

Grain Sorghum

1994 Missouri Crop Performance

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MISSOURI CROP PERFORMANCE

1994

GRAIN SORGHUM

This report is a contribution of the Department of Agronomy, Plant Science Unit, University of Missouri Agricultural Experiment Station. The work received significant support through fees paid by the companies submitting hybrids for evaluation.

The University of Missouri began its performance testing program for grain sorghum hybrids in 1958. The number of commercial entries in the program increased from 40 in 1958 to 134 in 1982. There were 82 hybrids in the program in 1994.

The large number of commercial hybrids available makes selection of a superior hybrid difficult. To select intelligently, producers need a reliable, unbiased, up-to-date source of information that will permit valid comparisons among available hybrids. The objective of the University of Missouri's performance testing program is to provide this information. The tests are conducted under as uniform conditions as possible. Small plots are used to reduce the chance of soil and climatic variations occurring from one plot to another. Results obtained should aid the individual grower in judging the relative merits of many of the commercial grain sorghum hybrids available in Missouri today.

COMPARING HYBRIDS

The performance of a hybrid cannot be measured with absolute precision. Uncontrollable variability is involved in the determination of each yield average. This variability sometimes occurs because the soil is not uniform, but many other conditions may contribute to it. Because variability exists in all field experimentation, statistics are used as a tool to assist in making decisions. The statistical tool used in these trials is the test of least significant difference (L.S.D.). The L.S.D. is quite simple to apply. When two entries are compared and the difference between them is greater than the L.S.D., the entries are judged to be significantly different. Differences smaller than the L.S.D. may have occurred by chance and are judged to be not significant.

Hybrid performance may seem inconsistent from location to location and from year to year because of differences in rainfall, temperature, soil fertility, diseases, insects, and other factors. To obtain an improved estimate of relative hybrid performance, results from more than one location or year should be considered. In this publication, the authors have tried to facilitate comparisons across years and locations.

In each trial, the "top yielding" hybrids have been identified. These hybrids are those that did not yield significantly less than the highest yielding hybrid in the test. They are denoted in the tables by an asterisk (*) next to their yields. Thus, by going down a column, readers can readily identify the highest yielding hybrids in a trial. By going across, readers can evaluate the relative performance of a hybrid during several years or at several locations. From the standpoint of yield, the most desirable hybrids will be those that are among the "top yielding" hybrids (that is, those that have an asterisk) the greatest number of times.

Although yield usually receives first consideration, other agronomic characteristics may be equally important when selecting a grain sorghum hybrid. Moisture content at harvest, stalk strength and resistance to insects and diseases are among the hybrid characteristics that deserve careful consideration. High moisture content at harvest, whether due to later maturity or slow dry-down, may indicate an increased drying requirement. Poor stalk strength or susceptibility to pests may decrease harvestable yield because of lodging or stand loss. Therefore, when selecting a hybrid, producers should also consider the data presented on agronomic characteristics other than yield.

The Missouri Agricultural Experiment Station does not recommend specific hybrids. Farmers growing a new hybrid for the first time should consider the information contained in this report and then grow a small acreage to determine adaptability. This should be the practice for all new hybrids regardless of origin.

EXPERIMENTAL PROCEDURES

Entries. All producers of hybrid seed were eligible to enter hybrids in the 1994 evaluation trials. Participation was voluntary. The testing coordinator exercised no control over which hybrid or how many hybrids were entered. However, to help finance the evaluation program, a fee of \$90 per location was charged for each hybrid entered by the seed producer.

Locations. On the basis of geographical characteristics, the state is divided into regions. Grain sorghum hybrid evaluation trials are located in the north-central, southwestern and southeastern regions of the state. In 1994, the locations for these trials were on (1) the E.L. Reed farm near Chillicothe in Livingston County, (2) the Richard Primus farm near Martinsburg in Audrain County, (3) the Kenny Tevis farm near Hughesville in Pettis County, (4) the Kurt Gretzinger farm near Urich in Clinton County, (5) the Wally Norton farm near Lamar in Barton County, (6) the Glenn Nothdurft farm near Oran in Scott County and (7) the Tony Jones farm near New Madrid in New Madrid County. Trial locations are shown on the adjacent map.



Field Plot Design. Each test was arranged in a lattice field plot design with three replications. All plots were four rows wide and 20 feet long. The between-row spacing was 30 inches at all locations. Only the center two rows were harvested to determine yield.

Plot Management. The tests were planted and harvested with equipment designed for small-plot work. Fertilizer was applied at each site at the discretion of the farmer. Herbicides and cultivation were used for weed control and plots were hand weeded as necessary. Management details varied from location to location and are specified on individual yield tables.

Data Recorded. Agronomic characteristics were evaluated at harvest. Head compactness was scored on a scale of 1 to 5. A score of 1 indicates the most compact or tight head, while 5 indicates the most lax or loose head. Lodging was determined by counting the number of culms inclined more than 30 degrees from vertical. This value was converted to a percentage of the total number of culms in each plot. Yield was measured in number of bushels per acre at a moisture content of 14.0 percent. An electronic moisture tester was used for all moisture readings. To convert yield to pounds/acre, multiply bushels/acre by 56.

Electronic Accessibility of Data. Results of the Missouri Crop Performance Trials are now available in two forms: this printed Special Report and Missouri's Agricultural Electronic Bulletin Board (AgEBB). Variety test information is accessible from the MAIN MENU of the AgEBB under "CROP PERFORMANCE TESTING". The system number is 314/882-8289. If you need assistance in accessing the system call 314/882-4827 for the system staff's help.

SUMMARY OF RESULTS

Results for each location include data on plant height, head compactness, percent off-type heads, lodging, grain moisture at harvest, and yield adjusted to 14.0 percent moisture.

Significant yield variation was observed among hybrids at each location. Individual hybrid performance across the three north-central, two southwestern and two southeastern locations are summarized in Tables 5, 8, and 11. Average yields and yield ranges for each trial are summarized in Table 1. The spring weather of 1994 was cool and wet causing some emergence problems. Summer rainfall was below normal for the state, while temperatures remained normal. Because environmental conditions influence the performance of hybrid sorghums, the reader is encouraged to give more weight to results from several locations or years than to those from a single test.

TABLE 1. 1994 YIELD SUMMARY

LOCATION	NUMBER OF ENTRIES	IRRI- GATED	<u>YIELD</u> <u>RANGE</u>	<u>(BU/ACRE)</u> <u>AVERAGE</u>	DATA TABLE
Chillicothe	42	No	110-148	130	2
Hughesville	42	No	134-159	146	3
Martinsburg	42	No	86-123	103	4
Urich	48	No	107-142	124	6
Lamar	48	No	103-136	118	7
Oran	55	Yes	134-165	151	9
New Madrid	55	No	103-160	138	10

An indication of hybrid maturity is moisture content of the grain at harvest. Because high moisture at harvest is generally a disadvantage, growers should give preference to hybrids within a yield group with the lowest moisture content.

TABLE 2. Performance of Grain Sorghum Hybrids evaluated near Chillicothe (Livingston County) on the E.L. Reed Farm (Gerald Stevens, operator) during 1994 and near Spickard (Grundy County) on the North Missouri Center during 1992-93.

Planted: 16 May 1994
 Harvested: 21 September 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Putnam Silt Loam

Fertilizer: N=100; P₂O₅=60; K₂O=100 lbs./A
 Herbicide: Atrazine
 Insecticide: None
 Previous Crop: Soybean
 Soil Test: pH=6.2, OM=3.1%, P=64, K=349

