



**1962  
SORGHUM  
PERFORMANCE  
TRIALS  
IN  
MISSOURI**

O. V. SINGLETON

And

M. S. ZUBER

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# 1962 SORGHUM PERFORMANCE TRIALS

O. V. Singleton and M. S. Zuber

## INTRODUCTION

Performance trials for grain sorghum hybrids, paid for on a fee basis by seed companies, have been conducted for the 5-year period 1958-1962. Four testing sites were used in 1962. These were located near Spickard (northwest), Palmyra (northeast), Columbia (central), Mt. Vernon (southwest). However, due to excessive spring rains delaying planting until late June and relatively early freezes at Mt. Vernon, many of the entries did not mature and harvest of the crop was abandoned at that location.

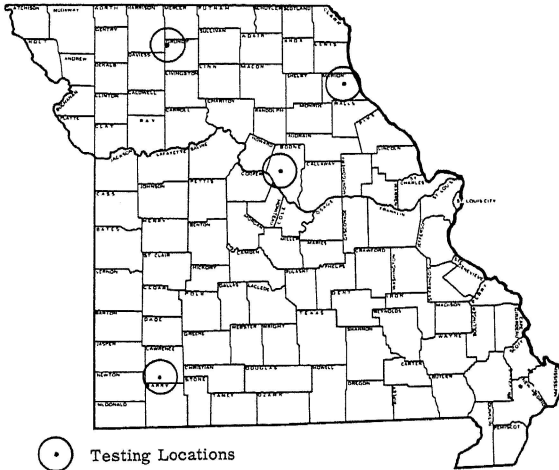


Figure 1. Outline map of Missouri showing the testing locations for the 1962 grain sorghum tests.

The 1962 estimate of harvested acres of grain sorghum was 85 percent of the 1961 acreage and 59 percent of the 10-year average. The estimated average yield of 45 bushels per acre was 13 bushels less than the estimated corn yield. Data were obtained from the Missouri Farm Census Reports.

Comparisons between the yields of corn and grain sorghum at 2 of the testing sites can be made since these tests were located either in the same field or in close proximity (Table 2). These comparisons are only suggestive since planting dates and cultural factors were not the same for the 2 tests.

### ENVIRONMENTAL CONDITIONS

The rainfall and temperature records for May 1 to September 15 at each location are reported in Tables 4 and 5. Temperatures for 1962 were above normal at Columbia and Palmyra and below at Spickard. Total rainfall was sufficient to provide adequate moisture except at Columbia; at other locations the rainfall was not well distributed during the growing season. Heavy rains delayed planting at Mt. Vernon until June and early frosts and freezes caused abandonment of harvest of the test there.

### EXPERIMENTAL METHODS

#### Seed Source

All producers and distributors of grain sorghum seed were eligible to enter the tests in 1962. No limit was placed on the number of hybrids any one company could enter.

#### Field Design

Entries were planted in 4 plots at each location. Individual plots consisted of 2 rows. The length of the harvested rows varied for the individual experiments. Harvested rows were 15 feet long at Spickard,

19 feet long at Palmyra and Columbia. Distance between rows was 38 inches at Columbia, 40 inches at Spickard, and 30 inches at Palmyra. Plots were located at random over the testing area to minimize soil and cultural differences.

#### Yield

The heads from each plot were harvested by hand and weighed. Acre yields were computed on the basis of threshed grain.

#### Threshing Percent

Threshing percent data were determined for all plots at Columbia and Spickard. All threshing percentages were obtained after the sorghum heads had been air-dried to a uniform moisture content. The mean threshing percent from the Columbia and Spickard locations was used for computing yields at Palmyra.

#### Date of Blooming

The number of days from planting to 50 percent blooming was recorded for each replication at Columbia.

#### Plant Height

The average height of the plants, in inches, was determined for each entry.

#### Head Compactness and Exsertion

Compactness was graded from 1 to 5. (1 for the most compact, or tight head, and 5 for the most lax, or loose head.)

Exsertion is the relative distance that the head protrudes above the top leaf blade. Grade 1 indicates the least exsertion and grade 5 the greatest.

### Off-Type Heads, Tall Plants, and Lodged Plants

Off-type heads, tall plants, and lodged plants were counted prior to harvest. Very little lodging occurred at Columbia and Spickard.

