Progress Report 286

Kentucky Soybean Performance Tests–1984

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

Soybean tests in 1984 were planted at six locations in the state. The testing locations, soil types, planting dates, and other information are shown on the following page.

The date of a 50% chance of a fall killing frost is important in determining which variety you select to plant (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 Princeton and Lexington locations in Tables 7 and 9. Particular attention should be given to the maturity date of a variety when double-cropping soybeans (see the discussion on double-crop soybeans).

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 1 year out of 10 chance of a fall killing frost subtract 13-18 days from the dates in Table 1.

METHODS

All tests were planted in a randomized complete block design with three replications (plots) of each variety. Individual plots were 20 feet long and 4 rows wide with 30 inches between rows in the conventional tests; in the double-crop tests the plots were 20 feet long and 8 rows wide with 15 inches between rows. The seeding rate for the conventional tests was 8-10 viable seeds per foot of row and for the double-crop tests was 5-6 viable seeds per foot of row. All plots were planted with a modified soybean planter. All plots were treated with herbicides and maintained as weed free as possible.

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 beans that may have been lost as a result of combining or shattering.

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

LODGING—Lodging was rated on a scale of 1 to 5; 1=almost all plants erect; 2=all plants over slightly

Location of the 1984 Kentucky Soybean Performance Tests

Table 1.—Location, Planting Date, and Climatic Date for the 1984 Soybean Performance Tests.

	1 Henderson	2 Morgantown	3 Princeton	4 Princeton Double-Crop	5 Paducah	6 Lexington	7 Bowling Green Double-Crop
Farmer Cooperator	James McConathy	Maitland Rice	Exp. Sta.	Exp. Sta.	Mike Boatwright	Exp. Sta.	James & Mike Reynolds
Extension Agent	William Hendrick	Michael Jackson			George Martin		Kelcy Driskill
Soil Type	Wakeland Silt Loam	Newark Silt Loam	Crider Silt Loam	Crider Silt Loam	Grenada Silt Loam	Maury Silt Loam	Pembroke Silt Loam
Date of Planting	6/1	6/8	5/24	7/02[1]	5/25	5/17	6/29[1]
Row Width (inches)	30	30	30	15	30	30	15
Herbicides[2]	3 pt. Treflan	3 pt. Treflan	1 1/2 pt. Treflan 6 pt. Lasso	4 pt. Lasso 1 1/2 pt. Lorox 4L 2 1/2 pt. Paraquat	4 pt. Lasso 1 1/2 pt. Lorox 4L	8 pt. Lasso	6 pt. Lasso 1 pt. Lorox 4L 2 pt. Paraquat
Soil Test							
P	171	51	86	86	140	200+	200+
K	342	130	354	354	216	225	392
pH	6.7	6.2	6.1	6.1	7.0	6.3	6.6
Fertilizer Applied[2]	None	None	None	None	None	50 lb/A K_2O 1 T/A Lime	None
50% Chance of Killing Frost[3]	10/26	10/13	10/19	10/19	10/24	10/26	10/23

[1] No-till double-cropped after wheat.
[2] Amount per acre.
[3] Based on a 30-year average.
* Trade names or products mentioned or similar products not named is neither intended as an endorsement nor criticism of such products by the Kentucky Agricultural Experiment Station.

or a few down; 3=all plants over moderately or 25% down; 4=all plants over considerably or 50-80% down; 5=all plants over badly.

MATURITY DATE—A variety was considered mature when 95% of the pods had 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 may also be expressed as days earlier (-) or later (+) than that of a standard variety (Williams). Maturity dates were recorded at the Paducah and Princeton locations.

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

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

SHATTERING—Shattering was scored 3 weeks after maturity and was based on estimates of the percent of open pods on a scale of 1 to 5: 1=no shattering; 2=1-10% shattered; 3=10-25% shattered; 4=25-30% shattered; and 5=more than 50% shattered.