Growing Season Rainfall: May=2.3, June=3.1, July=4.1, Aug.=2.5, Sept.=6.1, TOTAL=18.1"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	Pioneer Hybrid 8500	15.8	55	0.0	1.0	0.0	147.7**	37.2	97.4*	92.4
HyPerformer Hy 1320	17.7	61	0.0	1.0	0.0	146.6*	--	--	--	--
HyPerformer HSC Cherokee	16.4	56	0.0	1.0	0.0	146.3*	37.7	--	92.0	--
Patriot 8766	18.8	60	0.0	1.0	0.0	143.4*	--	--	--	--
Crosbyton GW5960	14.8	53	0.0	2.0	0.0	141.9*	50.8*	--	96.4	--
Dekalb DK-55	19.5	58	0.0	3.0	0.0	141.9*	--	--	--	--
JMS 213Y	20.3	55	0.0	1.3	0.0	140.4*	32.4	98.0*	86.4	90.3
Dekalb DK-58	18.6	60	0.0	1.7	0.0	139.4*	19.4	100.6*	79.4	86.5
Triumph TRX25222	20.4	62	0.0	1.0	0.0	137.4*	--	--	--	--
Genetic Resources GRI 02943	18.4	61	0.0	1.0	0.0	137.0*	--	--	--	--
Asgrow XP5312	17.9	55	0.0	1.0	0.0	136.5*	--	--	--	--
Cargill 737	16.0	52	0.0	1.0	0.0	135.6*	37.8	--	86.7	--
Pioneer Hybrid 8305	19.7	60	0.0	1.0	0.0	135.2*	45.4	--	90.3	--
Golden Harvest H-444W	16.7	62	0.0	1.0	0.0	134.4*	51.9*	101.7*	93.2	96.0
NC+ 7R37E	18.0	57	0.0	1.3	0.0	132.8*	--	--	--	--
Genetic Resources GRI 23943	17.8	68	0.0	2.0	0.0	132.3*	--	--	--	--
Dekalb DK-51	16.6	53	0.0	1.6	0.0	132.1*	52.6*	--	92.4	--
Northrup King KS555Y	17.7	56	0.0	1.0	0.0	131.6*	--	--	--	--
Dekalb DK-54	20.5	62	0.0	1.3	0.0	131.1*	--	--	--	--
Cargill 727	18.0	48	0.0	2.0	0.0	131.1*	22.6	92.4	76.9	82.0
Ciba 1655	18.9	56	0.0	1.0	0.0	131.0*	40.4	--	85.7	--
Cargill 575	18.1	59	0.0	2.0	0.0	130.6*	52.5*	105.1*	91.6	96.1
Pioneer Hybrid 8446	18.5	52	0.0	1.7	0.0	129.6*	32.4	--	81.0	--
Cargill 837	17.7	58	0.0	1.0	0.0	129.5*	43.3	96.0*	86.4	89.6
MFA 650	15.5	60	0.0	1.7	0.0	129.2*	42.8	103.8*	86.0	91.9
Asgrow A570	16.6	59	0.0	1.0	0.0	128.9*	--	--	--	--
NC+ 7C49	19.3	57	0.0	1.0	0.0	128.8*	32.7	101.6*	80.8	87.7
Mycogen 444E	18.8	54	0.0	1.0	0.0	127.1	33.2	91.5	80.2	83.9
Cargill 857	19.0	52	0.0	1.3	0.0	126.6	30.8	69.7	78.7	75.7
Mycogen 466W	16.6	59	0.0	1.0	0.0	126.4	--	--	--	--
MFA GS-10	17.5	50	0.0	2.0	0.0	124.4	58.8*	102.9*	91.6	95.4
Ciba 1616	17.4	63	0.0	1.0	0.0	124.2	42.2	105.2*	83.2	90.5
Golden Harvest H-505BW	16.9	59	0.0	1.7	0.0	122.3	--	98.2*	--	--
Dekalb DK-48	21.1	55	0.0	1.6	0.0	120.4	35.3	78.8	77.9	78.2
Pioneer Hybrid 8212Y	20.9	53	0.0	1.0	0.0	120.4	43.1	--	81.8	--
Patriot 8608c	18.6	57	0.0	1.7	0.0	119.8	--	--	--	--
Genetic Resources GRI 06943	21.1	56	0.0	1.0	0.0	114.4	--	--	--	--
MFA 570	17.7	57	0.0	1.0	0.0	113.3	47.7*	106.0*	80.5	89.0
Triumph TR 65G	17.6	54	0.0	1.0	0.0	112.5	44.2	112.4*	78.4	89.7
Patriot 8657	18.2	52	0.0	1.0	0.0	111.9	--	--	--	--
MFA 660	17.2	65	0.0	2.7	0.0	111.3	39.0	84.2	75.2	78.2
Northrup King KS710	19.8	47	0.0	1.7	0.0	109.5	46.3	98.4*	77.9	84.7
TRIAL AVERAGE	18.2	57	0.0	1.4	0.0	129.7	41.8	97.5	85.8	89.7
L.S.D. AT .05	3.4	5	NS	0.5	NS	20.0	17.0	19.7		
C.V. %	11.5	5.1		24.3		10.6	25.0	12.4		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant at the .05 level.

TABLE 3. Performance of Grain Sorghum Hybrids evaluated near Hughesville (Pettis County) on the Kenny Tevis Farm during 1992-94.

Planted: 19 May 1994
 Harvested: 21, 25 October 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Summit Silt Loam

Fertilizer: N=120; P₂O₅=50; K₂O=75 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Previous Crop: Sunflower
 Soil Test: pH=6.5, OM=2.3%, P=70, K=386

Growing Season Rainfall: May=1.6, June=3.0, July=2.8, Aug.=3.5, Sept.=3.6, TOTAL=14.5"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	Dekalb DK-55	13.7	60	0.0	4.3	0.0	159.3**	--	--	--
Asgrow XP5312	12.3	52	0.0	3.3	0.0	157.8*	--	--	--	--
NC+ 7R37E	14.0	55	0.0	2.3	0.0	153.7*	--	--	--	--
HyPerformer Hy 1320	14.2	55	0.0	2.7	0.0	153.1*	--	--	--	--
Ciba 1655	14.2	54	0.0	1.7	0.0	152.6*	93.7	--	123.2	--
Dekalb DK-56	15.0	63	0.0	1.7	0.0	152.0*	--	--	--	--
Cargill 737	11.5	49	0.0	1.3	0.0	151.7*	94.4	--	123.1	--
Cargill 857	13.8	53	0.0	3.7	0.0	151.4*	98.8*	163.6	125.1	137.9
Dekalb DK-48	14.2	53	0.0	2.7	0.0	151.0*	93.0	165.2*	122.0	136.4
Patriot 8766	14.8	59	0.0	2.0	0.0	150.3*	--	--	--	--
Triumph TRX25222	13.3	60	0.3	1.3	0.0	150.2*	--	--	--	--
NC+ 7C49	12.6	53	0.0	3.0	0.0	149.3*	99.5*	153.3	124.4	134.0
Mycogen 444E	12.4	53	0.0	2.3	0.0	148.8*	87.4	160.5	118.1	132.2
Pioneer Hybrid 8305	13.3	54	0.0	2.7	0.0	148.4*	112.9**	--	130.7	--
Crosbyton GW5960	12.4	47	0.0	4.0	0.0	148.3*	96.5	--	122.4	--
Northrup King KS710	12.0	46	0.0	3.3	0.0	148.0*	93.1	166.8*	120.6	136.0
Cargill 837	13.1	57	0.0	2.7	0.0	147.7*	96.2	175.3*	122.0	139.7
Golden Harvest H-505BW	11.8	48	0.0	2.3	0.0	147.6*	--	155.4	--	--
MFA 660	14.1	60	0.0	4.0	0.0	147.5*	89.1	164.4	118.3	133.7
Asgrow A570	12.6	61	0.0	2.3	0.0	147.4*	--	--	--	--
MFA 570	12.2	55	0.0	2.0	0.0	147.2*	103.8*	164.3	125.5	138.4
Dekalb DK-58	12.7	60	0.0	2.7	0.0	146.4	84.5	155.5	115.5	128.8
Triumph TR 65G	13.7	50	0.0	3.0	0.0	146.1	90.1	168.9*	118.1	135.0
HyPerformer HSC Cherokee	14.8	56	0.0	2.0	0.0	145.1	94.3	--	119.7	--
Pioneer Hybrid 8446	12.3	46	0.0	4.3	0.0	144.2	99.1*	--	121.7	--
MFA 650	13.5	54	0.0	3.7	0.0	143.6	87.8	148.4	115.7	126.6
Pioneer Hybrid 8212Y	12.3	51	0.0	1.3	0.0	143.5	91.0	--	117.2	--
Ciba 1616	13.5	57	0.0	2.3	0.0	143.0	105.2*	145.8	124.1	131.3
Northrup King KS555Y	12.4	55	0.0	2.7	0.0	142.5	--	--	--	--
JMS 213Y	13.1	53	0.0	3.7	0.0	142.5	100.9*	163.1	121.7	135.5
Pioneer Hybrid 8500	15.0	50	0.0	4.3	0.0	142.4	96.7	163.5	119.6	134.2
Patriot 8608c	12.3	53	0.0	3.7	0.0	141.7	--	--	--	--
Golden Harvest H-444W	12.7	58	0.0	2.3	0.0	141.7	89.1	161.9	115.4	130.9
Cargill 575	12.1	54	0.0	3.3	0.0	141.3	97.5	153.7	119.4	130.8
Dekalb DK-51	13.0	47	0.0	3.0	0.0	140.2	93.2	--	116.7	--
MFA GS-10	12.2	50	0.0	5.0	0.0	139.7	102.0*	152.3	120.9	131.3
Genetic Resources GRI 02943	13.4	61	0.0	3.0	0.0	138.3	--	--	--	--
Cargill 727	13.8	51	0.0	3.7	0.0	138.2	85.3	173.0*	111.8	132.2
Mycogen 466W	12.9	53	0.0	3.3	0.0	135.5	--	--	--	--
Genetic Resources GRI 06943	14.3	54	0.0	3.7	0.0	134.1	--	--	--	--
Patriot 8657	13.1	47	0.0	1.3	0.0	134.1	--	--	--	--
Genetic Resources GRI 23943	13.9	64	0.0	3.3	0.0	133.6	--	--	--	--
TRIAL AVERAGE	13.2	54	0.0	2.9	0.0	145.7	95.0	159.4	120.4	133.4
L.S.D. AT .05	10.0	8	NS	1.5	NS	12.4	14.4	18.0		
C.V. %	2.2	8.7		31.3		5.2	9.3	6.9		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 4. Performance of Grain Sorghum Hybrids evaluated near Martinsburg (Audrain County) on the Richard Primus Farm during 1993-94, and on the Clarence Phears farm during 1992.

