~ TERRA TS466RR**	37.4	16.8
~ GATEWAY 5R515**	39.6	14.9	TERRA TS4792**	37.0	18.0
~ GOLDEN HARVEST H-3943RR	35.8	17.9	TERRA TS490	37.1	16.8
~ GOLDEN HARVEST H-3960RR*	35.4	18.5	TERRA TS520	36.5	15.9
GOLDEN HARVEST H-4115**	34.8	17.8	~ TERRA TS556RR**	36.7	16.3
~ GOLDEN HARVEST H-4404RR**	36.3	17.7	~ TERRA TS558RR	35.2	15.6
GOLDEN HARVEST H-4459ST5**	36.2	18.3	~ UNISOUTH GENETICS USG 7478RR**	38.4	16.7
GOLDEN HARVEST H-4516*	36.1	18.8	UNISOUTH GENETICS USG 7499	37.4	16.6
~ HARTZ VARIETY H 4252RR**	37.8	17.9	~ UNISOUTH GENETICS USG 7528RR	35.1	17.0
HOLLADAY	36.9	15.3	~ UNISOUTH GENETICS USG 7547RR	37.6	15.6
HORNBECK HBK 4890	35.3	17.5	~ UNISOUTH GENETICS USG 7548RR**	37.1	16.7
HORNBECK HBK 4891	35.1	18.2	~ UNISOUTH GENETICS USG 7557RR	36.3	17.0
~ HORNBECK HBK R4660**	38.7	16.2	~ UNISOUTH GENETICS USG 7577RR	37.3	15.4
~ HORNBECK HBK R4855	35.3	18.4	~ WILFARM SF 477 RR**	37.7	17.6
~ HORNBECK HBK R5588	36.6	17.7	~ WILFARM WF 290 RR	35.5	19.0
HUTCHESON	35.8	17.7	~ WILFARM WF 370 RR	36.8	17.4
~ HYTEST HTS4301 RR**	36.4	17.6	~ WILFARM WF 480 RR**	35.3	17.9
~ HYTEST HTS4725 RR	34.2	18.2			

^A Variety protein and oil concentration was determined at the Logan Co. location and expressed on the basis of 13% moisture. The mean protein concentration was 36.4%, and the mean oil concentration was 17.4%.

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

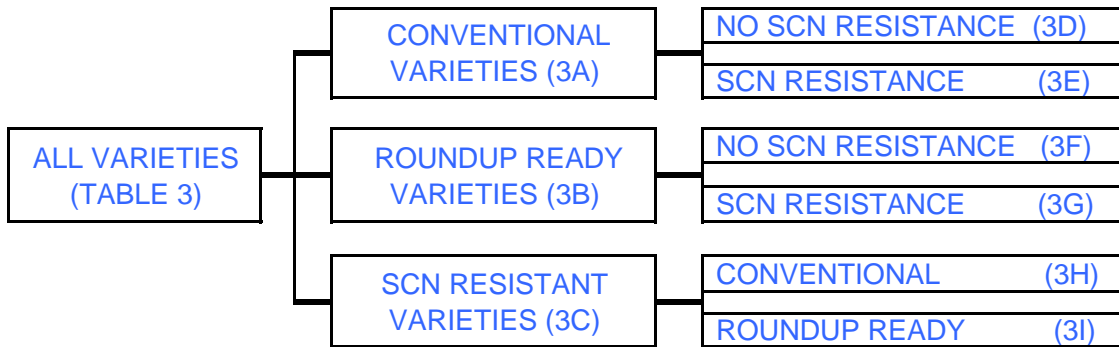
** Resistant to the soybean cyst nematode (Race 3 and Race 14)



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**SELECTION KEY TO CREATE SUBSETS OF TABLE 3
(1999 SUMMARY OF THE CONVENTIONAL TEST TABLES 4-7)**



Selected varieties found by using this key should also be found in the summary table containing all varieties (table 3) to observe potential yield loss by the chosen key restraints. The selected variety can be easily located in table 3 by finding it's 1999 yield in the appropriate maturity group.