INTERPRETATION

An important step in profitable soybean production is selecting good quality seed of the best variety 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 season, 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. 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. Data from the location nearest to a soybean grower's farm probably provide the best estimate of the potential of the soybean varieties in that area. **The yields as reported in this publication should be used for relative comparisons; absolute yields on a grower's farm may be different.**

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

Performance of the soybean varieties will vary from year to year and location to location depending on adaptability, weather conditions, and management. The average performance of a variety over a period of years provides a better estimate of its potential and stability than its performance in a particular year. **When selecting a variety it is important to consider the three- or two-year average presented in the tables; this provides an estimate of a variety's stability and performance potential over years.**

Small differences in yield are usually of little importance. The yield of two varieties at a single location may differ because of chance factors (difference in soil characteristics, fertility, or availability of moisture) even though the inherent yielding ability is the same. To decide if an observed yield difference is real, use the LSD (least significant difference) value quoted 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 may be reasonably certain that the entries actually do differ in yielding ability. "N.S." in the tables indicates that no statistically significant differences were determined.

GROWING CONDITIONS FOR THE 1984 TESTS

Kentucky's growing conditions were generally favorable over the state this year. Most locations received adequate rainfall during the growing season; however, some areas experienced extended periods with little or no rainfall. Bowling Green in particular was extremely dry during July and early August, causing severe drought damage to the plots. Lexington also experienced a very dry summer as can be seen in the reduced yields.

SPECIAL NOTES

No data was taken at Bowling Green in 1984 due to extreme drought damage to the plots. Only data from 1983 are presented. No 1983 data from Lexington are presented due to drought damage. Only 1984 data are presented at Morgantown as this is a new location.

VARIETY ADAPTATION

Early-maturing varieties (Group III), such as Cumberland and Williams, are best adapted in areas of Kentucky north of the line indicated on the

following map. The line is approximately the same as where the Western Kentucky Parkway is located. Late-maturing varieties (Group V), such as Essex and Forrest, are best adapted in areas south of the indicated line. Mid-season varieties (Group IV), such as Union and Franklin, can be successfully grown in most areas in Kentucky.

Approximate areas of adaptation of the maturity groups commonly grown in Kentucky.

DOUBLE-CROP SOYBEANS

Planting soybeans in a double-cropping system usually results in a later planting date than conventional-planted beans. Previous research has shown that soybean yields are generally reduced by 1/2-3/4 bu/A per day for each day planting is delayed after mid-June and 1 bu/A per day when planted after the last part of June. **Practices such as high-moisture harvesting or swathing of the small grains and no-till planting of the soybeans all help to get the soybeans planted earlier and should be used where possible.**

The shorter growing season of a double-cropping system results in a shorter vegetative growth period, reduced plant height, and a smaller plant canopy. **Row spacing research has indicated that the highest yields in double-crop plantings are obtained using narrow rows (10-12 in.), particularly when the planting date is in late June and July.**

Variety selection is very important in a soybean double-cropping system. **Reseach has shown that the mid- to full-season maturing varieties adapted in your area perform best in a double-crop planting.** Caution must be used to select a variety that will mature before the first fall frost. **When plantings are made in July, a variety that is one maturity group earlier than normally used should be selected to prevent a yield reduction due to frost injury.**

SOIL FERTILITY and INOCULATION

Failure to adjust soil acidity is often the most limiting fertility practice. Acid soils should be limed to pH 6.4. If soil pH is below 6.2 at planting, molybdenum should be applied. Apply phosphate and potash as needs are indicated by soil test results. For double-cropped beans, phosphate and potash can be applied for both crops when seeding the small grain. Foliar applications may be necessary to correct manganese deficiency problems on some soils with high pH levels in the Western Coal Field region.

No nitrogen is recommended for soybeans. However, if soybeans have not been planted in the field in the past 3 years, seed should be inoculated as close to planting time as possible. See Kentucky Cooperative Extension publication AGR-1 for specific fertility and inoculation recommendations.