Planted: 23 May 1994
 Harvested: 6 October 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam

Fertilizer: N=110; P₂O₅=80; K₂O=120 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Previous Crop: Wheat
 Soil Test: pH=6.8, OM=2.4%, P=62, K=276

Growing Season Rainfall: May=2.3, June=3.3, July=0.4, Aug.=4.0, Sept.=1.2, TOTAL=11.2"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Moisture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	Dekalb DK-56	17.9	48	0.0	1.5	0.0	122.8**	--	--	--
Dekalb DK-55	18.7	43	0.0	2.6	0.0	119.8*	--	--	--	--
Pioneer Hybrid 8305	17.0	49	0.0	2.0	0.0	118.9*	90.7*	--	104.8	--
MFA 660	15.5	48	0.0	3.4	0.0	117.7*	73.5	176.6*	95.6	122.6
JMS 213Y	17.2	47	0.0	2.5	0.0	117.0*	96.4*	167.1	106.7	126.8
Golden Harvest H-505BW	16.8	46	0.0	2.7	0.0	115.3*	--	162.8	--	--
Golden Harvest H-444W	13.5	47	0.0	2.3	0.0	115.1*	88.0	167.3	101.6	123.5
Patriot 8608c	14.4	45	0.0	2.9	0.0	112.9*	--	--	--	--
Cargill 575	13.2	44	0.0	3.1	0.0	112.2*	84.4	155.8	98.3	117.5
Pioneer Hybrid 8212Y	17.1	42	0.0	1.4	0.0	111.7*	83.5	--	97.6	--
Genetic Resources GRI 23943	16.3	49	0.0	1.8	0.0	110.7*	--	--	--	--
Ciba 1655	16.5	43	0.0	1.0	0.0	109.1*	90.0*	--	99.6	--
Cargill 857	19.8	47	0.0	2.1	0.0	108.8*	82.4	175.2*	95.6	122.1
Patriot 8766	17.8	46	0.0	0.8	0.0	108.8*	--	--	--	--
MFA 650	15.3	44	0.0	2.7	0.0	108.7*	82.7	161.7	95.7	117.7
Dekalb DK-58	18.0	46	0.0	2.3	0.0	108.6*	96.6*	176.3*	102.6	127.2
Genetic Resources GRI 02943	17.4	47	0.0	1.4	0.0	108.1	--	--	--	--
HyPerformer Hy 1320	20.2	48	0.0	1.0	0.0	107.0	--	--	--	--
NC+ 7C49	13.3	41	0.0	2.9	0.0	103.8	90.6*	172.8	97.2	122.4
Asgrow XP5312	13.9	45	0.0	1.7	0.0	103.6	--	--	--	--
Triumph TRX25222	15.2	47	0.0	1.3	0.0	101.0	--	--	--	--
NC+ 7R37E	15.1	42	0.0	2.7	0.0	100.6	--	--	--	--
Crosbyton GW5960	13.5	43	0.0	3.3	0.0	100.6	91.3*	--	95.9	--
Mycogen 466W	14.2	42	0.0	1.8	0.0	99.7	--	--	--	--
Pioneer Hybrid 8500	13.3	42	0.0	2.0	0.0	99.6	90.8*	168.7	95.2	119.7
Genetic Resources GRI 06943	14.7	43	0.0	2.0	0.0	98.4	--	--	--	--
Asgrow A570	18.5	45	0.0	1.5	0.0	98.3	--	--	--	--
Cargill 837	14.7	46	0.0	3.7	0.0	98.2	77.5	182.6*	87.9	119.4
Ciba 1616	12.9	46	0.0	1.8	0.0	98.1	91.3*	176.0*	94.7	121.8
Dekalb DK-51	14.6	39	0.0	2.3	0.0	97.9	84.4	--	91.2	--
HyPerformer HSC Cherokee	14.2	42	0.0	2.7	0.0	95.7	95.8*	--	95.8	--
Cargill 737	15.2	38	0.0	1.3	0.0	95.4	101.2*	--	98.3	--
Cargill 727	17.6	38	0.0	2.7	0.0	95.2	81.3	172.5	88.3	116.3
Dekalb DK-48	16.6	38	0.0	1.3	0.0	94.7	85.2	188.8*	90.0	122.9
Mycogen 444E	15.8	39	0.0	2.8	0.0	94.4	78.6	178.6*	86.5	117.2
MFA 570	12.9	42	0.0	2.8	0.0	92.0	92.0*	174.2	92.0	119.4
Triumph TR 65G	14.0	42	0.0	1.9	0.0	91.5	104.2*	172.4	97.9	122.7
Pioneer Hybrid 8446	12.5	41	0.0	3.7	0.0	91.2	76.3	--	83.8	--
Patriot 8657	15.7	39	0.0	1.3	0.0	90.3	--	--	--	--
Northrup King KS710	15.0	38	0.0	2.9	0.0	86.8	75.4	167.8	81.1	110.0
Northrup King KS555Y	15.0	42	0.0	2.0	0.0	86.6	--	--	--	--
MFA GS-10	11.2	39	0.0	3.8	0.0	85.8	98.2*	172.6	92.0	118.9
TRIAL AVERAGE	15.5	44	0.0	2.2	0.0	103.2	87.9	172.6	95.6	121.2
L.S.D. AT .05	2.7	4	NS	1.1	NS	14.3	20.7	17.3		
C.V. %	10.7	6.2		29.0		8.5	14.4	6.2		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 5. Performance of Grain Sorghum Hybrids evaluated at three North-Central Missouri locations (Chillicothe, Hughesville, and Martinsburg) during 1994.

Brand-Hybrid	Lodging (%)				Yield (Bu/Acre)			
	Chillicth	Hughsvle	Martnsbg	Mean	Chillicth	Hughesville	Martinsburg	Mean
Dekalb DK-55	0.0	0.0	0.0	0.0	141.9*	159.3**	119.8*	140.3**
HyPerformer Hy 1320	0.0	0.0	0.0	0.0	146.6*	153.1*	107.0	135.6*
Dekalb DK-54	0.0	0.0	0.0	0.0	131.1*	152.0*	122.8**	135.3*
Pioneer Hybrid 8305	0.0	0.0	0.0	0.0	135.2*	148.4*	118.9*	134.2*
Patriot 8766	0.0	0.0	0.0	0.0	143.4*	150.3*	108.8*	134.2*
JMS 213Y	0.0	0.0	0.0	0.0	140.4*	142.5	117.0*	133.3*
Asgrow XP5312	0.0	0.0	0.0	0.0	136.5*	157.8*	103.6	132.6*
Dekalb DK-58	0.0	0.0	0.0	0.0	139.4*	146.4	108.6*	131.5*
Ciba 1655	0.0	0.0	0.0	0.0	131.0*	152.6*	109.1*	130.9
Golden Harvest H-444W	0.0	0.0	0.0	0.0	134.4*	141.7	115.1*	130.4
Crosbyton GW5960	0.0	0.0	0.0	0.0	141.9*	148.3*	100.6	130.3
Pioneer Hybrid 8500	0.0	0.0	0.0	0.0	147.7**	142.4	99.6	129.9
Triumph TRX25222	0.0	0.0	0.0	0.0	137.4*	150.2*	101.0	129.5
HyPerformer HSC Cherokee	0.0	0.0	0.0	0.0	146.3*	145.1	95.7	129.0
NC+ 7R37E	0.0	0.0	0.0	0.0	132.8*	153.7*	100.6	129.0
Cargill 857	0.0	0.0	0.0	0.0	126.6	151.4*	108.8*	128.9
Golden Harvest H-505BW	0.0	0.0	0.0	0.0	122.3	147.6*	115.3*	128.4
Cargill 575	0.0	0.0	0.0	0.0	130.6*	141.3	112.2*	128.0
Genetic Resources GRI 02943	0.0	0.0	0.0	0.0	137.0*	138.3	108.1	127.8
Cargill 737	0.0	0.0	0.0	0.0	135.6*	151.7*	95.4	127.6
NC+ 7C49	0.0	0.0	0.0	0.0	128.8*	149.3*	103.8	127.3
MFA 650	0.0	0.0	0.0	0.0	129.2*	143.6	108.7*	127.2
MFA 660	0.0	0.0	0.0	0.0	111.3	147.5*	117.7*	125.5
Genetic Resources GRI 23943	0.0	0.0	0.0	0.0	132.3*	133.6	110.7*	125.5
Pioneer Hybrid 8212Y	0.0	0.0	0.0	0.0	120.4	143.5	111.7*	125.2
Cargill 837	0.0	0.0	0.0	0.0	129.5*	147.7*	98.2	125.1
Asgrow A570	0.0	0.0	0.0	0.0	128.9*	147.4*	98.3	124.9
Patriot 8608c	0.0	0.0	0.0	0.0	119.8	141.7	112.9*	124.8
Mycogen 444E	0.0	0.0	0.0	0.0	127.1	148.8*	94.4	123.4
Dekalb DK-51	0.0	0.0	0.0	0.0	132.1*	140.2	97.9	123.4
Dekalb DK-48	0.0	0.0	0.0	0.0	120.4	151.0*	94.7	122.0
Ciba 1616	0.0	0.0	0.0	0.0	124.2	143.0	98.1	121.8
Pioneer Hybrid 8446	0.0	0.0	0.0	0.0	129.6*	144.2	91.2	121.7
Cargill 727	0.0	0.0	0.0	0.0	131.1*	138.2	95.2	121.5
Mycogen 466W	0.0	0.0	0.0	0.0	126.4	135.5	99.7	120.5
Northrup King KS555Y	0.0	0.0	0.0	0.0	131.6*	142.5	86.6	120.2
MFA 570	0.0	0.0	0.0	0.0	113.3	147.2*	92.0	117.5
Triumph TR 65G	0.0	0.0	0.0	0.0	112.5	146.1	91.5	116.7
MFA GS-10	0.0	0.0	0.0	0.0	124.4	139.7	85.8	116.6
Genetic Resources GRI 06943	0.0	0.0	0.0	0.0	114.4	134.1	98.4	115.6
Northrup King KS710	0.0	0.0	0.0	0.0	109.5	148.0*	86.8	114.8
Patriot 8657	0.0	0.0	0.0	0.0	111.9	134.1	90.3	112.1
TRIAL AVERAGE	0.0	0.0	0.0	0.0	129.7	145.7	103.2	126.2
L.S.D. AT .05	NS	NS	NS	NS	20.0	12.4	14.3	9.2
C.V. %					10.6	5.2	8.5	7.9

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant at the .05 level.

