

# Grain Sorghum

502275

**1981 Missouri Crop Performance**



**Minor · Morris · Burdick · Mason · Sparks**

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NAME OF GRAIN SORGHUM ENTRIES AND SEED SOURCE EVALUATED IN 1981.

BRAND	HYBRID/VARIETY	SEED SOURCE
AMERICANA	1240GBR	AMERICANA SEEDS, INC., BOX 275, BOWEN, IL 62316
ASGROW	CORRAL, MUSTANG, COLT, TOPAZ	ASGROW SEED CO., 7000 PORTAGE RD., KALAMAZOO, MI 49001
CARGILL	50, 60, 70	CARGILL SEEDS, P.O. BOX 5645, MINNEAPOLIS, MN 55440
COKER	7675, 7638, 7623, 7605, 7723	COKER'S PEDIGREED SEED CO., RT. 1, BOX 150, LUBBOCK, TX 79401
DEKALB	E-59+, C-42Y+, DK-57, DK-61, DK-58, DK-59, DK-42Y	DEKALB AGRESEARCH INC., RT-2, LUBBOCK, TX 79415
GOLDEN HARVEST	H500B, H600B	COLUMBIANA SEED CO., ELDRED, IL 62027
GOLD TAG	565, 585	FERRY MORSE SEED CO, DRAWER 7274, MOUNTAINVIEW, CA, 94042
FUNK'S	G-522DR, G-522A, G-623GBR G-499GBR, G-550, G-611	FUNK SEEDS INT., 719 26TH ST., LUBBOCK, TX 79404
GREEN	G820	GREEN SEED CO, P.O. BOX 943, GALLATIN, TN 37066
GROWERS	SG 10, SG 17GBR, SG 40GBR GSA 1310A	GROWERS SEED ASSOC. P.O. BOX 1656, LUBBOCK, TX 79408
MFA	GS-10, GS-301A	MFA SEED DIVISION, 201 S 7TH ST., COLUMBIA, MO 65201
MIGRO	TEK 1021R, TEK 1055R TEK 35R, TEK 1094R	MIGRO DIV. OF N.A.P.B., P.O. BOX 2955, MISSION, KS 66201
NC+	172, 271, 174, 160	NC+ HYBRIDS, 3820 NO. 56TH ST., LINCOLN, NE 68504
NORTHRUP KING	2884, 2778, 2244	NORTHRUP KING CO., 1452 29TH ST., SUITE 214, WEST DES MOINES, IA 50265
O'S GOLD	GS 712, GS 5100	O'S GOLD SEED CO. P.O.BOX 460, PARKERSBURG, IA 50665
PAG	5550, 5514, 6662	PAG SEEDS , P.O.BOX 9480, DEPT. 16, MINNEAPOLIS, MN 55440
PFIZER GENETICS	M56G, M568G, EXP 7957	PFIZER GENETICS, 1000 EXEC. PARKWAY, ST. LOUIS, MO 63141
PIONEER	8272, 8515, 8585	GARST & THOMAS HYBRID CORN CO., 605 MAIN, COON RAPIDS, IA 50058
PIONEER	8311	PIONEER HI-BRED INTERNATIONAL, INC., 1000 W. JEFFERSON ST., TIPTON, IN
RING AROUND	RA 733GB	RING AROUND PROD. INC., P.O. BOX 589, MONTGOMERY, AL 36195
STAUFFER SEEDS	734GR, 535GR, 530GR, 657YGT, 677GR, 708GR 729GT	STAUFFER SEEDS, BOX 125, PHILLIPS, NE 68865
TAYLOR-EVANS	T-E Y-101-G, T-E DINERO T-E DINERO-R, T-E Y-101-R	TAYLOR-EVANS SEED CO., P.O.BOX 68, TULIA, TX 79088
TRIUMPH	TWO 64YG, TWO 62Y	TEXAS TRIUMPH SEED CO., BOX 1050, RALLS, TX 79357
WARNER	W-839DR, W-851DR, W-744DR, W-655T	GEORGE WARNER SEED CO., BOX 1448, HEREFORD, TX 79045
YOUNG	ORO G, ORO G XRTRA	R.C. YOUNG SEED & GRAIN CO., 624 27TH ST., LUBBOCK, TX 79404
	MARTIN	UMC, FOUNDATION SEED, COLUMBIA, MO 65211

# MISSOURI CROP PERFORMANCE

1981

## GRAIN SORGHUM

This report is a contribution of the Department of Agronomy, University of Missouri Agricultural Experiment Station, which reports on Research Project 363. The work was supported in part by funds from the Missouri Seed Improvement Association and fees from the companies submitting hybrids for evaluation.