SEEDING RATES

Soybean seeding rates should be governed by the final stand desired in terms of plants per foot of row. **To obtain a given number of plants per foot of row, seed size and percent germination of the seed lot must be considered.** Soybean varieties differ considerably in seed size, with the more common varieties ranging from 2,600 to 3,500 seed per pound. After selecting the variety, row spacing, and the number of seeds per foot, the planting rate in pounds per acre can be determined from Table 2. If the field conditions are nearly ideal and the seed is of high quality use the lower rate. Adjustments also need to be made for differences in seed lot germination. The seeding

Table 2.—Pounds of Seed per Acre for the Given Row Width and Seed Size at the Recommended Seeding Rate.*

Row spacing (inches)	10	20	30	40
Seeding Rate (seeds per foot)	3-4	6-8	8-10	10-12
Seeds per pound				
2,600	60-80	60-80	54-67	50-60
2,800	56-75	56-75	50-62	47-56
3,000	52-70	52-70	46-58	44-52
3,200	49-65	49-65	44-54	41-49
3,400	46-61	46-61	41-51	38-46
3,600	44-58	44-58	39-48	36-44

*Germination assumed to be 100%.

rates in Table 2 are recommended for both conventional plantings and double-crop plantings. **When planting with a no-till system, the seeding rates should be increased by 10% to compensate for higher seedling mortality.**

CERTIFIED SEED

Always plant high quality seed of the variety you select. Certified seed is a reliable source of good seed. Certified seed has passed rigid field and laboratory standards for genetic identity and purity of a variety. Certified soybean seed also has good germination and is free of noxious weed seed and other crop seed. The Agricultural Experiment Station recommends that Kentucky-certified seed be used whenever possible for growing a commercial crop of soybeans. Information on certified seed growers in Kentucky can be obtained from your local county Extension agent or the Kentucky Seed Improvement Association (P. O. Box 12008, Lexington, KY 40579).

KENTUCKY STATE SEED LAW

The Kentucky state seed law requires all seed exposed, offered for sale, or sold in Kentucky to be labeled as to kind and variety for each agricultural seed component present in excess of 5% of the whole and the percentage by weight of each component. All soybean seed blends should be labeled as to the percentage composition of each variety that makes up the mixture. Table 3 lists the soybean blends tested in 1984 and the components of the mixture.

Table 3.—Percentage Composition of Each Variety in the Soybeans Blends Tested in 1984.

Name	Variety 1	Variety 2
AgriPro HP 3990	90% Ex. 1941	10% Ex. 5734

AVERAGE STATEWIDE PERFORMANCE

The performance data of varieties that have been in the Kentucky variety tests for at least 2 years are averaged over years and across locations in maturity zones and are shown in Table 4. **Performance of a variety across a period of years and at several locations in the state is a good indicator of its production potential.**

Varieties that have shown satisfactory yields and lodging resistance in Table 4 can be expected to have satisfactory field performance under similar conditions and locations in Kentucky. If you have soybean cyst nematode problems a resistant variety should be used in conjunction with a recommended crop rotation in your production system (see Kentucky Cooperative Extension publication PPA-3, "Soybean Cyst Nematode," available at your county Extension office.)

SOURCE OF SEED

The seed planted in the 1984 Soybean Performance Tests was acquired from the following sources:

Entry	Source
A4997, A4271, A3966, A5474	Asgrow Seed Company, 7000 Portage Road, Kalamazoo, MI 49001
J-112, J-125, J-130	Jacques Seed Company, Box 370, Lincoln, IL 62656
RA-404, RA-481, RA-451, Mitchell 450, Michell, RA-380, RA-502, RA-405, RA-480	Rohm & Haas Seeds, Inc., Cornbelt Region, P. O. Box 507, 423 South Street, Lebanon, IN 46052
Voris 465	Voris Seeds, Inc., Box 457, Windfall, IN 46076
Stevens, Hyperformer Brand 401	Hyperformer Seed Company, 5100 Poplar, Suite 3200, Memphis, TN 38137
FFR-561, SS-443	Southern States Coop., Inc., P. O. Box 26234, Richmond, VA 23230
JMS 4383, JMS 4982	J. M. Schultz Seed Company, 105 North Pine Street, Dieterich, IL 62424
AgriPro AP 350 AgriPro AP 420 AgriPro HP 3990	North American Plant Breeders, R. R. 2, Highway 30 East, Ames, IA 50010
Pioneer 5482 Pioneer 9441 Pioneer 9561 Pioneer 9571 Pioneer 9471 Pioneer 3981	Pioneer Hi-Bred International, Inc., 1000 West Jefferson Street, Tipton, IN 46072
S45-01, McNair 500, S4240, S3933	Northrup King Company, Route 3, Box 153, Shelbyville, IN 46176
Coker 393, Coker 355, Coker 425, Coker 485	Rohm & Haas Seeds, Inc., Cornbelt Region, P. O. Box 507, 423 South Street, Lebanon, IN 46052
Scott Brand 8047	Scott Seed Company, Inc., Box 849, New Albany, IN 47150
Stutts	Miles Farm Supply, Inc., Route 3, Owensboro, KY 42301
Gold Medal 4970 Gold Medal 4420 Gold Medal 3380	Louisville Seed Company, P. O. Box 120, Louisville, KY 40201
CX 324, CX 380, CX 482	DeKalb-Pfizer Genetics, 3100 Sycamore Road, DeKalb, IL 60115
Bailey 468 Bailey 469	Bailey Seed Farms, Inc., Route 6, Box 178, Portland, IN 47371
Bay, Cumberland, Desoto, Douglas, Elf, Essex, Fayette, Forrest, Franklin, Lawrence, Nathan, Pella, Pixie, Union, Williams 82, York	Kentucky Foundation Seed Project, P. O. Box 11950, Lexington, KY 40579