TABLE 6. Performance of Grain Sorghum Hybrids evaluated near Urich (Henry County) on the Kurt Gretzinger Farm during 1994 and near Nevada (Vernon County) on the Gilbert Wilson Farm during 1992-93.

Planted: 18 May 1994
 Harvested: 27 October 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Hartwell Silt Loam
 Soil Test: pH=6.6, OM=2.3%, P=21, K=180

Fertilizer: N=165; P₂O₅=120; K₂O=80 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Irrigation: 0.00 inches
 Previous Crop: Grain Sorghum

Growing Season Rainfall: May=1.9, June=2.5, July=2.5, Aug.=6.3, Sept.=2.5, TOTAL=15.7"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	Dekalb DK-55	11.9	55	0.0	3.3	0.0	142.4**	--	--	--
Triumph TRX25222	10.9	51	0.3	1.3	0.0	140.3*	--	--	--	--
Triumph TR 82G	12.6	51	1.5	2.4	0.0	137.8*	--	--	--	--
Asgrow XP5312	11.8	48	0.0	3.0	0.0	137.1*	--	--	--	--
Asgrow A570	11.8	52	1.2	2.4	0.0	134.9*	--	--	--	--
Dekalb DK-54	13.3	52	0.9	1.7	0.0	133.7*	74.8	139.7*	104.3	116.1
Cargill 575	11.5	49	0.0	2.7	0.0	132.6*	85.2	121.5	108.9	113.1
Ciba 1616	13.4	53	0.4	2.3	0.0	131.4*	88.8*	140.2*	110.1	120.1
HyPerformer Hy 1320	12.9	50	0.4	2.3	0.0	131.3*	--	--	--	--
Golden Harvest H-444W	11.0	53	0.4	1.6	0.0	130.2*	88.9*	116.1	109.6	111.7
Pioneer Hybrid 8305	12.9	51	0.8	1.7	0.0	129.4*	101.5*	--	115.5	--
Cargill 837	11.7	51	0.7	2.9	0.0	129.0*	92.0*	134.8*	110.5	118.6
Northrup King KS714Y	11.4	47	0.4	3.0	0.0	128.7*	93.2*	119.6	111.0	113.8
Mycogen 466W	10.9	48	0.0	2.7	0.0	126.7*	--	122.4	--	--
MFA 660	12.2	50	0.0	3.3	0.0	126.5*	75.6	140.9*	101.1	114.3
Pioneer Hybrid 8212Y	11.5	49	1.2	2.0	0.0	126.4*	83.9	--	105.2	--
Triumph TR 481	10.8	47	0.0	3.0	0.0	126.2*	--	--	--	--
Northrup King KS735	11.2	48	0.0	3.3	0.0	124.8*	--	--	--	--
NC+ 7C49	11.1	50	0.0	3.3	0.0	124.8*	101.4*	124.5	113.1	116.9
Dekalb DK-58	10.8	50	0.0	3.4	0.0	124.7*	84.1	132.1	104.4	113.6
NC+ 7R37E	12.1	47	0.0	2.3	0.0	124.4*	--	--	--	--
Patriot 8608c	11.3	47	0.0	2.7	0.0	124.4*	--	--	--	--
Ohlde 215	11.4	47	0.4	3.3	0.0	124.3*	--	--	--	--
ICI 5616	11.6	45	0.0	2.7	0.0	123.8*	--	--	--	--
Dekalb DK-56	12.6	51	13.4	2.6	0.0	123.0*	83.6	128.8	103.3	111.8
ICI 5536	11.8	44	0.0	3.0	0.0	122.7*	--	--	--	--
Ohlde 136	11.8	44	0.0	1.3	0.0	122.4	--	--	--	--
MFA 650	11.4	48	1.2	2.9	0.0	122.1	97.1*	128.2	109.6	115.8
Cargill 737	11.2	47	0.9	2.0	0.0	121.5	94.7*	--	108.1	--
MFA GS-10	10.7	44	0.0	3.0	0.0	121.3	80.6	130.5	100.9	110.8
Crosbyton GW5960	11.4	46	0.9	3.0	0.0	120.6	90.9*	--	105.8	--
Patriot 8766	14.6	49	0.0	2.4	0.0	120.6	--	--	--	--
HyPerformer HSC 1289c	11.6	48	0.0	2.7	0.0	119.2	93.2*	--	106.2	--
HyPerformer HSC Cherokee	13.9	49	0.0	2.7	0.0	119.2	87.3	--	103.3	--
Ohlde 246Y	11.6	50	0.3	1.7	0.0	119.0	--	--	--	--
Ciba 1655	12.1	50	2.1	1.3	0.0	118.1	81.2	--	99.7	--
Ciba 522DR	10.9	44	0.0	2.7	0.0	117.7	--	--	--	--
Triumph TR 65G	12.3	50	0.3	2.7	0.0	116.9	87.9	124.1	102.4	109.6
Pioneer Hybrid 8446	11.7	45	0.5	3.0	0.0	116.8	81.9	--	99.4	--
Pioneer Hybrid 8500	12.6	47	0.4	4.0	0.0	116.8	100.0*	130.7	108.4	115.8
MFA 570	12.0	50	0.9	1.6	0.0	115.9	105.0**	144.2*	110.5	121.7
Dekalb DK-51	12.2	47	1.9	2.3	0.0	115.3	--	--	--	--
Mycogen 444E	11.5	45	0.0	3.1	0.0	115.2	92.6*	--	103.9	--
Cargill 727	12.1	45	0.0	3.0	0.0	114.9	92.4*	124.1	103.7	110.5
Cargill 857	12.2	49	0.5	3.0	0.0	112.8	85.6	139.4*	99.2	112.6
Patriot 8657	12.1	45	0.0	1.7	0.0	112.1	--	--	--	--
Golden Harvest H-505BW	11.0	47	19.1	2.6	0.0	108.5	77.8	116.6	93.2	101.0
Ohlde 214	12.2	43	0.0	3.0	0.0	106.7	--	--	--	--
TRIAL AVERAGE	11.9	48	1.1	2.6	0.0	123.6	88.7	129.0	106.2	113.8
L.S.D. AT .05	1.3	4	9.4	1.1	NS	19.7	16.7	21.6		
C.V. %	6.8	4.9		24.9		9.8	11.5	10.3		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 7. Performance of Grain Sorghum Hybrids evaluated near Lamar (Barton County) on the Wally Norton Farm during 1992-94.

Planted: 18 May 1994
 Harvested: 29 September 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Parsons Silt Loam
 Soil Test: pH=6.0, OM=1.8%, P=60, K=186

Fertilizer: N=150; P₂O₅=75; K₂O=75 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Irrigation: 0.00 inches
 Previous Crop: Soybean