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TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7 ALL ENTRIES

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
PIONEER VARIETY 93B82	41.8			2.4		
ASGROW A 3904**	38.8	45.9	48.6	1.8	2.0	1.7
~ PIONEER VARIETY 93B53	38.5			1.9		
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ WILFARM WF 290 RR	36.5			2.3		
SOUTHERN STATES HT-381-STS	36.2	38.5	43.4	2.3	2.3	1.9
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ SOUTHERN STATES RT-386	35.3			2.4		
~ WILFARM WF 370 RR	35.1			1.8		
~ PIONEER VARIETY 93B84	34.9			1.8		
MACON	34.7	42.5	46.0	2.2	2.1	1.7
~ TERRA TS397RR**	34.4			2.7		
~ SOUTHERN STATES RT-3975	33.6			2.0		
~ NK BRAND S39-D9	33.4			1.8		
NK BRAND S39-11**	33.4			2.5		
~ GOLDEN HARVEST H-3943RR	31.1			1.6		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.5	42.3	46.0	2.1	2.1	1.8
LSD (0.10)	2.8	2.6	1.9	0.2	0.3	0.1
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
ASGROW A 4341	40.7	49.6	49.9	2.3	1.9	1.5
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
HORNBECK HBK 4891	38.1			2.6		
~ DEKALB CX405RR	37.9			2.4		
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
GOLDEN HARVEST H-4115**	37.2			2.3		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
DELTA KING XTJ 784	36.7			2.4		
STRESSLAND	36.6	45.0	47.6	2.6	2.5	2.0
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
ASGROW A 4604**	35.9	42.3		2.4	2.9	
~ STINE 4001-4	35.8			2.8		
~ DELTA KING 4868 RR	35.6			2.1		
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
NK BRAND S43-B5	34.9	46.5	48.0	2.6	2.5	1.8
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
~ LG 6430 RR	34.6			2.4		
SOUTHERN STATES FFR-439	34.6	43.7	46.7	1.9	2.2	1.8
PIONEER VARIETY 94B22**	34.4			2.5		
CAVERNDALE CF 486**	34.3			2.5		

TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7 ALL ENTRIES

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
GATEWAY 470	34.1	37.0	44.2	2.5	2.9	2.2
~ CALLAHAN 8437RR	34.0			2.6		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ HORNBECK HBK R4855	33.8			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ DELTAPINE DP 4750 RR	33.4			2.4		
CALLAHAN 9474	33.3			2.4		
~ EXCEL 8422 RR*	33.3			2.5		
SOUTHERN CROSS JAMES**	33.1			2.6		
~ ASGROW AG 4602**	33.1			2.4		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ HYTEST HTS4725 RR	32.9			2.5		
~ ASGROW AG 4101*	32.8			2.6		
SOUTHERN CROSS EXODUS	32.8	37.7	43.5	2.8	3.0	2.3
~ DEKALB CX433RR	32.7			2.1		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
STINE 4790	32.6			2.6		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
~ SOUTHERN STATES RT-447	32.3			2.4		
~ HORNBECK HBK R4660**	32.3			1.9		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
~ CAVERNDALE CF 481nRR**	32.2			2.6		
NK BRAND 3474	31.9	42.0	46.3	2.4	3.1	2.3
HORNBECK HBK 4890	31.8			1.8		
CAVERNDALE CF 492	31.6	43.5	46.4	2.5	1.9	1.7
~ SOUTHERN CROSS MICAH**	31.5			2.0		
PIONEER VARIETY 9482	31.4	41.0	46.7	2.1	2.6	2.0
~ WILFARM SF 477 RR**	31.2			2.1		
CAVERNDALE CF 461	31.1	42.3	45.8	2.1	2.6	2.1
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8
~ DEKALB CX414cRR*	30.2			2.4		
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
~ CAVERNDALE CF 465nRR**	30.0			2.0		
~ DELTAPINE DP 4344 RR	29.7			2.1		
~ CALLAHAN 9480RR	29.6			2.3		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
SOUTHERN STATES FFR-493	29.6	44.4	47.3	1.6	1.8	1.5
CALHOUN	29.3	43.9	46.8	1.8	1.5	1.3
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ LG 6485 RR	28.5			2.1		
~ EXCEL 8461 RR*	27.8			2.6		
SOUTHERN STATES FFR-4985-STS	27.4	33.2		2.4	3.3	
UNISOUTH GENETICS USG 7499	27.4	36.2	43.4	2.4	2.1	1.7
DELTAPINE DP 4909	26.4			1.5		
TERRA TS490	26.0	31.1	39.6	2.4	2.7	2.6
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
TERRA RVS499	18.1			2.0		
GROUP IV AVERAGE	33.2	39.7	44.7	2.3	2.5	2.0
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2