### Test Weight

Test weights were determined at Columbia and Spickard for all entries.

## RESULTS

Results of the individual tests are reported in Tables 6, 7, and 8. The summary, Table 9, summarizes results for all locations.

Acre yields were very high at Palmyra and Spickard.

Six entries were tested in 1960, 1961, and 1962 at Columbia, Palmyra, and Spickard. Table 10 summarizes these data.

## PERIOD-OF-YEARS RESULTS

The best basis for selecting a grain sorghum hybrid is on its performance record over several years (Table 10). In the event it is necessary to make a selection on the performance record for a single year, it is better to use the averages from several locations, such as those found in Table 9.

Table 1. The Average Number of Acres, Total Production, Average Acre Yield for Grain Sorghum, and the Average Acre Yield for Corn during the Ten-Year Period 1953-1962.

Year	Acreage	Grain Sorghum		Average Corn Yield Bu.
		Total Production Bu.	Average Acre Yield Bu.	
1953	34,000	510,000	15	34
1954	66,000	1,056,000	16	20
1955	93,000	2,325,000	25	40
1956	187,000	5,610,000	28	48
1957	590,000	25,960,000	40	44
1958	688,000	35,088,000	44	54
1959	507,000	25,350,000	45	53
1960	452,000	20,340,000	45	52
1961	208,000	9,776,000	47	62
1962	177,000*	7,965,000*	45*	58*
1953-62 Average	300,200	13,398,000	35	47

\*Estimated as of December 18, 1962.

Table 2. Comparative Acre Yields of Grain Sorghum and Corn at Testing Locations in Missouri in 1962.

Testing Location	Grain Sorghum			Corn		
	Average Yield Bu.	High Yield Bu.	Low Yield Bu.	Average Yield Bu.	High Yield Bu.	Low Yield Bu.
Columbia	106.0	132.4	87.5	100.3	117.3	90.3
Mt. Vernon	Abandoned			120.8	139.5	94.4
Palmyra	157.9	190.7	130.8	No Comparable Test		
Spickard	140.0	188.3	98.2	99.9	113.3	84.9

Table 3. Seed Source and Names of Entries Tested in 1963.

Entries	Seed Source	Address
DeKalb C44b, Exp. 1500, Exp. 1600	DeKalb Agri. Assn., Inc.	Lubbock, Texas
Frontier 410B, 400C, 400B, 410C, 410E, 22X, 60X, 61X	Frontier Hybrids, Inc.	Scott City, Kansas
Garst & Thomas Medium Early, Pioneer 846, 848, X9423, X9449	Garst & Thomas Hybrid Corn Co.	Coon Rapids, Iowa
MFA GS8, GS9	MFA Seed Division	Marshall, Missouri
NK 210, 310, 222, 227, 283	Northrup King and Co.	Minneapolis, Minnesota
Paymaster Comanche, Ute, Apache	Paymaster Seed Farms	Plainview, Texas
Steckley GG R106	Steckley Hybrid Corn Co.	Lincoln, Nebraska
Taylor-Evans TE66, TE77, TE88	Taylor-Evans Seed Co.	Tulia, Texas
RS 608, RS 610, RS 630, RS 650, RS 681, Kansas 701, Oklahoma 612, 613, 632	Missouri Agri. Expt. Station	Columbia, Missouri
Martin		

Table 4. Total rainfall, number of days with rain, and dry periods from May 1 to September 15, 1962, at each of the testing locations.

Testing Location	Total Rainfall Inches	Days with Rain					Sept. 15	Total	Dry Periods**
		May	June	July	Aug.	Sept. 15			
Columbia	11.10	9	7	8	4	4	32	(5/7-5/23)(8/6-9/2)	
Mt. Vernon	19.56	8	13	8	6	6	41	(5/15-5/26)(8/11-9/4)	
Palmyra	17.16	9	7	11	4	4	35	(5/12-6/2)(8/13-9/4)	
Spickard	22.35	8	9	7	5	5	34	(8/6-8/23)	

\*\* A dry period must have at least 15 consecutive days with less than 0.25 inch of precipitation.

Table 5. Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90°F or more, and 100°F or more, at Each of the Testing Locations from May 1, to September 15, 1962.