Growing Season Rainfall: May=2.8, June=3.4, July=6.9, Aug.=7.8, Sept.=7.2, TOTAL=28.1"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-heads pactness (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	HyPerformer Hy 1320	19.8	56	0.0	1.6	0.3	136.4**	--	--	--
Northrup King KS714Y	15.5	49	0.0	5.2	0.0	136.4**	80.2	101.8*	108.3	106.1
Triumph TR 82G	19.1	53	0.0	2.0	0.0	132.5*	--	--	--	--
Asgrow XP5312	16.6	50	0.0	3.2	0.0	131.7*	--	--	--	--
Patriot 8766	18.8	51	0.0	1.5	1.0	130.4*	--	--	--	--
Pioneer Hybrid 8305	19.1	52	0.0	2.8	0.0	129.7*	93.8	--	111.8	--
MFA GS-10	14.3	46	0.0	4.4	0.0	126.5*	109.6*	107.9*	118.1	114.7
Cargill 837	17.7	50	0.0	4.0	0.0	125.7*	112.0*	100.7*	118.9	112.8
HyPerformer HSC Cherokee	18.2	50	0.0	1.9	0.3	125.5*	101.2	--	113.4	--
Asgrow A570	18.1	52	0.0	1.3	0.0	125.2*	--	--	--	--
Triumph TR 65G	18.5	49	0.0	2.2	0.0	124.2*	111.4*	88.0	117.8	107.9
Triumph TRX25222	17.8	54	0.0	1.4	0.0	124.0*	--	--	--	--
NC+ 7R37E	18.8	48	0.0	2.9	0.0	123.8*	--	--	--	--
Ciba 522DR	16.3	50	0.0	1.9	0.0	123.5	--	--	--	--
MFA 570	16.9	51	0.0	1.4	0.0	123.1	104.3*	110.0*	113.7	112.5
Golden Harvest H-444W	16.3	54	0.0	1.9	0.0	122.3	108.1*	81.6	115.2	104.0
Mycogen 466W	14.7	51	0.0	3.4	1.1	122.3	--	67.3	--	--
Dekalb DK-54	19.2	52	0.0	3.0	0.0	122.2	99.4	92.0*	110.8	104.5
Ciba 1616	17.6	53	0.0	1.1	0.0	120.9	121.3**	103.6*	121.1	115.3
Pioneer Hybrid 8500	17.7	50	0.0	1.6	0.0	119.6	98.9	91.3*	109.3	103.3
ICI 5616	15.7	46	0.0	3.8	0.0	118.3	86.1	--	102.2	--
Ohlde 215	16.5	48	0.0	2.3	0.0	117.1	--	--	--	--
Northrup King KS735Y	18.6	48	0.0	3.4	0.0	116.9	--	--	--	--
Patriot 8608c	16.9	49	0.0	4.3	0.0	116.3	--	--	--	--
Mycogen 444E	16.2	51	0.0	4.2	0.0	115.9	103.3*	--	109.6	--
NC+ 7C49	14.8	50	0.0	4.3	0.0	115.7	106.3*	97.4*	111.0	106.5
Dekalb DK-55	20.2	53	0.0	4.4	0.0	115.1	--	--	--	--
HyPerformer HSC 1289c	15.6	51	0.0	5.0	0.0	113.5	99.5	--	106.5	--
Dekalb DK-51	17.4	48	0.0	3.8	0.3	113.0	--	--	--	--
Triumph TR 481	16.5	49	0.0	1.9	0.0	112.9	--	--	--	--
Crosbyton GW5960	15.2	48	0.0	3.5	0.0	112.3	98.2	--	105.3	--
Ohlde 246Y	16.9	52	0.0	4.2	0.0	111.7	--	--	--	--
Cargill 575	15.4	49	0.0	5.1	0.0	111.5	96.3	84.8	103.9	97.5
Ohlde 136	18.0	52	0.0	2.0	0.0	111.4	--	--	--	--
Cargill 727	17.5	48	0.0	4.7	0.0	111.4	100.2	106.2*	105.8	105.9
MFA 660	18.9	54	0.0	4.7	0.0	110.9	97.7	84.0	104.3	97.5
Pioneer Hybrid 8446	18.2	47	0.0	5.0	0.0	110.2	86.2	--	98.2	--
Golden Harvest H-505BW	16.4	53	0.0	4.6	1.9	109.8	90.6	95.2*	100.2	98.5
Pioneer Hybrid 8231Y	18.6	48	0.0	2.1	0.0	109.5	91.2	113.1*	100.4	104.6
ICI 5536	17.2	47	0.0	3.3	0.0	108.9	115.3*	104.3*	112.1	109.5
Ciba 1655	18.3	50	0.0	1.0	0.0	108.9	97.3	--	103.1	--
Patriot 8657	19.2	45	0.0	1.8	0.0	108.6	--	--	--	--
MFA 650	17.4	52	0.0	4.8	0.0	108.3	85.8	101.4*	97.1	98.5
Cargill 857	17.5	50	0.0	4.4	0.0	107.8	95.6	89.1	101.7	97.5
Dekalb DK-58	18.4	54	0.0	5.1	0.0	105.5	105.3*	116.7*	105.4	109.2
Dekalb DK-56	19.9	51	0.0	3.6	0.0	105.0	92.0	116.8*	98.5	104.6
Ohlde 214	15.8	43	0.0	3.0	0.3	104.9	--	--	--	--
Cargill 737	16.8	46	0.0	1.8	0.0	102.9	115.6*	--	109.3	--
TRIAL AVERAGE	17.4	50	0.0	3.1	0.1	117.5	101.7	98.8	109.6	106.0
L.S.D. AT .05	1.9	4	NS	1.0	1.0	12.6	19.6	26.8		
C.V. %	6.8	5.2		20.6		6.6	11.9	16.7		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant at the .05 level.

TABLE 8. Performance of Grain Sorghum Hybrids evaluated at two Southwest Missouri locations (Urich and Lamar) during 1994.

Brand-Hybrid	Urich Planted: 18 May 1994 Harvested: 27 October 1994 Planted Pop.: 104,500 seeds/A. Row Spacing: 30 inches Soil Type: Hartwell Silt Loam Growing Season Moisture: 15.7"			Lamar Planted: 18 May 1994 Harvested: 29 September 1994 Planted Pop.: 104,500 seeds/A. Row Spacing: 30 inches Soil Type: Parsons Silt Loam Growing Season Moisture: 28.1"		
	Urich	Lamar	Mean	Urich	Lamar	Mean
Triumph TR 82G	0.0	0.0	0.0	137.8*	132.5*	135.2**
Asgrow XP5312	0.0	0.0	0.0	137.1*	131.7*	134.4*
HyPerformer Hy 1320	0.0	0.3	0.2	131.3*	136.4**	133.8*
Northrup King KS714Y	0.0	0.0	0.0	128.7*	136.4**	132.6*
Triumph TRX25222	0.0	0.0	0.0	140.3*	124.0*	132.2*
Asgrow A570	0.0	0.0	0.0	134.9*	125.2*	130.0*
Pioneer Hybrid 8305	0.0	0.0	0.0	129.4*	129.7*	129.6*
Dekalb DK-55	0.0	0.0	0.0	142.4**	115.1	128.8*
Dekalb DK-54	0.0	0.0	0.0	133.7*	122.2	128.0*
Cargill 837	0.0	0.0	0.0	129.0*	125.7*	127.4*
Ciba 1616	0.0	0.0	0.0	131.4*	120.9	126.2*
Golden Harvest H-444W	0.0	0.0	0.0	130.2*	122.3	126.2*
Patriot 8766	0.0	1.0	0.5	120.6	130.4*	125.5*
Mycogen 466W	0.0	1.1	0.6	126.7*	122.3	124.5*
NC+ 7R37E	0.0	0.0	0.0	124.4*	123.8*	124.1*
MFA GS-10	0.0	0.0	0.0	121.3	126.5*	123.9*
HyPerformer HSC Cherokee	0.0	0.3	0.2	119.2	125.5*	122.4
Cargill 575	0.0	0.0	0.0	132.6*	111.5	122.0
ICI 5616	0.0	0.0	0.0	123.8*	118.3	121.0
Northrup King KS735	0.0	0.0	0.0	124.8*	116.9	120.8
Ohlde 215	0.0	0.0	0.0	124.3*	117.1	120.7
Ciba 522DR	0.0	0.0	0.0	117.7	123.5	120.6
Triumph TR 65G	0.0	0.0	0.0	116.9	124.2*	120.6
Patriot 8608c	0.0	0.0	0.0	124.4*	116.3	120.4
NC+ 7C49	0.0	0.0	0.0	124.8*	115.7	120.2
Triumph TR 481	0.0	0.0	0.0	126.2*	112.9	119.6
MFA 570	0.0	0.0	0.0	115.9	123.1	119.5
MFA 660	0.0	0.0	0.0	126.5*	110.9	118.7
Pioneer Hybrid 8500	0.0	0.0	0.0	116.8	119.6	118.2
Pioneer Hybrid 8212Y	0.0	0.0	0.0	126.4*	109.5	118.0
Ohlde 136	0.0	0.0	0.0	122.4	111.4	116.9
Crosbyton GW5960	0.0	0.0	0.0	120.6	112.3	116.4
HyPerformer HSC 1289c	0.0	0.0	0.0	119.2	113.5	116.4
ICI 5536	0.0	0.0	0.0	122.7*	108.9	115.8
Mycogen 444E	0.0	0.0	0.0	115.2	115.9	115.6
Ohlde 246Y	0.0	0.0	0.0	119.0	111.7	115.4
MFA 650	0.0	0.0	0.0	122.1	108.3	115.2
Dekalb DK-58	0.0	0.0	0.0	124.7*	105.5	115.1
Dekalb DK-51	0.0	0.3	0.2	115.3	113.0	114.2
Dekalb DK-56	0.0	0.0	0.0	123.0*	105.0	114.0
Ciba 1655	0.0	0.0	0.0	118.1	108.9	113.5
Pioneer Hybrid 8446	0.0	0.0	0.0	116.8	110.2	113.5
Cargill 727	0.0	0.0	0.0	114.9	111.4	113.2
Cargill 737	0.0	0.0	0.0	121.5	102.9	112.2
Patriot 8657	0.0	0.0	0.0	112.1	108.6	110.4
Cargill 857	0.0	0.0	0.0	112.8	107.8	110.3
Golden Harvest H-505BW	0.0	1.9	1.0	108.5	109.8	109.2
Ohlde 214	0.0	0.3	0.2	106.7	104.9	105.8
TRIAL AVERAGE	0.0	0.1	0.1	123.6	117.5	120.6
L.S.D. AT .05	NS	NS	NS	19.7	12.6	11.4
C.V. %				9.8	6.6	8.3

** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 9. Performance of Grain Sorghum Hybrids evaluated near Oran (Scott County) on the Glenn Nothdurft Farm during 1992-94.