TABLE 4.—AVERAGE PERFORMANCE ACROSS YEARS AND LOCATIONS

Variety	Lexington Morgantown and Henderson		Paducah and Princeton		Princeton and Bowling Green[a] Double-Crop			
	Yield Bu/Ac 83-84	Lodging 83-84	Yield Bu/Ac 83-84	Lodging 83-84	Yield Bu/Ac 83-84	Lodging 83-84	Approx. Seed/Lb	Approx.[b,c] Maturity
Early (Group II & III)								
A3966	45.5	2.2	36.4	1.1	30.4	1.0	2600	- 6
Coker 393	41.5	1.9	36.8	1.0	26.9	1.0	3000	- 2
Cumberland	38.9	1.9	31.7	1.0	25.7	1.0	2600	- 4
Elf	38.6	1.0	32.5	1.0	28.1	1.0	2600	- 2
Fayette[e]	39.8	2.1	33.2	1.2	24.4	1.0	2500	- 3
J-112	40.3	2.4	32.0	1.5	22.1	1.0	2500	- 1
Pella	42.5	1.5	33.8	1.1	31.6	1.0	2100	- 6
Pioneer 3981	42.3	2.2	36.8	1.2	28.0	1.0	2100	- 2
Williams 82	41.5	1.9	34.8	1.0	29.1	1.2	2600	0
Mid-Season (Group IV)								
AgriPro AP350	42.6	2.7	34.8	1.6	24.9	1.1	2400	+ 7
AgriPro AP420	42.1	3.1	30.5	1.8	26.0	1.4	2700	+ 4
A4997	41.9	2.4	30.2	1.5	28.3	1.1	3900	+16
Desoto	41.6	2.7	33.8	1.3	28.2	1.0	2700	+ 1
Douglas[d]	45.5	2.2	33.9	1.1	20.3	1.0	2600	+ 7
Franklin[d]	39.8	2.6	33.9	1.6	24.7	1.2	2600	+ 2
Hyperformer 401	41.0	3.5	32.8	1.7	21.3	1.1	2600	+ 9
J-125	44.3	2.8	33.1	1.2	20.0	1.0	2500	+ 3
J-130	42.2	3.1	32.6	1.6	24.8	1.3	2900	+ 7
JMS 4982	43.4	3.1	35.0	1.7	25.0	1.1	3200	+ 8
Lawrence	42.6	1.3	34.4	1.0	26.5	1.0	2600	+ 1
Mitchell	43.6	2.8	32.0	1.7	30.2	1.2	2900	+ 2
Mitchell 450	41.9	2.6	28.1	1.1	29.3	1.2	2600	+17
Pixie	39.9	1.2	31.6	1.0	25.6	1.0	2600	+ 1
RA-481	39.2	2.8	29.9	1.3	27.3	1.0	3000	+20
SS-443	43.0	2.2	38.5	1.2	24.8	1.0	2900	+ 2
Stevens	41.5	2.4	31.4	1.2	24.1	1.2	2800	+ 5
S45-01	44.8	2.7	33.4	1.2	26.3	1.1	3400	+ 5
Union	37.4	2.6	31.6	1.5	27.5	1.0	2600	+ 1
Voris 465	41.5	2.7	30.6	1.2	26.8	1.1	2400	0
Late (Groups V & VI)								
Bay	38.9	3.0	27.7	1.5	24.4	1.6	2800	+28
Coker 355[e]	34.8	3.7	29.2	2.2	20.9	1.8	3300	+31
Essex	39.2	3.0	31.3	1.7	22.0	1.1	3500	+22
FFR-561[d]	41.7	2.5	32.1	1.4	31.9	1.3	3400	+25
Forrest[d]	36.2	3.7	28.6	1.8	21.9	1.8	3500	+30
Nathan[e]	34.4	4.0	27.3	2.7	23.1	2.4	3500	+21
Pioneer 5482	38.3	3.1	30.6	1.4	24.6	1.3	3000	+25
Pioneer 9561[d]	39.4	3.2	27.9	1.4	21.5	1.7	3300	+31
RA-502[d]	37.8	3.7	27.0	2.6	18.0	2.8	3000	+30
York	35.3	3.1	24.9	1.7	22.0	1.2	2600	+26
Average	40.6	2.6	31.9	1.5	25.2	1.3		
$LSD_{(.10)}$	6.8	0.8	7.7	0.7	6.6	0.8		