Location	Cooperator	Average Fahrenheit Temperature	Departure From Normal	No. days with Temp. 90°F or more		No. days with Temp. 100°F or more 1962
				1962	Avg.	
Columbia	Missouri Agri. Exp. Station	74.1	+1.8	53	39	5
Mt. Vernon	Univ. of Mo. Southwest Center	74.8	+2.4	45	25	3
Palmyra	Eard Page	73.5	+0.7	27	42	1
Spickard	Univ. of Mo. North Mo. Center	72.2	-1.1	17	42	0



Table 6. 1962 Performance Record for the Sorghum Test Conducted in Boone County, Near Columbia, Missouri. (Exp. S70). Planted May 31, 1962. Harvested October 8, 1962.

Entry	Acre Yield Bu.	Thresh- ing %	Lodged Plants %	Plants per 40 ft. Row No.	Head		Per 40 ft. Row Off-		Plant Height Ins.	Test Weight lbs.	Planting to 50% Blooming Days
					Compact- ness 1-5	Exser- tion 1-5	Type Heads No.	Tall Plants No.			
Taylor-Evans 77	132.4	83.8	0.2	166	2.0	2.0	0.0	0.3	45	53.6	75
Paymaster Apache	125.3	82.7	0.0	151	2.0	2.0	0.0	0.5	46	54.6	74
Northrup King 310	124.8	78.8	0.2	144	2.3	1.0	0.5	0.5	45	56.2	81
Taylor-Evans 88	123.9	80.5	0.2	139	2.0	2.3	0.0	0.3	48	55.0	75
MFA GS8	119.8	82.2	0.0	173	2.0	2.0	0.0	0.3	44	55.0	75
Northrup King 210	116.3	82.0	0.0	189	2.0	3.8	0.0	0.3	50	55.9	63
Kansas 701	115.1	84.4	0.0	121	2.0	2.0	1.0	1.8	47	55.7	76
RS 630	115.1	82.2	0.0	151	2.0	2.8	6.5	2.3	52	53.6	64
Frontier 400C	114.4	82.4	0.0	190	2.8	3.0	0.8	0.5	50	56.1	63
RS 681	113.4	78.5	0.0	175	2.0	2.0	0.5	1.0	46	56.1	73
Pioneer 846	111.7	81.1	0.2	156	3.0	2.0	0.0	0.3	46	54.1	67
Frontier 22X	110.8	81.5	0.0	155	2.0	1.8	0.8	1.5	48	56.2	71
Frontier 410E	109.1	80.2	0.0	166	2.0	1.5	0.0	0.8	38	52.0	71
RS 650	108.9	83.7	0.0	127	2.0	2.0	0.0	0.0	46	55.6	67