TABLE 3. 1999 SUMMARY OF VARIETY TEST TABLES 4-7 ALL ENTRIES

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
HUTCHESON	34.0	38.0	42.1	1.9	2.4	2.4
~ ASGROW AG 5001	33.3			1.9		
~ SOUTHERN STATES RT-540N**	32.8			1.7		
HOLLADAY	32.1	40.8	45.0	2.2	3.1	2.6
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
~ TERRA TS556RR**	31.3			1.9		
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
~ EXCEL 8510NRR*	30.3			1.7		
~ SOUTHERN CROSS TIMOTHY	30.2			1.8		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
ANAND**	29.4	36.5		1.7	2.3	
~ SOUTHERN STATES RT-560	29.1			2.1		
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
TERRA RVS77	28.9	34.1		2.0	2.8	
~ HYTEST HTS5426 RR**	28.7			2.0		
~ UNISOUTH GENETICS USG 7547RR	28.6			2.0		
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
~ UNISOUTH GENETICS USG 7528RR	28.2			1.9		
SOUTHERN STATES HT-551-STS	28.2	31.8	39.9	1.5	2.1	2.1
~ UNISOUTH GENETICS USG 7577RR	28.1			2.0		
~ HORNBECK HBK R5588	28.1			2.2		
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ UNISOUTH GENETICS USG 7557RR	27.6			1.9		
~ ASGROW AG 5401**	27.4			2.2		
TERRA RVS549	27.2			1.8		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ TERRA TS558RR	24.5			2.2		
TERRA TS520	24.1	30.7	38.9	1.9	2.4	2.1
~ NK BRAND S51-T1*	23.5			2.0		
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	28.6	34.8	40.2	1.9	2.5	2.3
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	32.2	38.6	43.8	2.2	2.4	2.0

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3A. Conventional varieties - subset of the 1999 summary table 3

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
PIONEER VARIETY 93B82	41.8			2.4		
ASGROW A 3904**	38.8	45.9	48.6	1.8	2.0	1.7
SOUTHERN STATES HT-381-STS	36.2	38.5	43.4	2.3	2.3	1.9
MACON	34.7	42.5	46.0	2.2	2.1	1.7
NK BRAND S39-11**	33.4			2.5		
GROUP III AVERAGE	37.0	42.3	46.0	2.2	2.1	1.8
LSD (0.10)	2.8	2.6	1.9	0.2	0.3	0.1
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
ASGROW A 4341	40.7	49.6	49.9	2.3	1.9	1.5
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
HORNBECK HBK 4891	38.1			2.6		
GOLDEN HARVEST H-4115**	37.2			2.3		
DELTA KING XTJ 784	36.7			2.4		
STRESSLAND	36.6	45.0	47.6	2.6	2.5	2.0
ASGROW A 4604**	35.9	42.3		2.4	2.9	
NK BRAND S43-B5	34.9	46.5	48.0	2.6	2.5	1.8
SOUTHERN STATES FFR-439	34.6	43.7	46.7	1.9	2.2	1.8
PIONEER VARIETY 94B22**	34.4			2.5		
CAVERNDALE CF 486**	34.3			2.5		
GATEWAY 470	34.1	37.0	44.2	2.5	2.9	2.2
CALLAHAN 9474	33.3			2.4		
SOUTHERN CROSS JAMES**	33.1			2.6		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
SOUTHERN CROSS EXODUS	32.8	37.7	43.5	2.8	3.0	2.3
STINE 4790	32.6			2.6		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
NK BRAND 3474	31.9	42.0	46.3	2.4	3.1	2.3
HORNBECK HBK 4890	31.8			1.8		
CAVERNDALE CF 492	31.6	43.5	46.4	2.5	1.9	1.7
PIONEER VARIETY 9482	31.4	41.0	46.7	2.1	2.6	2.0
CAVERNDALE CF 461	31.1	42.3	45.8	2.1	2.6	2.1
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
SOUTHERN STATES FFR-493	29.6	44.4	47.3	1.6	1.8	1.5
CALHOUN	29.3	43.9	46.8	1.8	1.5	1.3
SOUTHERN STATES FFR-4985-STS	27.4	33.2		2.4	3.3	
UNISOUTH GENETICS USG 7499	27.4	36.2	43.4	2.4	2.1	1.7
DELTAPINE DP 4909	26.4			1.5		
TERRA TS490	26.0	31.1	39.6	2.4	2.7	2.6
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
TERRA RVS499	18.1			2.0		
GROUP IV AVERAGE	33.2	39.9	45.1	2.3	2.5	2.0
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2