[a] 1983 data only for Bowling Green double-crop.
[b] Days earlier (-) or later (+) than Williams.
[c] Data based on 1984 observations at Princeton and Paducah.
[d] Resistant to the soybean cyst nematode (Race 3).
[e] Resistant to the soybean cyst nematode (Race 3 and Race 4).

TABLE 5.—SOYBEAN VARIETY TESTS—HENDERSON

VARIETY	YIELD BU/AC 82-84	YIELD BU/AC 83-84	YIELD BU/AC 1984	LODG -ING 82-84	LODG -ING 83-84	LODG -ING 1984	HT.[a] (IN) 1984	POD HT. 1984
EARLY (GROUPS II AND III)								
AGRIPRO HP 3990[d]	-	-	49.1	-	-	3.7	54	8.7
A3966	-	46.7	52.3	-	2.7	3.8	48	7.7
BAILEY 468	-	-	48.8	-	-	4.3	48	6.0
COKER 393	48.0	43.7	49.8	2.2	2.4	3.5	44	5.3
CUMBERLAND	43.8	37.0	45.8	2.2	2.1	2.8	43	5.3
CX 324	-	-	50.3	-	-	3.2	45	6.0
CX 380	-	-	47.5	-	-	3.8	48	7.3
ELF	45.5	39.5	42.3	1.4	1.0	1.0	18	3.0
FAYETIE[c]	44.7	41.0	45.3	3.0	2.4	3.2	50	6.0
GOLD MEDAL 5380	-	-	33.4	-	-	4.3	49	4.7
J-112	-	42.1	49.3	-	3.0	4.2	58	9.3
PELLA	46.8	42.5	46.5	2.1	1.8	2.3	45	7.0
PIONEER 3981	-	45.2	47.0	-	2.4	3.2	44	6.7
RA-380	-	-	50.1	-	-	5.0	49	6.3
S3933	-	-	45.8	-	-	2.7	44	6.0
WILLIAMS 82	46.9	43.5	46.2	2.4	2.4	3.5	48	7.0
MID-SEASON (GROUP IV)								
AGRIPRO AP350	48.5	46.6	52.6	3.4	3.3	4.8	61	11.7
AGRIPRO AP420	47.1	45.4	43.3	3.6	3.4	4.8	55	7.0
A4271	-	-	49.2	-	-	3.8	48	6.3
A4997	-	48.8	56.8	-	2.6	3.7	45	9.0
CX 482	-	-	48.1	-	-	5.0	55	9.0
DESOTO	47.4	43.4	43.7	2.9	3.2	4.3	49	7.7
DOUGLAS	52.4	50.3	51.2	2.5	2.5	3.0	48	8.3
FRANKLIN[b]	45.9	44.8	43.1	3.1	2.7	3.2	51	7.7
GOLD MEDAL 4420	-	-	54.0	-	-	4.3	48	7.0
GOLD MEDAL 4970	-	-	55.0	-	-	5.0	54	9.0
HYPERFORMER 401	45.7	44.4	42.3	4.2	4.0	4.8	55	9.0
J-125	52.4	50.2	54.5	3.3	3.3	4.8	53	7.7
J-130	46.0	44.4	49.0	3.8	3.5	5.0	53	7.7
JMS 4383	-	-	51.9	-	-	4.8	52	6.7