RS 610	108.6	82.2	0.0	140	2.5	4.0	0.3	0.8	51	56.0	64
Frontier 410C	107.6	82.2	0.0	187	2.0	2.0	3.3	0.5	44	53.1	68
Steckley GG R106	106.8	78.1	0.2	188	2.0	2.5	0.0	0.0	46	55.8	67
Northrup King 283	106.6	78.2	0.0	140	3.0	1.0	0.0	0.0	41	54.8	85
Oklahoma 612	106.4	81.0	0.0	107	3.0	2.3	0.0	0.3	46	55.3	71
MFA GS9	106.3	80.8	0.0	161	2.0	2.3	0.3	0.5	45	55.8	74
Oklahoma 632	105.5	80.5	0.0	165	2.5	2.3	0.0	0.0	47	55.9	75
Oklahoma 613	104.0	80.2	0.0	147	3.0	2.3	0.0	0.0	45	53.5	71
Northrup King 222	103.0	81.6	0.0	163	5.0	2.8	0.0	0.3	43	57.5	61
Frontier 400B	102.2	79.9	0.0	172	2.3	3.0	1.8	0.0	46	55.2	64
Pioneer 848	101.1	80.4	0.0	163	4.0	2.0	0.0	0.0	43	55.1	66
Frontier 61X	100.7	81.0	0.0	174	2.5	3.0	0.8	0.5	44	55.5	64
Pioneer X9449	100.1	78.5	0.0	185	4.0	2.5	0.0	0.0	46	53.7	64
Frontier 410B	99.6	81.8	0.3	149	2.0	2.3	1.5	0.5	44	55.8	67
Taylor-Evans 66	99.3	77.0	0.0	149	2.3	2.0	0.0	0.3	40	55.0	67
DeKalb Exp. 1600	98.4	80.6	0.0	160	2.0	2.0	0.3	0.8	43	53.8	72
Pioneer X9423	97.4	80.6	0.0	145	3.0	2.8	0.0	0.3	44	56.2	64
Frontier 60X	96.7	81.8	0.0	178	2.8	3.0	1.0	1.5	45	55.2	62
Garst & Thomas Med. Early	96.5	80.1	0.0	161	2.8	2.8	0.5	0.0	47	56.3	64
DeKalb C44b	96.1	79.0	0.0	139	4.0	2.5	0.0	0.0	48	54.0	62
RS 608	96.1	82.5	0.0	135	3.0	2.5	0.0	0.3	44	56.8	63
Paymaster Ute	94.3	80.4	0.0	141	2.0	2.0	0.0	0.0	42	57.1	67
Northrup King 227	92.6	81.4	0.3	171	2.3	3.0	0.3	0.0	45	54.9	62
DeKalb Exp. 1500	92.5	77.8	0.0	157	2.8	2.3	0.0	0.3	43	53.9	65
Paymaster Comanche	91.3	82.7	0.0	147	2.3	2.3	0.0	0.0	43	55.0	64
Martin	87.5	83.3	0.0	145	2.0	2.3	0.0	0.0	42	56.6	68
Mean	106.0	80.9	0.0	157	2.5	2.4	0.5	0.4	45	55.2	68