The University of Missouri began its performance testing program for sorghum hybrids in 1958. The number of commercial entries in the program has grown from 40 in 1958 to 81 today.

The large number of commercial hybrids available makes selection of a superior hybrid difficult. To select intelligently, a reliable, unbiased, up-to-date source of information which will permit valid comparisons among available hybrids is needed. 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 and 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 is often the result of soil disuniformity, 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 the analysis of trials reported here 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 nonsignificant.

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, an effort has been made to facilitate comparisons across years and locations.

In each trial, the "top yielding" hybrids have been identified. These hybrids are those which did not yield significantly less than the highest yielding hybrids in the test. They are denoted in the tables by an asterisk (\*) next to their yields. Thus, by going down a column, the highest yielding hybrids in a trial can be readily identified. By going

across, the relative performance of a hybrid during several years or at several locations can be evaluated. From the standpoint of yield, the most desirable hybrids will be those which are among the "top yielding" hybrids (that is, 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. Stalk strength and resistance to insects and diseases are among the hybrid characteristics which deserve careful consideration. Poor stalk strength and/or susceptibility to pests may decrease harvestable yield because of lodging or stand loss. Therefore, the data presented on final stand and lodging should also be considered when selecting a hybrid.

The Missouri Agricultural Experiment Station does not make specific recommendations for hybrids. It is suggested that farmers growing a new hybrid for the first time 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.

Grain Sorghum performance trials were planted at six locations in 1981. These were the Greenley Memorial Center near Novelty in Knox County, the Agronomy Research Center near Columbia in Boone County, the Carl Barnhart farm near Clinton in Henry County, the Southwest Center near Mt. Vernon in Lawrence County, the Claude Keasler farm near Parma in Stoddard County and the Kenneth Heath farm near Bertrand in Mississippi County. The trial on the farm of Kenneth Heath was abandoned because of irregular emergence. See Figure 1 for the locations of successful trials in various parts of Missouri.