TABLE 3A. Conventional varieties - subset of the 1999 summary table 3

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
HUTCHESON	34.0	38.0	42.1	1.9	2.4	2.4
HOLLADAY	32.1	40.8	45.0	2.2	3.1	2.6
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
ANAND**	29.4	36.5		1.7	2.3	
TERRA RVS77	28.9	34.1		2.0	2.8	
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
SOUTHERN STATES HT-551-STS	28.2	31.8	39.9	1.5	2.1	2.1
TERRA RVS549	27.2			1.8		
TERRA TS520	24.1	30.7	38.9	1.9	2.4	2.1
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	29.2	35.1	41.1	1.9	2.5	2.4
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	32.6	38.8	44.3	2.2	2.5	2.1

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3B. Roundup Ready varieties - subset of the 1999 summary table 3

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
~ PIONEER VARIETY 93B53	38.5			1.9		
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ WILFARM WF 290 RR	36.5			2.3		
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ SOUTHERN STATES RT-386	35.3			2.4		
~ WILFARM WF 370 RR	35.1			1.8		
~ PIONEER VARIETY 93B84	34.9			1.8		
~ TERRA TS397RR**	34.4			2.7		
~ SOUTHERN STATES RT-3975	33.6			2.0		
~ NK BRAND S39-D9	33.4			1.8		
~ GOLDEN HARVEST H-3943RR	31.1			1.6		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.0			2.1		
LSD (0.10)	2.8			0.2		
MID-SEASON (GROUP IV)						
~ DEKALB CX405RR	37.9			2.4		
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
~ STINE 4001-4	35.8			2.8		
~ DELTA KING 4868 RR	35.6			2.1		
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
~ LG 6430 RR	34.6			2.4		
~ CALLAHAN 8437RR	34.0			2.6		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ HORNBECK HBK R4855	33.8			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ DELTAPINE DP 4750 RR	33.4			2.4		
~ EXCEL 8422 RR*	33.3			2.5		
~ ASGROW AG 4602**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ HYTEST HTS4725 RR	32.9			2.5		
~ ASGROW AG 4101*	32.8			2.6		
~ DEKALB CX433RR	32.7			2.1		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
~ SOUTHERN STATES RT-447	32.3			2.4		
~ HORNBECK HBK R4660**	32.3			1.9		
~ CAVERNDALE CF 481nRR**	32.2			2.6		
~ SOUTHERN CROSS MICAH**	31.5			2.0		

TABLE 3B. Roundup Ready varieties - subset of the 1999 summary table 3

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
~ WILFARM SF 477 RR**	31.2			2.1		
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8
~ DEKALB CX414cRR*	30.2			2.4		
~ CAVERNDAL CF 465nRR**	30.0			2.0		
~ DELTAPINE DP 4344 RR	29.7			2.1		
~ CALLAHAN 9480RR	29.6			2.3		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ LG 6485 RR	28.5			2.1		
~ EXCEL 8461 RR*	27.8			2.6		
GROUP IV AVERAGE	33.2	38.2	42.8	2.3	2.1	1.7
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2
LATE (GROUP V)						
~ ASGROW AG 5001	33.3			1.9		
~ SOUTHERN STATES RT-540N**	32.8			1.7		
~ TERRA TS556RR**	31.3			1.9		
~ EXCEL 8510NRR*	30.3			1.7		
~ SOUTHERN CROSS TIMOTHY	30.2			1.8		
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
~ SOUTHERN STATES RT-560	29.1			2.1		
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
~ HYTEST HTS5426 RR**	28.7			2.0		
~ UNISOUTH GENETICS USG 7547RR	28.6			2.0		
~ UNISOUTH GENETICS USG 7528RR	28.2			1.9		
~ UNISOUTH GENETICS USG 7577RR	28.1			2.0		
~ HORNBECK HBK R5588	28.1			2.2		
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ UNISOUTH GENETICS USG 7557RR	27.6			1.9		
~ ASGROW AG 5401**	27.4			2.2		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ TERRA TS558RR	24.5			2.2		
~ NK BRAND S51-T1*	23.5			2.0		
GROUP V AVERAGE	28.3			1.9		
LSD (0.10)	2.9			0.2		
GRAND MEAN	32.1	36.9	40.8	2.1	2.1	1.8

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3C. SCN resistant varieties - subset of the 1999 summary table 3^A