Differences in yield between any two entries of less than 13.2 bushels are not considered significant.

Table 7. 1962 Performance Record for the Sorghum Test Conducted in Marion County, Near Palmyra, Missouri.  
(Exp. S73). Planted May 17, 1962. Harvested October 18, 1962.

Entry	Acre Yield Bu.	Thresh- ing %	Lodged Plants %	Plants per 40 ft. Row No.	Head		Per 40 ft. Row		Plant Height Ins.
					Compact- ness 1-5	Exser- tion 1-5	Type Heads No.	Tall Plants No.	
Northrup King 310	190.7	80.0	0.4	138	3.0	1.5	0.0	2.3	62
Taylor-Evans 88	182.7	81.0	2.0	151	2.8	3.0	0.0	0.0	61
Pioneer 846	181.3	83.0	0.3	153	3.0	2.3	0.0	0.0	56
Pioneer 848	180.5	82.2	0.5	149	4.0	2.0	0.0	0.3	52
Northrup King 210	180.4	83.2	1.7	181	2.0	3.3	0.0	0.0	59
Paymaster Apache	178.6	83.7	0.5	148	2.0	1.5	0.0	0.3	57
Northrup King 283	176.8	79.2	0.2	161	3.8	1.0	0.3	0.0	58
Oklahoma 632	174.7	83.2	2.5	170	3.0	3.3	0.0	0.5	61
MFA GS8	170.7	83.6	0.7	181	2.0	2.0	0.0	0.3	57
RS 630	169.7	83.2	0.4	162	2.3	2.0	0.8	1.5	61
Taylor-Evans 77	168.9	82.5	3.5	156	2.3	2.0	0.0	0.3	61
Garst & Thomas Med. Early	167.7	82.7	0.7	186	2.0	2.8	0.0	0.3	58
Pioneer X9449	166.9	81.9	0.6	161	3.0	2.0	0.0	0.5	54
RS 681	161.9	81.4	0.5	160	2.0	2.3	0.0	1.3	56
RS 610	161.6	82.7	1.2	149	2.0	2.8	0.0	1.0	59
Oklahoma 613	160.8	80.9	0.3	166	3.0	2.5	0.0	0.5	55
Frontier 22X	158.0	83.1	1.5	158	2.0	1.3	2.0	2.3	60
Kansas 701	157.6	84.8	1.4	143	2.3	2.5	0.3	2.3	59
RS 650	156.2	85.1	2.3	145	2.0	2.8	0.0	0.0	54
Oklahoma 612	156.1	81.6	1.1	139	3.0	2.3	0.0	0.3	52
Frontier 400B	155.7	81.9	0.6	144	2.8	2.5	0.0	0.5	56
Frontier 400C	154.9	83.6	1.8	167	2.0	2.3	0.3	0.3	61
Frontier 410C	153.6	83.6	1.2	188	2.0	2.5	0.3	0.3	58
Pioneer X9423	152.5	82.0	0.5	152	3.0	2.0	0.5	0.5	51
MFA GS9	152.2	82.0	1.3	134	3.0	2.8	0.0	0.0	59
Frontier 60X	150.7	82.2	0.8	187	3.0	2.3	3.5	1.5	55
Steckley GG R106	147.2	79.2	8.2	171	3.0	3.3	0.0	0.0	59
RS 608	147.0	83.5	1.0	149	3.0	2.5	0.3	0.5	56
Frontier 410B	145.5	83.1	1.3	151	2.0	2.3	0.0	0.5	55
Paymaster Ute	145.3	82.0	1.2	150	2.0	2.0	0.3	0.8	52
DeKalb C44b	144.9	80.5	0.4	128	4.0	2.0	0.3	0.3	54
DeKalb Exp. 1600	144.9	81.2	5.4	165	2.0	2.3	0.0	0.5	57
Frontier 61X	143.7	83.0	0.8	170	2.8	2.8	0.8	0.8	59
DeKalb Exp. 1500	143.3	80.3	1.0	144	2.5	2.5	0.0	0.3	53
Frontier 410E	143.0	80.9	0.8	128	1.0	1.0	0.0	0.0	47
Taylor-Evans 66	140.9	80.7	1.0	131	2.0	1.3	0.0	1.3	48
Paymaster Comanche	140.8	83.5	2.7	143	2.0	2.8	0.3	0.8	55
Northrup King 227	139.8	82.5	1.7	149	2.0	2.3	0.0	0.0	57
Northrup King 222	137.3	82.0	0.3	160	4.0	2.5	0.3	0.3	52
Martin	130.8	82.8	2.3	171	2.0	2.5	0.0	0.5	54
Mean	157.9	82.2	1.4	156	2.5	2.3	0.3	0.6	56