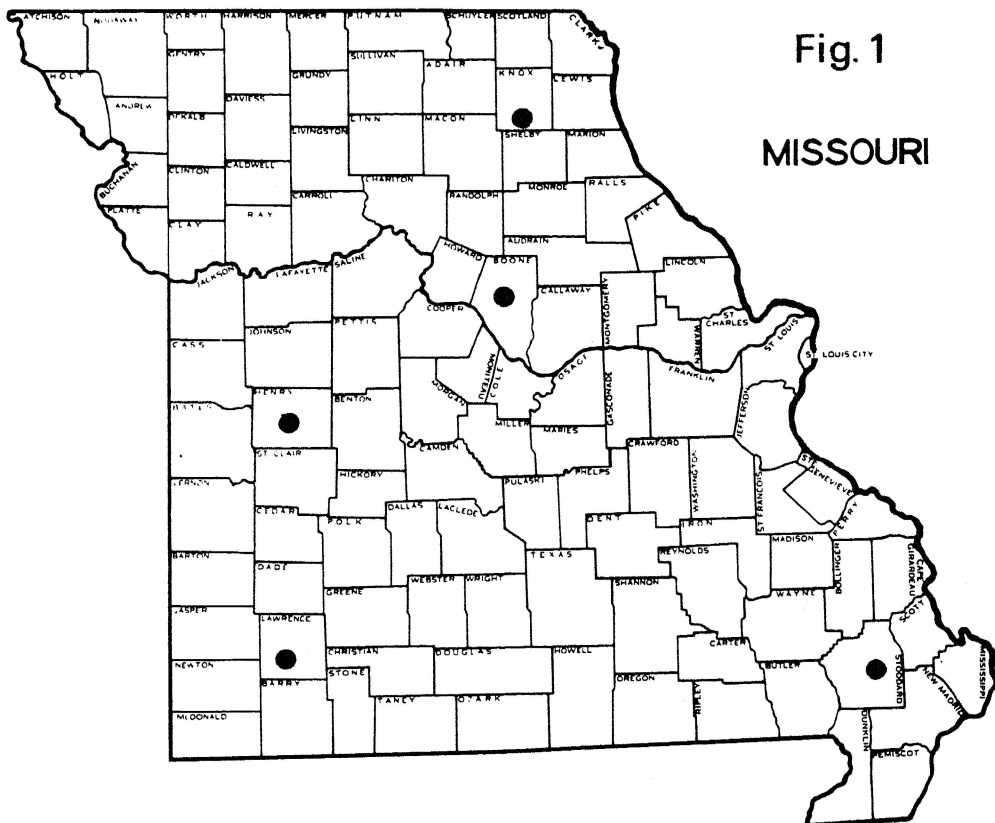


Fig. 1

MISSOURI

## EXPERIMENTAL PROCEDURES

Entries. All producers of hybrid seed were eligible to enter hybrids in the 1981 evaluation plots. Participation was voluntary and no control was exercised by the program over which, or how many, hybrids were entered. However, to help finance the evaluation program, a fee of forty dollars per location was charged for each hybrid entered by the seed producer. In addition to the fee entries, a broader-based program was continued in which certain widely-grown hybrids were included on a no-fee basis. Identification of these widely-grown hybrids was through a mail survey of hybrids marketed by seed producers in Missouri.

Field Plot Design. All tests were arranged in lattice field plot designs with three replications. Plots were four rows wide and 25 feet long at all locations. The two center rows were harvested to measure yield.

Cultural Practices. The tests were planted and harvested with commercial equipment modified for small plot work. Details of the management practices followed at each location are given in Table 1, Page 7.

Data Recorded. Bloom date was recorded when 50% of the plants in a plot were shedding pollen. The other agronomic characteristics were evaluated at harvest. 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 pounds per acre at a moisture content of 12.5 percent. An electronic moisture tester was used for all moisture readings. For conversion of yield to bushels/acre, divide pounds/acre by 56.

## RESULTS

Average yields (Table 8, Page 18) for the five test locations ranged from 3845 pounds/acre (69 bushels/acre) at Clinton to 7967 pounds/acre (142 bushels/acre) at Novelty. The yield level at Clinton was low due to late planting. A killing frost on October 19 prevented most hybrids from reaching full maturity.

Novelty has been the highest yielding location during each of the past 3 years. As an average for these years, grain sorghum hybrids have outyielded corn hybrids tested on the same research station.

Results for individual locations are presented in Tables 3 through 7. Significant variation among hybrids was observed at each location, and on the average, the difference between the highest and lowest yielding commercially available hybrids (Martin excluded) was 1457 pounds/acre (26 bushels). Results from Mt. Vernon (Table 6, Page 14) offer an opportunity to compare hybrids for standability since environmental conditions were favorable for lodging at that location.

TABLE 1. CULTURAL PRACTICES OF THE 1981 GRAIN SORGHUM EVALUATION TRIALS.

LOCATION (COUNTY)	COOPERATOR *	FERTILIZER N-P205-K20	HERBICIDE	ROW WIDTH (IN)	DATE OF PLANTING	DATE OF HARVEST
NOVELTY (KNOX)	RANDELL SMOOT	160- 90-180	BEXTON + ATRAZINE	30	6-06-81	10-21-81
COLUMBIA (BOONE)	JOHN POEHLMANN	155-200-115	BEXTON + ATRAZINE	30	4-30-81	10-05-81
CLINTON (HENRY)	CARL BARNHART	100- 0- 0	RAMROD + ATRAZINE	30	7-06-81	11-13-81
MT. VERNON (LAWRENCE)	NORMAN JUSTUS	200-100-100	RAMROD + ATRAZINE	30	5-29-81	9-25-81
PARMA (STODDARD)	CLAUDE KEASLER	125- 0- 30	RAMROD + ATRAZINE	38	5-06-81	9-17-81

\* INCLUDES EXPERIMENT STATION MANAGERS.

TABLE 2. RAINFALL AND TEMPERATURE DURING 1981.