**BACK TO
SELECTION
KEY**

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
ASGROW A 3904**	38.8	45.9	48.6	1.8	2.0	1.7
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ TERRA TS397RR**	34.4			2.7		
NK BRAND S39-11**	33.4			2.5		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.5			2.2		
LSD (0.10)	2.8			0.2		
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
GOLDEN HARVEST H-4115**	37.2			2.3		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
ASGROW A 4604**	35.9	42.3		2.4	2.9	
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
PIONEER VARIETY 94B22**	34.4			2.5		
CAVERNDALE CF 486**	34.3			2.5		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ EXCEL 8422 RR*	33.3			2.5		
SOUTHERN CROSS JAMES**	33.1			2.6		
~ ASGROW AG 4602**	33.1			2.4		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ ASGROW AG 4101*	32.8			2.6		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
~ HORNBECK HBK R4660**	32.3			1.9		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
~ CAVERNDALE CF 481nRR**	32.2			2.6		
~ SOUTHERN CROSS MICAH**	31.5			2.0		
~ WILFARM SF 477 RR**	31.2			2.1		
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8

TABLE 3C. SCN resistant varieties - subset of the 1999 summary table 3^A

**BACK TO
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VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
~ DEKALB CX414cRR*	30.2			2.4		
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
~ CAVERNDALE CF 465nRR**	30.0			2.0		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ EXCEL 8461 RR*	27.8			2.6		
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
GROUP IV AVERAGE	33.9	37.4	42.1	2.3	2.5	2.1
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2
LATE (GROUP V)						
~ SOUTHERN STATES RT-540N**	32.8			1.7		
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
~ TERRA TS556RR**	31.3			1.9		
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
~ EXCEL 8510NRR*	30.3			1.7		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
ANAND**	29.4	36.5		1.7	2.3	
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
~ HYTEST HTS5426 RR**	28.7			2.0		
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ ASGROW AG 5401**	27.4			2.2		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ NK BRAND S51-T1*	23.5			2.0		
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	28.5	34.6	38.5	1.9	2.3	2.3
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	32.1	37.0	41.6	2.1	2.4	2.1

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A The conventional tests are not infected with SCN. Varieties will perform differently under SCN pressure.

Table 9 shows variety performance in the presence of SCN.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3D. Conventional varieties - no SCN resistance - subset of the 1999 summary table 3

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
PIONEER VARIETY 93B82	41.8			2.4		
SOUTHERN STATES HT-381-STS	36.2	38.5	43.4	2.3	2.3	1.9
MACON	34.7	42.5	46.0	2.2	2.1	1.7
GROUP III AVERAGE	37.6	40.5	44.7	2.3	2.2	1.8
LSD (0.10)	2.8	2.6	1.9	0.2	0.3	0.1
MID-SEASON (GROUP IV)						
ASGROW A 4341	40.7	49.6	49.9	2.3	1.9	1.5
HORNBECK HBK 4891	38.1			2.6		
DELTA KING XTJ 784	36.7			2.4		
STRESSLAND	36.6	45.0	47.6	2.6	2.5	2.0
NK BRAND S43-B5	34.9	46.5	48.0	2.6	2.5	1.8
SOUTHERN STATES FFR-439	34.6	43.7	46.7	1.9	2.2	1.8
GATEWAY 470	34.1	37.0	44.2	2.5	2.9	2.2
CALLAHAN 9474	33.3			2.4		
NK BRAND 3474	31.9	42.0	46.3	2.4	3.1	2.3
HORNBECK HBK 4890	31.8			1.8		
CAVERNDALE CF 492	31.6	43.5	46.4	2.5	1.9	1.7
PIONEER VARIETY 9482	31.4	41.0	46.7	2.1	2.6	2.0
CAVERNDALE CF 461	31.1	42.3	45.8	2.1	2.6	2.1
SOUTHERN STATES FFR-493	29.6	44.4	47.3	1.6	1.8	1.5
CALHOUN	29.3	43.9	46.8	1.8	1.5	1.3
SOUTHERN STATES FFR-4985-STS	27.4	33.2		2.4	3.3	
UNISOUTH GENETICS USG 7499	27.4	36.2	43.4	2.4	2.1	1.7
DELTAPINE DP 4909	26.4			1.5		
TERRA TS490	26.0	31.1	39.6	2.4	2.7	2.6
TERRA RVS499	18.1			2.0		
GROUP IV AVERAGE	31.6	41.4	46.1	2.2	2.4	1.9
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2
LATE (GROUP V)						
HUTCHESON	34.0	38.0	42.1	1.9	2.4	2.4
HOLLADAY	32.1	40.8	45.0	2.2	3.1	2.6
TERRA RVS77	28.9	34.1		2.0	2.8	
SOUTHERN STATES HT-551-STS	28.2	31.8	39.9	1.5	2.1	2.1
TERRA RVS549	27.2			1.8		
TERRA TS520	24.1	30.7	38.9	1.9	2.4	2.1
GROUP V AVERAGE	29.1	35.1	41.5	1.9	2.6	2.3
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	31.7	39.8	44.9	2.2	2.4	2.0