Planted: 6 May 1994
 Harvested: 19 September 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Commerce Silt Loam
 Soil Test: pH=5.9, OM=2.2%, P=102, K=304

Fertilizer: N=160; P₂O₅=60; K₂O=85 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Irrigation: 3.00 inches
 Previous Crop: Soybean

Growing Season Rainfall: May=2.6, June=3.5, July=3.0, Aug.=3.7, Sept.=2.5, TOTAL=15.3"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	MFA GS-10	--	55	0.0	3.2	0.0	165.2**	144.0*	176.0*	154.6
Dekalb DK-55	--	56	0.0	5.0	0.0	164.9	--	--	--	--
Pioneer Hybrid 8118	--	56	0.0	2.6	0.0	163.2	130.9	154.2	147.1	149.4
AgraTech 805WG	--	52	0.0	2.6	0.0	161.1	125.4	167.7*	143.3	151.4
Pioneer Hybrid 8310	--	55	0.0	1.0	0.0	160.9	150.1*	--	155.5	--
ICI 5392	--	53	0.0	2.0	0.0	160.7	146.7*	--	153.7	--
Deltapine G-1616	--	54	0.0	1.8	0.0	160.0	134.1	166.6*	147.1	153.6
Pioneer Hybrid XS538	--	47	0.0	2.3	0.0	159.7	--	--	--	--
Triumph TR 82G	--	61	0.0	1.3	0.0	159.6	109.6	177.9*	134.6	149.0
Asgrow A570	--	53	0.0	1.2	0.0	159.5	145.0*	--	152.3	--
HyPerformer HSC Cherokee	--	54	0.0	1.0	0.0	159.4	129.4	160.0	144.4	149.6
Asgrow XP5312	--	55	0.0	2.0	0.0	159.3	--	--	--	--
Capehart Exp.93-2	--	58	0.0	1.8	0.0	159.3	133.4	--	146.4	--
Pioneer Hybrid 8305	--	58	0.0	1.5	0.0	157.8	131.4	--	144.6	--
Northrup King KS714Y	--	47	0.0	2.7	0.0	157.6	123.6	184.5**	140.6	155.2
Mycogen 444E	--	54	0.0	2.7	0.0	157.5	133.8	163.1*	145.7	151.5
Cargill 575	--	49	0.0	2.5	0.0	156.4	117.6	144.1	137.0	139.4
Northrup King KS735	--	51	0.0	2.5	0.0	155.9	--	--	--	--
Pioneer Hybrid XS536	--	51	0.0	2.5	0.0	155.6	--	--	--	--
Dekalb DK-66	--	63	0.0	1.5	0.0	155.4	137.3*	162.0*	146.4	151.6
HyPerformer HY 1320	--	55	0.0	1.2	0.0	154.9	147.8*	180.6*	151.4	161.1
Pioneer Hybrid 8446	--	47	0.0	2.8	0.0	153.8	127.8	168.9*	140.8	150.2
Terral TV 1050	--	54	0.0	1.2	0.0	152.7	116.9	--	134.8	--
Pioneer Hybrid XS323	--	51	0.0	3.7	0.0	152.1	--	--	--	--
Capehart Champion	--	59	0.0	1.3	0.0	151.3	101.0	--	126.2	--
MFA 650	--	52	0.0	2.3	0.0	151.0	120.0	154.7	135.5	141.9
MFA 570	--	57	0.0	1.5	0.0	150.9	120.2	174.3*	135.6	148.5
ICI 5616	--	49	0.0	2.0	0.0	150.9	--	--	--	--
Capehart Cream	--	52	0.0	3.0	0.0	150.8	126.4	--	138.6	--
Cargill 857	--	51	0.0	2.2	0.0	150.6	121.6	169.8*	136.1	147.3
HyPerformer HSC Wings	--	54	0.0	1.2	0.0	150.2	126.9	160.4	138.6	145.8
HyPerformer 1225DR	--	49	0.0	1.8	0.0	149.6	158.5*	162.1*	154.1	156.7
Capehart Challenger	--	57	0.0	1.0	0.0	149.3	150.2*	--	149.8	--
Deltapine G-522DR	--	49	0.0	1.3	0.0	148.9	136.8*	153.2	142.9	146.3
HyPerformer HB94-55	--	58	0.0	2.9	0.0	148.9	--	--	--	--
AgraTech 792G	--	47	0.0	2.9	0.0	148.5	--	--	--	--
Dekalb DK-58	--	48	0.0	3.0	0.0	148.3	--	--	--	--
Dekalb DK-51	--	47	0.0	2.7	0.0	148.2	--	--	--	--
Dekalb DK-54	--	56	0.0	2.2	0.0	147.9	136.2*	--	142.1	--
HyPerformer HSC Honcho	--	47	0.0	2.3	0.0	147.6	130.8	--	139.2	--
Terral TV 9421	--	49	0.0	2.7	0.0	146.6	--	--	--	--
Cargill 737	--	51	0.0	1.0	0.0	146.5	126.2	--	136.4	--
Triumph TR 481	--	52	0.0	1.7	0.0	146.1	--	--	--	--
Crosbyton GW5960	--	50	0.0	2.3	0.0	145.1	134.0	--	139.6	--
AgraTech GK802G	--	50	0.0	2.0	0.0	143.9	162.7*	158.9	153.3	155.2
Capehart Contender	--	53	0.0	1.7	0.0	143.8	134.8*	--	139.3	--
MFA 660	--	59	0.0	3.2	0.0	143.6	142.2*	162.2*	142.9	149.3
Cargill 837	--	52	0.0	2.7	0.0	143.4	133.0	160.3	138.2	145.6
Dekalb DK-40Y	--	50	0.0	4.0	0.0	139.9	136.6*	--	138.3	--
Pioneer Hybrid 8212Y	--	50	0.0	1.5	0.0	139.4	123.2	165.7*	131.3	142.8
Dekalb DK-56	--	54	0.0	2.7	0.0	138.2	120.7	171.4*	129.5	143.4
Triumph TWO 80-D	--	48	0.0	1.3	0.0	138.0	145.6*	159.4	141.8	147.7
ICI 5536	--	47	0.0	2.2	0.0	136.6	--	--	--	--
ICI 5319	--	50	0.0	1.4	0.0	134.0	112.8	165.4*	123.4	137.4
Deltapine 1552	--	54	0.0	3.0	0.0	133.6	163.4**	163.4*	148.5	153.5
TRIAL AVERAGE	--	53	0.0	2.2	0.0	151.2	132.6	162.1	141.9	148.6
L.S.D. AT .05		7	NS	0.8	NS	NS	28.7	23.0		
C.V. %		8.4		22.1		18.4	13.4	8.8		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant at the .05 level.

TABLE 10. Performance of Grain Sorghum Hybrids evaluated near New Madrid (New Madrid County) on the Tony Jones Farm during 1993-94, and the Henry Retz Farm near Catron during 1992.

Planted: 11 May 1994
 Harvested: 9 September 1994
 Planted Population: 104,500 seeds/A.
 Row Spacing: 30 inches
 Soil Type: Dubbs Silt Loam
 Soil Test: pH=6.5, OM=1.6%, P=29, K=147

Fertilizer: N=110; P₂O₅=30; K₂O=30 lbs./A
 Herbicide: Ramrod + Atrazine
 Insecticide: None
 Irrigation: 0.00 inches
 Previous Crop: Soybean

Growing Season Rainfall: May=1.8, June=9.7, July=2.3, Aug.=2.2, Sept.=3.2, TOTAL=19.2"