LOCATION	MONTH	RAINFALL			TEMPERATURE		
		INCHES	DEPART. FROM NORMAL	RAINY DAYS	* F	DEPART. FROM NORMAL	90° OR ABOVE
NOVELTY *	MAY	8.3	+4.3	13	56.6	-6.5	0
	JUNE	11.4	+6.4	8	69.8	-1.8	1
	JULY	8.2	+4.0	10	73.1	-2.9	4
	AUGUST	3.2	-0.4	5	69.2	-5.2	1
COLUMBIA	MAY	7.7	+3.0	10	59.1	-5.3	0
	JUNE	8.0	+3.4	10	74.4	+1.4	4
	JULY	12.1	+8.3	10	78.1	+0.8	10
	AUGUST	4.5	+1.3	8	73.1	-2.9	3
CLINTON	MAY	9.5	+4.1	13	61.1	-3.6	0
	JUNE	17.2	+11.4	14	74.3	+1.0	5
	JULY	3.9	-0.4	8	79.8	+2.1	15
	AUGUST	3.5	-0.6	--	64.0	--	--
MT. VERNON	MAY	4.0	-1.6	8	61.4	-3.8	0
	JUNE	11.4	+6.2	10	74.2	+0.5	0
	JULY	3.1	-0.4	6	78.6	+0.7	17
	AUGUST	6.9	+3.8	6	73.7	-3.5	3
SIKESTON	MAY	7.1	+2.0	9	63.3	-4.6	0
	JUNE	4.6	+0.2	8	76.5	+0.1	11
	JULY	7.5	+4.7	12	80.9	+1.6	17
	AUGUST	1.9	-1.2	5	77.0	-0.7	3

-- DATA NOT AVAILABLE.

\* NOVELTY (KIRKSVILLE DATA).

TABLE 3. PERFORMANCE OF GRAIN SORGHUM HYBRIDS EVALUATED NEAR NOVELTY ON THE GREENLEY MEMORIAL CENTER IN 1979-81. PLANTED: 6 JUNE 1981. HARVESTED: 21 OCTOBER 1981. PLANTING RATE: 6 SEEDS/FT.