Differences in yield between any two entries of less than 23.3 bushels are not considered significant.

Table 8. 1962 Performance Record for the Sorghum Test Conducted in Grundy County, Near Spickard, Missouri. (Exp. S74). Planted May 17, 1962. Harvested October 24, 1962.

Entry	Acre Yield Bu.	Thresh- ing %	Lodged Plants %	Plants per 40 ft. Row No.	Head		Per 40 ft. Row Off-		Plant Height Ins.	Test Weight lbs.
					Compact- ness 1-5	Exser- tion 1-5	Type Heads No.	Tall Plants No.		
Northrup King 310	188.3	81.8	0.4	188	3.0	2.5	0.0	0.0	63	54.8
Taylor-Evans 77	168.8	81.4	0.0	185	2.0	3.3	0.3	0.5	61	52.9
MFA GS8	159.9	84.8	0.0	185	2.0	2.8	0.0	1.3	58	52.1
Northrup King 283	155.5	79.7	0.0	187	4.0	1.8	0.0	0.0	58	52.3
Stackley GG R106	155.0	85.3	0.2	180	3.0	2.8	0.0	0.8	61	54.2
Paymaster Apache	154.2	84.8	0.0	146	2.0	2.3	0.0	1.5	58	51.5
Taylor-Evans 88	152.7	81.5	0.0	155	2.3	2.8	0.3	0.8	56	54.1
Pioneer X9449	152.1	85.0	0.0	186	3.8	2.3	0.0	0.0	54	55.6
Oklahoma 632	149.0	84.6	0.2	177	3.5	3.5	0.3	0.8	62	53.8
DeKalb Exp. 1600	148.4	81.8	0.3	195	2.5	3.3	0.8	0.8	59	51.7
Pioneer 848	148.3	84.0	0.0	178	4.0	2.0	0.0	0.8	53	54.9
Kansas 701	148.1	85.2	0.2	153	2.0	2.8	1.0	2.3	61	54.1
Pioneer 846	147.9	85.0	0.2	162	3.0	2.0	0.0	0.5	54	54.8
Northrup King 210	145.2	84.3	0.0	190	2.0	3.0	1.3	0.5	60	54.7
MFA GS9	143.6	83.2	0.0	159	2.0	3.3	0.0	1.0	60	53.4
Garst & Thomas Med. Early	143.5	85.4	0.2	176	3.0	3.0	0.0	0.8	59	53.9
Frontier 22X	141.3	85.3	0.3	163	2.0	2.3	2.8	4.5	60	54.2
Oklahoma 612	140.7	82.2	0.0	176	3.5	2.0	0.0	0.5	52	50.4
Oklahoma 613	140.1	81.6	0.3	167	3.5	3.3	0.0	0.5	56	53.0
RS 681	139.6	84.3	0.0	191	2.0	3.0	0.0	1.3	54	52.6
RS 610	139.4	83.7	0.3	174	2.0	2.5	0.5	1.8	57	54.0
Frontier 400C	137.7	84.8	0.0	183	2.0	3.0	2.5	0.8	58	53.9
Northrup King 227	135.8	83.5	0.0	195	2.5	2.3	0.0	0.3	57	52.2
DeKalb C44b	135.6	81.9	0.0	143	4.0	2.0	0.0	0.5	54	50.2
Frontier 60	134.5	82.6	0.0	190	3.0	3.0	0.5	0.8	55	53.0
Northrup King 222	134.4	82.3	0.0	193	4.8	2.3	0.0	0.5	49	56.3
Taylor-Evans 66	133.5	83.0	0.0	150	3.0	2.0	0.0	0.3	49	51.0
Frontier 410E	133.1	81.8	0.0	173	2.0	1.0	0.8	1.8	45	51.2
DeKalb Exp. 1500	132.3	82.8	0.0	176	3.0	2.3	0.0	0.5	52	49.7
Frontier 410B	132.0	84.4	0.0	143	2.0	2.5	2.8	1.0	51	54.7
RS 630	131.7	84.2	0.0	180	2.0	2.3	4.3	3.0	57	52.4
Frontier 410C	131.5	84.9	0.3	179	2.0	2.8	1.5	1.8	54	53.6
Paymaster Ute	128.6	83.5	0.3	147	2.0	2.0	0.0	1.0	53	56.1
Frontier 61X	128.3	85.0	0.2	199	2.8	3.0	1.3	1.8	56	54.6
Frontier 400B	126.8	83.5	0.3	153	3.0	3.5	0.8	0.3	55	53.8
Pioneer X9423	124.0	83.3	0.0	175	3.3	2.0	1.0	0.0	50	55.5
RS 650	121.8	82.4	0.0	134	2.0	2.3	0.0	0.8	52	53.7
RS 608	121.1	84.5	0.3	154	2.8	2.8	0.0	1.0	53	53.2
Paymaster Comanche	116.9	84.4	0.0	147	2.0	2.8	0.0	0.0	55	54.5
Martin	<u>98.2</u>	<u>82.3</u>	<u>0.2</u>	<u>155</u>	<u>2.5</u>	<u>3.0</u>	<u>0.0</u>	<u>0.0</u>	<u>56</u>	<u>56.0</u>
Mean	140.0	83.5	0.1	171	2.7	2.6	0.6	0.9	56	53.5

Differences in yield between any two entries of less than 14.9 bushels are not considered significant.

Table 9. 1962 Summary of the Grain Sorghum Tests Conducted Near Columbia, Palmyra and Spickard, Missouri. (Exp. S70, S73, and S74).