Brand-Hybrid	1994					Yield (Bu/Acre)			Means	
	Mois- ture (%)	Plant Ht. (In.)	Off-type Heads (%)	Com- pactness Score	Lodg- ing (%)	1994	1993	1992	2 Yr.	3 Yr.
	HyPerformer HB94-55	--	65	0.0	3.0	0.0	160.1**	--	--	--
MFA 660	--	61	0.0	3.0	0.0	158.4*	107.1	130.8*	132.8	132.1,
Dekalb DK-55	--	55	0.0	5.0	16.7	157.3*	--	--	--	--
Terral TV 1050	--	58	0.0	1.3	0.0	157.1*	97.1	--	127.1	--
Cargill 857	--	54	0.0	3.0	0.0	154.8*	108.4*	144.7*	131.6	136.0,
HyPerformer HY 1320	--	57	0.0	2.0	0.0	154.4*	103.4	156.6*	128.9	138.1,
Cargill 575	--	57	0.0	3.0	0.0	154.3*	112.3*	109.0	133.3	125.2,
Deltapine G-522DR	--	54	0.0	1.3	0.0	152.3*	102.7	100.5	127.5	118.5,
Pioneer Hybrid 8118	--	64	0.0	3.7	0.0	152.2*	104.0	150.1*	128.1	135.4,
Dekalb DK-54	--	63	0.0	2.0	0.0	151.4*	102.6	--	127.0	--
Cargill 737	--	52	0.0	1.3	0.0	150.4*	126.3**	--	138.4	--
Mycogen 444E	--	52	0.0	3.0	0.0	150.4*	125.0*	116.8	137.7	130.7,
Pioneer Hybrid 8305	--	59	0.0	2.0	0.0	149.7*	99.4	--	124.6	--
Deltapine 1552	--	60	0.0	3.0	0.0	149.7*	88.3	129.2*	119.0	122.4,
HyPerformer 1225DR	--	54	0.0	2.0	0.0	145.2*	95.2	143.7*	120.2	128.0,
Dekalb DK-56	--	66	0.0	3.0	0.0	145.0*	106.0	115.9	125.5	122.3,
Asgrow A570	--	62	0.0	1.0	0.0	144.9*	86.3	--	115.6	--
HyPerformer HSC Honcho	--	50	0.0	3.0	0.0	144.7*	111.4*	--	128.1	--
Dekalb DK-66	--	69	0.0	2.0	0.0	144.0*	99.6	135.8*	121.8	126.5,
Pioneer Hybrid XS538	--	52	0.0	2.0	0.0	144.0*	--	--	--	--
MFA GS-10	--	53	0.0	3.0	0.0	143.9*	93.2	100.8	118.6	112.6,
Pioneer Hybrid 8446	--	50	0.0	3.0	0.0	143.3*	102.6	107.8	123.0	117.9,
Dekalb DK-58	--	58	0.0	3.3	0.0	142.6*	--	--	--	--
ICI 5392	--	57	0.0	2.0	0.0	141.5*	113.4*	--	127.5	--
Terral TV 9421	--	55	0.0	3.0	0.0	141.3*	--	--	--	--
MFA 570	--	58	0.0	2.0	0.0	139.7*	94.0	149.0*	116.9	127.6,
Capehart Cream	--	57	0.0	4.0	0.0	136.3*	100.1	--	118.2	--
HyPerformer HSC Cherokee	--	59	0.0	2.0	0.0	135.4*	98.7	137.4*	117.1	123.8,
Triumph TR 82G	--	60	0.0	2.0	0.0	134.7*	105.0	136.1*	119.9	125.3,
Crosbyton GW5960	--	57	0.0	3.0	0.0	134.6*	90.1	--	112.4	--
Northrup King KS735	--	57	0.0	3.0	0.0	134.4*	--	--	--	--
ICI 5319	--	59	0.0	2.0	0.0	134.1*	110.6*	136.8*	122.4	127.2,
HyPerformer HSC Wings	--	59	0.0	1.7	0.0	133.8*	96.7	101.5	115.3	110.7,
Asgrow XP5312	--	58	0.0	3.0	0.0	133.5*	--	--	--	--
Triumph TWO 80-D	--	59	0.0	2.0	0.0	133.1*	99.8	140.4*	116.5	124.4,
Triumph TR 481	--	58	0.0	2.0	0.0	132.1*	--	--	--	--
Deltapine G-1616	--	60	0.0	2.0	0.0	131.5*	99.8	139.5*	115.7	123.6,
MFA 650	--	59	0.0	2.0	0.0	131.3*	96.8	131.0*	114.1	119.7,
AgraTech 792G	--	57	0.0	3.0	0.0	131.2*	--	--	--	--
Northrup King KS714Y	--	57	0.0	3.0	0.0	131.2*	105.8	138.5*	118.5	125.2,
Cargill 837	--	55	0.0	2.0	0.0	130.7*	92.5	139.8*	111.6	121.0,
Capehart Champion	--	63	0.0	1.0	0.0	130.2*	117.8*	--	124.0	--
Capehart Challenger	--	58	0.0	1.7	0.0	128.1	109.7*	--	118.9	--
AgraTech GK802G	--	54	0.0	2.0	0.0	127.4	111.8*	158.1*	119.6	132.4,
Dekalb DK-40Y	--	55	0.0	3.0	0.0	125.9	126.1*	--	126.0	--
AgraTech 805WG	--	55	0.0	3.0	0.0	124.6	94.6	108.9	109.6	109.4,
Pioneer Hybrid 8310	--	59	0.0	1.7	0.0	124.6	96.3	--	110.5	--
Dekalb DK-51	--	52	0.0	4.0	0.0	123.7	--	--	--	--
Pioneer Hybrid XS323	--	55	0.0	3.0	0.0	123.3	--	--	--	--
Capehart Contender	--	56	0.0	2.0	0.0	121.1	89.6	--	105.4	--
Pioneer Hybrid 8212Y	--	54	0.0	1.7	0.0	119.0	121.4*	109.7	120.2	116.7,
ICI 5536	--	50	0.0	3.0	0.0	118.2	--	--	--	--
ICI 5616	--	47	0.0	2.3	0.0	114.3	--	--	--	--
Capehart Exp.93-2	--	62	0.0	2.0	20.0	107.4	103.6	--	105.5	--
Pioneer Hybrid XS536	--	50	0.0	3.0	0.0	103.4	--	--	--	--
TRIAL AVERAGE		57	0.0	2.5	0.7	137.5	103.0	127.9	120.2	122.9
L.S.D. AT .05		7	NS	0.4	9.9	30.2	18.4	38.2		
C.V. %		8.0		9.9		13.5	11.0	18.4		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 11. Performance of Grain Sorghum Hybrids evaluated at two Southeast Missouri locations (Oran and New Madrid) during 1994.

Brand-Hybrid	Oran Planted: 6 May 1994 Harvested: 19 September 1994 Planted Pop.: 104,500 seeds/A. Row Spacing: 30 inches Soil Type: Commerce Silt Loam Growing Season Moisture: 15.3"			New Madrid Planted: 11 May 1994 Harvested: 9 September 1994 Planted Pop.: 104,500 seeds/A. Row Spacing: 30 inches Soil Type: Dubbs Silt Loam Growing Season Moisture: 19.2"		
	Oran	New Madrid	Mean	Oran	New Madrid	Mean
		Lodging (%)			Yield (Bu/Acre)	
Dekalb DK-55	0.0	16.7	8.4	164.9	157.3*	161.1**
Pioneer Hybrid 8118	0.0	0.0	0.0	163.2	152.2*	157.7*
Cargill 575	0.0	0.0	0.0	156.4	154.3*	155.4*
Terral TV 1050	0.0	0.0	0.0	152.7	157.1*	154.9*
HyPerformer HY 1320	0.0	0.0	0.0	154.9	154.4*	154.6*
MFA GS-10	0.0	0.0	0.0	165.2**	143.9*	154.6*
HyPerformer HB94-55	0.0	0.0	0.0	148.9	160.1**	154.5*
Mycogen 444E	0.0	0.0	0.0	157.5	150.4*	154.0*
Pioneer Hybrid 8305	0.0	0.0	0.0	157.8	149.7*	153.8*
Cargill 857	0.0	0.0	0.0	150.6	154.8*	152.7*
Asgrow A570	0.0	0.0	0.0	159.5	144.9*	152.2*
Pioneer Hybrid XS538	0.0	0.0	0.0	159.7	144.0*	151.8*
ICI 5392	0.0	0.0	0.0	160.7	141.5*	151.1*
MFA 660	0.0	0.0	0.0	143.6	158.4*	151.0*
Deltapine G-522DR	0.0	0.0	0.0	148.9	152.3*	150.6*
Dekalb DK-66	0.0	0.0	0.0	155.4	144.0*	149.7*
Dekalb DK-54	0.0	0.0	0.0	147.9	151.4*	149.6*
Pioneer Hybrid 8446	0.0	0.0	0.0	153.8	143.3*	148.6*
Cargill 737	0.0	0.0	0.0	146.5	150.4*	148.4*
HyPerformer 1225DR	0.0	0.0	0.0	149.6	145.2*	147.4*
HyPerformer HSC Cherokee	0.0	0.0	0.0	159.4	135.4*	147.4*
Triumph TR 82G	0.0	0.0	0.0	159.6	134.7*	147.2*
Asgrow XP5312	0.0	0.0	0.0	159.3	133.5*	146.4*
HyPerformer HSC Honcho	0.0	0.0	0.0	147.6	144.7*	146.2*
Deltapine G-1616	0.0	0.0	0.0	160.0	131.5*	145.8*
Dekalb DK-58	0.0	0.0	0.0	148.3	142.6*	145.4*
MFA 570	0.0	0.0	0.0	150.9	139.7*	145.3*
Northrup King KS735	0.0	0.0	0.0	155.9	134.4*	145.2*
Northrup King KS714Y	0.0	0.0	0.0	157.6	131.2*	144.4*
Terral TV 9421	0.0	0.0	0.0	146.6	141.3*	144.0*
Capehart Cream	0.0	0.0	0.0	150.8	136.3*	143.6*
AgraTech 805WG	0.0	0.0	0.0	161.1	124.6	142.8*
Pioneer Hybrid 8310	0.0	0.0	0.0	160.9	124.6	142.8*
HyPerformer HSC Wings	0.0	0.0	0.0	150.2	133.8*	142.0
Deltapine 1552	0.0	0.0	0.0	133.6	149.7*	141.6
Dekalb DK-56	0.0	0.0	0.0	138.2	145.0*	141.6
MFA 650	0.0	0.0	0.0	151.0	131.3*	141.2
Capehart Champion	0.0	0.0	0.0	151.3	130.2*	140.8
Crosbyton GW5960	0.0	0.0	0.0	145.1	134.6*	139.8
AgraTech 792G	0.0	0.0	0.0	148.5	131.2*	139.8
Triumph TR 481	0.0	0.0	0.0	146.1	132.1*	139.1
Capehart Challenger	0.0	0.0	0.0	149.3	128.1	138.7
Pioneer Hybrid XS323	0.0	0.0	0.0	152.1	123.3	137.7
Cargill 837	0.0	0.0	0.0	143.4	130.7*	137.0
Dekalb DK-51	0.0	0.0	0.0	148.2	123.7	136.0
AgraTech GK802G	0.0	0.0	0.0	143.9	127.4	135.6
Triumph TWO 80-D	0.0	0.0	0.0	138.0	133.1*	135.6
ICI 5319	0.0	0.0	0.0	134.0	134.1*	134.0
Capehart Exp.93-2	0.0	20.0	10.0	159.3	107.4	133.4
Dekalb DK-40Y	0.0	0.0	0.0	139.9	125.9	132.9
ICI 5616	0.0	0.0	0.0	150.9	114.3	132.6
Capehart Contender	0.0	0.0	0.0	143.8	121.1	132.4
Pioneer Hybrid XS536	0.0	0.0	0.0	155.6	103.4	129.5
Pioneer Hybrid 8212Y	0.0	0.0	0.0	139.4	119.0	129.2
ICI 5536	0.0	0.0	0.0	136.6	118.2	127.4
TRIAL AVERAGE	0.0	0.7	0.3	151.2	137.5	147.1
L.S.D. AT .05	NS	NS	NS	NS	30.2	18.6
C.V. %				13.4	13.5	11.2

** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant at the .05 level.

TABLE 12. CHARACTERISTICS* OF GRAIN SORGHUM HYBRIDS.