[BACK TO SELECTION KEY](#)

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3E. Conventional varieties - SCN resistant - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
NK BRAND S39-11**	33.4			2.5		
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
GOLDEN HARVEST H-4115**	37.2			2.3		
ASGROW A 4604**	35.9	42.3		2.4	2.9	
PIONEER VARIETY 94B22**	34.4			2.5		
CAVERNDALE CF 486**	34.3			2.5		
SOUTHERN CROSS JAMES**	33.1			2.6		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
GROUP IV AVERAGE	35.2	37.0	41.3	2.4	2.8	2.4
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2
LATE (GROUP V)						
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
ANAND**	29.4	36.5		1.7	2.3	
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	29.2	35.1	40.2	2.0	2.4	2.5
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	33.3	36.2	51.1	2.2	2.6	3.1

[BACK TO SELECTION KEY](#)

* Resistant to the soybean cyst nematode (Race 3)

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

^A The conventional tests are not infected with SCN. Varieties will perform differently under SCN pressure.

Table 9 shows variety performance in the presence of SCN.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3F. Roundup Ready variety - no SCN resistance - subset of the 1999 summary table 3

VARIETY / BRAND	YIELD (BU/AC) ^A			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
~ PIONEER VARIETY 93B53	38.5					1.9
~ WILFARM WF 290 RR	36.5					2.3
~ SOUTHERN STATES RT-386	35.3					2.4
~ WILFARM WF 370 RR	35.1					1.8
~ PIONEER VARIETY 93B84	34.9					1.8
~ SOUTHERN STATES RT-3975	33.6					2.0
~ NK BRAND S39-D9	33.4					1.8
~ GOLDEN HARVEST H-3943RR	31.1					1.6
GROUP III AVERAGE	34.8					2.0
LSD (0.10)	2.8					0.2
MID-SEASON (GROUP IV)						
~ DEKALB CX405RR	37.9					2.4
~ STINE 4001-4	35.8					2.8
~ DELTA KING 4868 RR	35.6					2.1
~ LG 6430 RR	34.6					2.4
~ CALLAHAN 8437RR	34.0					2.6
~ HORNBECK HBK R4855	33.8					2.5
~ DELTAPINE DP 4750 RR	33.4					2.4
~ HYTEST HTS4725 RR	32.9					2.5
~ DEKALB CX433RR	32.7					2.1
~ SOUTHERN STATES RT-447	32.3					2.4
~ DELTAPINE DP 4344 RR	29.7					2.1
~ CALLAHAN 9480RR	29.6					2.3
~ LG 6485 RR	28.5					2.1
GROUP IV AVERAGE	33.1					2.4
LSD (0.10)	3.2					0.3
LATE (GROUP V)						
~ ASGROW AG 5001	33.3					1.9
~ SOUTHERN CROSS TIMOTHY	30.2					1.8
~ SOUTHERN STATES RT-560	29.1					2.1
~ UNISOUTH GENETICS USG 7547RR	28.6					2.0
~ UNISOUTH GENETICS USG 7528RR	28.2					1.9
~ UNISOUTH GENETICS USG 7577RR	28.1					2.0
~ HORNBECK HBK R5588	28.1					2.2
~ UNISOUTH GENETICS USG 7557RR	27.6					1.9
~ TERRA TS558RR	24.5					2.2
GROUP V AVERAGE	28.6					2.0
LSD (0.10)	2.9					0.2
GRAND MEAN	32.2					2.1

[BACK TO SELECTION KEY](#)

~ Roundup Ready variety

^A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3G. Roundup Ready varieties - SCN resistant - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ TERRA TS397RR**	34.4			2.7		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.4			2.2		
LSD (0.10)	2.8			0.2		
MID-SEASON (GROUP IV)						
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ EXCEL 8422 RR*	33.3			2.5		
~ ASGROW AG 4602**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ ASGROW AG 4101*	32.8			2.6		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
~ HORNBECK HBK R4660**	32.3			1.9		
~ CAVERNDALE CF 481nRR**	32.2			2.6		
~ SOUTHERN CROSS MICAH**	31.5			2.0		
~ WILFARM SF 477 RR**	31.2			2.1		
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8
~ DEKALB CX414cRR*	30.2			2.4		
~ CAVERNDALE CF 465nRR**	30.0			2.0		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ EXCEL 8461 RR*	27.8			2.6		
GROUP IV AVERAGE	33.3	38.2	42.8	2.3	2.1	1.7
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2