Entry	Acre Yield Bu.	Thresh- ing %	Lodged Plants %	Plants per 40 ft. Row No.	Head		Per 40 ft. Row Off-		Plant Height Ins.	Test Weight lbs. *
					Compact- ness 1-5	Exser- tion 1-5	Type Heads No.	Tall Plants No.		
Northrup King 310	167.9	80.2	0.3	157	2.8	1.7	0.2	0.9	57	55.5
Taylor-Evans 77	156.7	82.6	1.1	169	2.1	2.4	0.1	0.4	55	53.2
Taylor-Evans 88	153.1	81.0	0.7	148	2.4	2.7	0.1	0.4	55	54.6
Paymaster Apache	152.7	83.8	0.2	148	2.0	1.9	0.0	0.8	54	53.0
MFA GS8	150.1	83.5	0.2	180	2.0	2.3	0.0	0.6	53	53.5
Northrup King 210	147.3	83.1	0.5	187	2.0	3.4	0.4	0.3	57	55.3
Pioneer 846	147.0	83.0	0.3	157	3.0	2.1	0.0	0.3	52	54.6
Northrup King 283	146.3	79.0	0.1	163	3.6	1.3	0.1	0.0	52	53.6
Pioneer 848	143.3	82.2	0.2	163	4.0	2.0	0.0	0.4	49	55.0
Oklahoma 632	143.1	82.7	0.9	171	3.0	3.0	0.1	0.4	57	54.9
Kansas 701	140.3	84.8	0.6	139	2.1	2.4	0.8	2.1	56	54.9
Pioneer X9449	139.7	81.9	0.2	177	3.6	2.3	0.0	0.2	51	54.7
RS 630	138.8	83.2	0.2	164	2.1	2.4	3.9	2.3	57	53.0
RS 681	138.3	81.4	0.2	175	2.0	2.4	0.2	1.2	52	54.3
Frontier 22X	136.7	83.3	0.6	159	2.0	1.8	1.9	2.8	56	55.2
RS 610	136.5	82.8	0.5	155	2.2	3.1	0.3	1.2	56	55.0
Steckley GG R106	136.3	80.8	2.7	183	2.7	2.9	0.0	0.3	55	55.0
Garst & Thomas Med. Early	135.9	82.8	0.3	174	2.6	2.9	0.2	0.4	55	55.1
Frontier 400C	135.7	83.6	0.6	180	2.3	2.8	1.2	0.5	56	55.0
Oklahoma 613	135.0	80.9	0.2	160	3.2	2.7	0.0	0.3	52	53.3
Oklahoma 612	134.4	81.6	0.4	141	3.2	2.2	0.0	0.4	50	52.8
MFA GS9	134.0	82.0	0.4	151	2.3	2.8	0.1	0.5	55	54.6
Frontier 410C	130.9	83.6	0.5	185	2.0	2.4	1.7	0.9	52	53.4
DeKalb Exp. 1600	130.6	81.2	1.8	173	2.2	2.5	0.4	0.7	53	52.7
RS 650	129.0	83.7	0.8	135	2.0	2.4	0.0	0.3	51	54.7
Frontier 410E	128.4	81.0	0.2	156	1.7	1.2	0.3	0.9	43	51.6
Frontier 400B	128.2	81.8	0.3	156	2.7	3.0	0.9	0.3	53	54.5
Frontier 60X	127.3	82.2	0.3	185	2.9	2.8	1.7	1.3	52	54.1
Frontier 410B	125.7	83.1	0.5	148	2.0	2.4	1.4	0.7	50	55.3
DeKalb C44b	125.5	80.4	0.1	137	4.0	2.2	0.1	0.3	52	52.1
Northrup King 222	124.9	82.0	0.1	172	4.6	2.5	0.1	0.4	48	56.9
Pioneer X9423	124.6	82.0	0.2	157	3.1	2.3	0.5	0.3	48	55.9
Taylor-Evans 66	124.6	80.3	0.3	143	2.4	1.8	0.0	0.6	46	53.1
Frontier 61X	124.2	83.0	0.3	181	2.7	2.9	1.0	1.0	53	55.0
Paymaster Ute	122.7	82.0	0.5	146	2.0	2.0	0.1	0.6	49	56.6
Northrup King 227	122.7	82.5	0.6	172	2.3	2.5	0.1	0.1	53	53.6
DeKalb Exp. 1500	122.7	80.3	0.3	159	2.8	2.4	0.0	0.4	49	51.8
RS 608	121.4	83.5	0.5	146	2.9	2.6	0.1	0.6	51	55.0
Paymaster Comanche	116.3	83.5	0.9	146	2.1	2.6	0.1	0.3	51	54.8
Martin	105.5	82.8	0.9	157	2.2	2.6	0.0	0.2	51	56.3
Mean	134.6	82.2	0.5	161	2.6	2.4	0.5	0.7	52	54.3

\* At 2 locations only - Columbia and Spickard.

Table 10. Three-Year Average (1960-1962) for the Sorghum Tests Conducted in Missouri, Near Columbia, Palmyra, and Spickard. (Exp. S70, S73, S74).

Entry	Acre Yield Bu.	Lodging %
Kansas 701	127.1	34.3
RS 610	123.2	30.4
Steckley GG R106	120.9	32.3
RS 650	119.0	25.1
RS 608	111.9	23.9
Martin	<u>95.6</u>	<u>24.0</u>
Mean	116.3	28.3