Brand-Hybrid	Bird Resistant	Maturity Group	Color		Endo-Sperm Type	Biotype E Gr. Bug Response
			Seed Coat	Endo-Sperm		
AgraTech 792G	NO	2	BZ	Y	N	T
AgraTech GK802G	NO	3	BZ	Y	N	T
AgraTech 805WG	NO	3	W	Y	N	T
Asgrow A570	NO	3	R	HY	N	S
Asgrow XP5312	NO	3	R	HY	N	R
Capehart Cream	NO	3	W	Y	N	R
Capehart Contender	NO	2	BZ	HY	N	S
Capehart Challenger	NO	3	BZ	HY	N	R
Capehart Champion	NO	3	BZ	HY	N	S
Capehart EXP 93-2	NO	3	BZ	HY	-	-
Cargill 575	NO	3	Y	HY	N	S
Cargill 727	NO	2	BZ	HY	N	R
Cargill 737	NO	2	BZ	HY	N	T
Cargill 837	NO	3	BZ	HY	N	T
Cargill 857	NO	3	BZ	HY	N	T
Ciba 522DR	NO	2	BZ	HY	N	S
Ciba 1616	NO	2	BZ	HY	N	R
Ciba 1655	NO	2	BZ	HY	N	R
Crosbyton GW5960	NO	2	BZ	Y	N	R
Dekalb DK-40y	NO	2	Y	Y	N	R
Dekalb DK-48	NO	2	BZ	HY	N	R
Dekalb DK-51	NO	2	BZ	HY	N	R
Dekalb DK-54	NO	3	BZ	HY	N	R
Dekalb DK-55	NO	3	BZ	HY	N	R
Dekalb DK-56	NO	3	R	HY	N	R
Dekalb DK-58	NO	4	BZ	HY	N	R
Dekalb DK-66	NO	4	BZ	HY	N	R
Deltapine 1552	NO	2	R	HY	N	S
Deltapine G-522DR	NO	2	BZ	HY	N	S
Deltapine G-1616	NO	2	BZ	HY	N	R
Golden Harvest H-444W	NO	2	W	HY	N	S
Golden Harvest H-505BW	NO	3	W	HY	N	S
GRI 06943	NO	3	R	W	N	R
GRI 02943	NO	3	BZ	W	N	R
GRI 23943	NO	3	R	W	N	R
Hyperformer 1225DR	NO	2	BZ	HY	N	S
Hyperformer HSC 1289C	NO	2	R	HY	N	R
Hyperformer HY 1320	NO	3	BZ	HY	N	R
Hyperformer HSC Cherokee	NO	2	R	HY	N	R
Hyperformer HSC Honcho	NO	1	BZ	HY	N	S
Hyperformer HSC Wings	NO	3	BZ	HY	N	S
Hyperformer HB94-55	NO	3	R	HY	N	S
ICI 5319	NO	3	BZ	HY	N	S
ICI 5392	NO	2	BZ	HY	N	R
ICI 5536	NO	2	R	-	-	-
ICI 5616	NO	2	R	-	-	-
JMS 213Y	NO	2	Y	Y	N	T
MFA 570	NO	2	BZ	Y	N	R
MFA 650	NO	3	Y	Y	N	T
MFA 660	NO	2	R	Y	N	S
MFA GS-10	NO	2	R	Y	N	S
Mycogen 444E	NO	3	BZ	HY	N	R
Mycogen 466W	NO	3	W	HY	N	R

TABLE 12. Continued.

Brand-Hybrid	Bird Resistant	Maturity Group	Color		Endo-Sperm Type	Biotype E Gr. Bug Response
			Seed Coat	Endo-Sperm		
NC+ 7R37E	NO	3	R	W	N	R
NC+ 7C49	NO	3	W	HY	N	S
Northrup King KS710	NO	3	BZ	HY	N	R
Northrup King KS714Y	NO	3	Y	HY	N	R
Northrup King KS555Y	NO	2	Y	HY	N	R
Northrup King KS735	NO	3	BZ	HY	N	R
Ohlde 136	NO	1	BZ	HY	N	R
Ohlde 214	NO	2	BZ	HY	N	R
Ohlde 215	NO	2	BZ	Y	N	T
Ohlde 246Y	NO	1	BZ	HY	N	R
Patriot 8608C	NO	1	Y	Y	N	R
Patriot 8657	NO	2	BZ	Y	N	T
Patriot 8766	NO	4	R	Y	N	T
Pioneer Hybrid 8118	NO	3	BZ	Y	HW	R
Pioneer Hybrid 8212Y	NO	3	Y	Y	HW	S
Pioneer Hybrid 8305	NO	3	R	W	HW	S
Pioneer Hybrid 8310	NO	3	R	W	HW	S
Pioneer Hybrid 8446	NO	2	BZ	Y	HW	R
Pioneer Hybrid 8500	NO	2	R	W	HW	S
Pioneer Hybrid XS323	NO	3	R	W	N	S
Pioneer Hybrid XS536	NO	2	R	W	N	S
Pioneer Hybrid XS538	NO	2	BZ	Y	N	S
Terral TV1050	NO	1	Y	N	R	R
Terral TV9421	NO	1	Y	N	R	-
Triumph TR65G	NO	3	R	W	N	R
Triumph TR82G	NO	3	R	W	N	R
Triumph TR481	NO	3	R	HY	N	R
Triumph Two 80-D	NO	3	BZ	HY	N	S
Triumph TRX25222	NO	3	W	W	N	R

* Descriptions for Commercial Hybrids were provided by the companies submitting them for evaluation.
 - Data not provided by the companies.

Color Codes
 HY - Heteroyellow
 W - White
 Y - Yellow
 R - Red
 BZ - Bronze

Endosperm Type Code
 HW - Heterowaxy
 N - Nonwaxy
 W - Waxy

Disease Reaction Code
 S - Susceptible
 T - Tolerant
 R - Resistant

TABLE 13. GRAIN SORGHUM SEED COMPANY ADDRESSES.

BRAND	HYBRID	SEED SOURCE
AgraTech	792G, 805WG, GK802G	AgraTech Seeds, Inc., 5559 N. 500 W., McCordsville, IN 46055 (317-335-3333)
Asgrow	A570, XP5312	Asgrow Seed Co., 9635-190-31, 7000 Portage Rd., Kalamazoo, MI 49001 (800-548-5641)
Capehart	Cream, Contender, Challenger, Champion, EXP 93-2	Capehart Seed Service, Box 10, Hwy. 61 S., Holland, MO 63853 (314-695-4447)
Cargill	575, 727, 737, 837, 857	Cargill Hybrid Seeds, Box 5645, Minneapolis, MN 55440 (612-772-6727)
Ciba	1616, 1655, 522DR	Ciba Seed, 3615, S. Hilton Lane, Peoria, IL 61607 (309-697-2414)
Crosbyton	GW5960	Crosbyton Seed Co., Box 429, 306 E. Main, Crosbyton, TX 79322 (806-675-2308)
Dekalb	DK-40y, DK-48, DK-51, DK-54, DK-55, DK-56, DK-58, DK-66	Dekalb Plant Genetics, Rt. 2, Box 56, Lubbock, TX 79415 (806-763-3336)
Deltapine	G-522DR, 1552, G-1616	Delta and Pine Land Co., Box 157, Scott, MS 38772 (601-742-3351)
Golden Harvest	H-444W, H-505BW	The J.C. Robinson Seed Co., 100 J.C. Robinson Blvd., Waterloo, NE 68069-0301 (402-779-2531)
GRI	02943, 06943, 23943	Genetic Resources Inc., PO Box 229, 1606 Cty Rd, 600N, Philo, IL 61864 (217-684-2703)
Hyperformer	1225DR, HSC 1289C, HSC Wings, Honcho, HY 1320, HSC Cherokee, HB94-55	Hyperformer Seed Co., One Hy Crop Row, Memphis, TN 38120 (901-756-1771)
ICI	5319, 5392, 5536, 5616	ICI Seed/Zeneca Inc., 101 Tamara Lane, Searcy, AR 72143 (501-268-3088)
JMS	213Y	J.M. Schultz Seed Co., Box 211, 105 Pine St., Dieterich, IL 62424 (217-925-5212)
MFA	GS-10, 570, 650, 660	MFA Inc., 615 Locust, Columbia, MO 65201 (314-876-5345)
Mycogen	444E, 466W	Mycogen Plant Sciences, 624 27TH, Lubbock, TX 79404 (806-744-1408)
NC+	7C49, 7R37E	NC+ Hybrids, 3820 N. 56th St., Box 4408, Lincoln, NE 68504 (402-467-2517)
Northrup King	KS555Y, KS710, KS714Y, KS735	Northrup King Co., 719 Magnolia, Mt. Vernon, IL 62864 (618-244-3454)
Ohlde	136, 214, 215, 246Y	Ohlde Seed Farms, Inc., Rt 1 Box 63, Palmer, KS 66962 (913-692-4555)
Patriot	8608C, 8657, 8766	Patriot Seed, Inc., 1411 N. Kickapoo, Lincoln, IL 62659 (217-732-8102)
Pioneer Hybrid	8212Y, 8305, 8446, 8500	Pioneer Hi-Bred Int., Inc., Mid River Office, Po Box 1536, O'Fallon IL 66269 (618-624-8222)
Pioneer Hybrid	8118, 8212Y, 8305, 8310, 8446, XS323, XS536, XS538	Pioneer Hi-Bred Int., Inc., 6767 Old Madison Pike #110, Huntsville, AL 35806 (205-430-0760)
Terral	TV1050, TV9421	Terral-Norris Seed Co., 604 Bount St., PO Box 826, Lake Providence, LA 71254 (318-559-2840)
Triumph	Two 80-D, TR65G, TR481, TR82G, TRX25222	Triumph Seed Co., Inc., Box 1050, Ralls, TX 79357 (806-253-2584)



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