[BACK TO SELECTION KEY](#)

TABLE 3G. Roundup Ready varieties - SCN resistant - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
~ SOUTHERN STATES RT-540N**	32.8			1.7		
~ TERRA TS556RR**	31.3			1.9		
~ EXCEL 8510NRR*	30.3			1.7		
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
~ HYTEST HTS5426 RR**	28.7			2.0		
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ ASGROW AG 5401**	27.4			2.2		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ NK BRAND S51-T1*	23.5			2.0		
GROUP V AVERAGE	28.1			1.9		
LSD (0.10)	2.9			0.2		
GRAND MEAN	32.0	36.9	40.8	2.1	2.1	1.8

[BACK TO SELECTION KEY](#)

~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A The conventional tests are not infected with SCN. Varieties will perform differently under SCN pressure.

Table 9 shows variety performance in the presence of SCN.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3H. SCN resistant - conventional varieties - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
NK BRAND S39-11**	33.4			2.5		
MID-SEASON (GROUP IV)						
GOLDEN HARVEST H-4459STS**	41.8			2.4		
GOLDEN HARVEST H-4516*	40.7			2.3		
GATEWAY 433**	40.0			2.5		
LG 6457 C STS**	39.8			2.5		
TERRA TS438c**	38.7			2.6		
CALLAHAN 9454**	38.4	41.6		2.4	2.6	
GOLDEN HARVEST H-4115**	37.2			2.3		
ASGROW A 4604**	35.9	42.3		2.4	2.9	
PIONEER VARIETY 94B22**	34.4			2.5		
CAVERNDALE CF 486**	34.3			2.5		
SOUTHERN CROSS JAMES**	33.1			2.6		
PIONEER VARIETY 94B53**	33.1			1.9		
STINE 4702-2**	33.1			2.4		
PHARAOH**	32.3	36.9	42.2	1.9	2.6	2.4
ASGROW A 4922**	30.2	32.9	41.0	2.0	2.3	1.8
TERRA TS4792**	30.1	33.5		2.3	2.9	
MANOKIN*	25.2	34.5	40.8	2.5	3.2	3.1
GROUP IV AVERAGE	35.2	37.0	41.3	2.4	2.8	2.4
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2
LATE (GROUP V)						
ASGROW A 5547**	32.1	36.1	41.0	1.9	2.6	2.8
ASGROW A 5404*	31.0			2.2		
DELTA KING 5580**	30.3			2.1		
DELTA KING 5995**	30.2			2.0		
KS 5292*	30.1	33.7	39.4	1.8	2.3	2.1
ANAND**	29.4	36.5		1.7	2.3	
KAS CHEROKEE 516*	28.5	33.9		1.8	2.5	
TERRA RVSROBIN 5*	22.3			2.2		
GROUP V AVERAGE	29.2	35.1	40.2	2.0	2.4	2.5
LSD (0.10)	2.9	2.4	2.1	0.2	0.2	0.2
GRAND MEAN	33.3	36.2	51.1	2.2	2.6	3.1

[BACK TO SELECTION KEY](#)

* Resistant to the soybean cyst nematode (Race 3)

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

^A The conventional tests are not infected with SCN. Varieties will perform differently under SCN pressure.

Table 9 shows variety performance in the presence of SCN.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties

TABLE 3I. SCN resistant varieties - Roundup Ready - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
EARLY (GROUP III)						
~ CALLAHAN 9390RR**	38.0			2.0		
~ ASGROW AG 3901**	37.1			2.5		
~ ASGROW AG 3701*	37.0			1.9		
~ GOLDEN HARVEST H-3960RR*	35.4			2.3		
~ TERRA TS397RR**	34.4			2.7		
~ EXCEL 8382NRR**	30.2			2.0		
GROUP III AVERAGE	35.4			2.2		
LSD (0.10)	2.8			0.2		
MID-SEASON (GROUP IV)						
~ ASGROW AG 4301**	37.5			2.3		
~ ASGROW AG 4402*	37.2			2.6		
~ DYNA-GRO 3468 N RR**	37.1			2.1		
~ SOUTHERN STATES RT-EXP 88401**	36.1			2.1		
~ ASGROW AG 4501**	36.0			2.1		
~ GATEWAY 4R453**	35.6			2.0		
~ ASGROW AG 4902*	35.3			2.3		
~ PIONEER VARIETY 9492**	35.2	38.7	43.2	2.1	2.1	1.7
~ CALLAHAN 9440RR**	35.2			2.1		
~ DYNA-GRO 3442 N RR**	35.2			2.8		
~ ASGROW AG 4702**	34.8			1.9		
~ WILFARM WF 480 RR**	34.8			2.6		
~ NK BRAND S42-M1**	34.7			2.4		
~ NK BRAND S46-W8**	34.6			2.5		
~ SOUTHERN STATES RT-446N*	33.9			2.1		
~ DELTA KING 4965 RR**	33.9			2.5		
~ PIONEER VARIETY 94B01**	33.7	45.1	45.7	1.8	1.9	1.5
~ HYTEST HTS4301 RR**	33.7			2.1		
~ DEKALB CX444cRR**	33.4			2.1		
~ EXCEL 8422 RR*	33.3			2.5		
~ ASGROW AG 4602**	33.1			2.4		
~ HYTEST HTS4800 RR**	33.1			2.4		
~ GOLDEN HARVEST H-4404RR**	32.9			2.3		
~ ASGROW AG 4101*	32.8			2.6		
~ UNISOUTH GENETICS USG 7478RR**	32.7			1.9		
~ CAVERNDALE CF 443nRR**	32.4			2.8		
~ HORNBECK HBK R4660**	32.3			1.9		
~ CAVERNDALE CF 481nRR**	32.2			2.6		
~ SOUTHERN CROSS MICAH**	31.5			2.0		
~ WILFARM SF 477 RR**	31.2			2.1		
~ DELTA KING 4762 RR**	30.6	30.9	39.4	1.9	2.3	1.8
~ DEKALB CX414cRR*	30.2			2.4		
~ CAVERNDALE CF 465nRR**	30.0			2.0		
~ HARTZ VARIETY H 4252RR**	29.6			2.5		
~ ASGROW AG 4901**	29.2			2.3		
~ TERRA TS466RR**	28.7			1.8		
~ EXCEL 8461 RR*	27.8			2.6		
GROUP IV AVERAGE	33.3	38.2	42.8	2.3	2.1	1.7
LSD (0.10)	3.2	3.0	2.3	0.3	0.3	0.2

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TABLE 3I. SCN resistant varieties - Roundup Ready - subset of the 1999 summary table 3^A

VARIETY / BRAND	YIELD (BU/AC) ^B			LODGING		
	1999	98-99	97-99	1999	98-99	97-99
LATE (GROUP V)						
~ SOUTHERN STATES RT-540N**	32.8			1.7		
~ TERRA TS556RR**	31.3			1.9		
~ EXCEL 8510NRR*	30.3			1.7		
~ PIONEER VARIETY 95B41*	29.8			2.0		
~ PIONEER VARIETY 95B32**	29.7			1.8		
~ SOUTHERN STATES RT-517N**	29.6			1.8		
~ NK BRAND S53-Q7**	29.1			1.8		
~ UNISOUTH GENETICS USG 7548RR**	29.1			1.8		
~ HYTEST HTS5426 RR**	28.7			2.0		
~ SOUTHERN STATES RT-557**	27.9			2.0		
~ ASGROW AG 5401**	27.4			2.2		
~ SOUTHERN STATES RT-5485**	26.7			2.0		
~ GATEWAY 5R515**	26.7			1.8		
~ DELTA KING 5664 RR**	26.4	32.8	35.0	1.7	2.0	2.0
~ ASGROW AG 5602**	26.2			2.0		
~ DELTA KING 5661 RR**	25.7			1.9		
~ DELTA KING 5762 RR**	25.6			2.0		
~ NK BRAND S51-T1*	23.5			2.0		
GROUP V AVERAGE	28.1			1.9		
LSD (0.10)	2.9			0.2		
GRAND MEAN	32.0	36.9	40.8	2.1	2.1	1.8

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~ Roundup Ready variety

* Resistant to the soybean cyst nematode (Race 3)

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

^A The conventional tests are not infected with SCN. Varieties will perform differently under SCN pressure.

Table 9 shows variety performance in the presence of SCN.

^B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

Yield data are from the following counties (some with missing maturity groups from 1999, see tables 6 and 7):

1999 Fayette, Caldwell, Daviess, and Logan Counties

98-99 Fayette, Caldwell, Daviess, Logan, Hardin, and Calloway Counties

97-99 Fayette, Caldwell, Daviess, Logan, Hardin, Calloway, Warren, and Ballard Counties