JMS 4982	50.4	48.2	52.4	3.6	3.5	4.7	58	8.3
LAWRENCE	47.7	45.3	46.9	1.9	1.6	1.8	45	6.7
MITCHELL	51.3	49.6	54.5	3.6	3.7	5.0	56	6.7
MITCHELL 450	48.8	46.1	53.5	2.4	2.9	3.8	54	12.7
PIONEER 9441	-	-	54.0	-	-	3.7	45	7.0
PIONEER 9471	-	-	49.6	-	-	4.0	49	10.7
PIXIE	49.0	43.4	58.3	1.5	1.1	1.2	20	3.0
RA-404	-	-	49.7	-	-	3.8	50	7.7
RA-405[b]	-	-	53.2	-	-	4.7	54	8.3
RA-451	-	-	54.5	-	-	4.7	56	8.7
RA-480	-	-	53.6	-	-	4.7	57	11.0
RA-481	-	50.6	52.0	-	3.2	4.2	53	13.0
SCOTT BRAND 8047	-	-	57.6	-	-	4.3	55	9.0
S5-443	-	46.8	48.7	-	2.7	4.0	42	7.7
STEVENS	47.3	47.8	53.2	3.1	3.0	4.0	51	10.0
S4240	-	-	61.1	-	-	3.2	43	6.7
S45-01	-	46.8	55.3	-	3.0	4.3	53	8.3
UNION	43.0	38.4	44.7	3.0	3.0	4.7	49	6.7
VORIS 465	47.0	44.2	47.4	2.4	2.6	3.7	49	5.3
LATE (GROUPS V AND VI)								
A5474[c]	-	-	51.7	-	-	4.2	54	11.7
BAILEY 469	-	-	57.3	-	-	4.8	54	8.0
BAY	49.8	49.0	54.4	3.3	3.2	4.3	51	11.0
COKER 355[c]	-	44.1	50.8	-	3.9	4.7	50	14.3
COKER 425	-	-	48.3	-	-	3.8	43	12.0
COKER 485[b]	-	-	50.8	-	-	5.0	48	11.3
ESSEX	50.5	46.9	51.2	3.4	3.1	4.2	42	8.3
FFR 561	-	50.2	54.2	-	2.9	4.0	49	9.3
FORREST[b]	48.7	46.9	50.5	3.9	3.8	4.8	49	11.7
MCNAIR 500	-	-	37.6	-	-	4.5	44	12.0
NATHAN[c]	47.4	45.1	47.0	3.9	3.8	4.8	63	11.7
PIONEER 5482	49.6	47.1	49.8	3.5	3.2	4.5	44	10.0
PIONEER 9561[b]	-	47.5	48.2	-	3.5	4.7	53	12.7
PIONEER 9571[c]	-	-	47.1	-	-	4.8	62	19.0
RA-502[b]	47.0	45.4	50.1	4.0	3.9	4.8	52	12.7
STUTTS	-	-	51.3	-	-	4.0	50	11.0
YORK	44.2	42.4	49.7	3.4	3.1	3.8	43	11.3
GRAND AVERAGE	47.7	45.4	49.9	3.0	2.9	4.0	49	8.7
LSD(.10)	4.7	6.0	7.2	0.6	0.8	0.6	4	1.8

[a] Plant height.
[b] Resistant to the soybean cyst nematode (Race 3).
[c] Resistant to the soybean cyst nematode (Race 3 and Race 4).
[d] Blend, see Table 3.