BRAND-HYBRID	1981					LODGING (%)			YIELD (LB/ACRE)		
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1980	1979	1981	1980	1979	
YOUNG ORO G XTRA	8-13	57	0.1	2.0	0.0	4.7	--	9943**	6761*	--	
NC+ 174	8-14	61	0.1	2.0	0.0	--	--	9437*	--	--	
TAYLOR-EVANS T-E Y-101G	8-11	51	0.3	2.0	0.0	--	--	9196*	--	--	
STAUFFER SEEDS 677GR	8-12	57	0.5	2.3	0.0	0.0	4.2	9021*	6711*	7414*	
DEKALB DK-61	8-13	54	0.3	3.0	0.0	0-0	--	8955	6553	--	
COKER 7623	8-12	63	2.9	1.6	0.0	--	--	8914	--	--	
O'S GOLD GS 712	8-14	59	0.1	2.0	0.0	0.0	--	8817	6752*	--	
NORTHRUP KING 2884	8-13	60	0.4	2.0	0.0	0.0	--	8785	7064*	--	
STAUFFER SEEDS 708GR	8-11	57	0.0	2.0	0.0	0.0	6.8	8778	6574	8247**	
DEKALB DK-59	8-15	59	0.8	3.0	0.0	0.0	--	8730	6729*	--	
FUNK'S G-611	8-13	60	1.0	3.0	0.0	0.0	15.7	8727	5608	6266	
GOLD TAG 585	8-15	57	0.1	2.0	0.0	--	--	8695	--	--	
COKER 7605	8-10	58	0.3	2.0	0.0	--	--	8676	--	--	
MFA GS-301A	8-11	52	0.0	2.3	0.0	0.0	4.8	8646	6277	7773*	
NORTHRUP KING 2244	8-11	49	0.0	3.0	0.0	--	--	8521	--	--	
FUNK'S G-522A##	8-12	53	0.4	3.0	0.0	--	10.7	8484	--	6268	
TAYLOR-EVANS Y-101-R##	8-10	54	0.6	3.6	0.0	0.0	6.2	8480	5728	6402	
ASGROW TOPAZ	8-12	52	0.9	2.0	0.0	0.0	--	8456	6872*	--	
ASGROW COLT	8-15	58	0.0	3.0	0.0	0.0	4.0	8425	5946	6080	
RING AROUND RA 733GB	8-12	52	0.0	3.3	0.0	0.0	9.6	8404	5961	6358	
NORTHRUP KING 2778	8-12	54	0.6	2.6	0.0	0.3	16.8	8389	6595	6415	
FUNK'S G-522DR	8-12	56	0.4	2.3	0.0	0.0	4.1	8374	5540	7811**	
TAYLOR-EVANS T-E DINERO-R	8-13	55	0.6	2.3	0.0	0.0	--	8371	5833	--	
TRIUMPH TWO 64YG	8-11	50	1.1	2.0	0.0	--	--	8331	--	--	
ASGROW MUSTANG	8-11	55	0.1	2.6	0.0	0.0	11.2	8318	6576	6510	
PFIZER GENETICS M568G	8-11	53	0.0	2.0	0.0	--	7.8	8260	--	7161**	
O'S GOLD GS 5100	8-12	50	0.1	3.0	0.0	--	--	8257	--	--	
MIGRO TEK 1055R	8- 9	58	0.2	2.3	0.0	--	--	8233	--	--	
WARNER W-851DR	8-13	58	0.1	2.0	0.0	0.0	--	8232	6173	--	
GROWERS GSA 1310A	8-12	48	0.0	2.3	0.0	--	--	8213	--	--	
NC+ 160	8-10	58	0.0	2.3	0.0	--	--	8196	--	--	
MIGRO TEK 1094R	8-10	52	0.0	2.3	0.0	--	--	8194	--	--	
COKER 7675	8-11	58	0.9	2.0	0.0	--	--	8149	--	--	
CARGILL 60	8-10	51	0.6	3.6	0.0	0.0	7.3	8121	6171	6767	
GREEN SEED G820	8-11	52	0.7	3.0	0.0	--	--	8120	--	--	
NC+ 172	8-11	52	0.2	2.6	0.0	--	--	8100	--	--	
AMERICANA 1240GBR	8-11	51	0.5	3.0	0.0	--	--	8092	--	--	
PAG 6662	8-12	55	0.4	4.3	0.0	0.0	11.2	8085	6323	6766	
COKER 7638	8-11	52	0.0	2.0	0.0	0.0	--	8029	6608	--	
PIONEER 8515	8-11	57	0.5	2.6	0.0	--	--	7935	--	--	
FUNK'S G-550	8-12	56	0.3	2.0	0.0	0.0	--	7935	5661	--	
MIGRO TEK 1021R	8-11	55	0.2	2.0	0.0	--	--	7929	--	--	
PFIZER GENETICS M56G	8-11	49	0.3	3.0	0.0	--	7.4	7919	--	6770	
STAUFFER SEEDS 734GR	8-10	53	0.9	3.0	0.0	0.0	3.9	7870	6093	7414*	
STAUFFER SEEDS 535GR	8-10	56	0.6	2.0	0.0	0.0	5.9	7862	5501	7938**	
GOLD TAG 565	8-11	52	0.1	2.3	0.0	--	--	7855	--	--	
COKER 7723	8-13	65	0.9	1.3	0.0	7.0	--	7813	7113*	--	
CARGILL 70	8-11	49	0.0	2.3	0.0	0.0	5.0	7790	6349	7642*	
WARNER W-839DR	8-13	56	0.0	2.0	0.0	0.0	11.2	7786	5900	7374*	
STAUFFER SEEDS 729GT##	8-11	51	0.4	3.0	0.0	0.0	9.3	7773	5778	7036*	
GROWERS SG 40GBR#	8-11	50	0.4	3.3	0.0	0.0	7.5	7730	6382	7181*	
TRIUMPH TWO 62Y	8-11	50	0.2	3.3	0.0	--	--	7723	--	--	
DEKALB E-59+##	8-13	57	0.8	3.0	0.0	0.0	12.1	7713	6399	6317	
PAG 5550	8-13	54	0.1	2.0	0.0	--	--	7703	--	--	
GROWERS SG 17GBR#	8-12	54	0.9	2.0	0.0	0.0	9.3	7672	4955	6356	
YOUNG ORO G	8-11	53	0.8	3.0	0.0	0.0	--	7589	6153	--	
DEKALB DK-58	8-12	55	0.4	2.3	0.2	0.0	--	7582	5531	--	
WARNER W-744DR	8-13	56	0.0	5.0	0.0	0.0	11.0	7557	6268	7038*	
PFIZER GENETICS EXP 7957	8-14	59	0.5	2.0	0.0	--	--	7539	--	--	
FUNK'S G-623GBR	8-12	52	1.4	3.0	0.0	--	8.3	7537	--	7178*	
DEKALB DK-42Y	8-12	52	0.0	2.3	0.0	0.0	--	7527	5468	--	
M-F-A GS-10##	8-11	51	0.2	3.0	0.0	0.0	10.2	7511	6437	6685	
STAUFFER SEEDS 530GR	8-12	55	0.0	1.6	0.0	0.0	11.5	7501	5864	7424*	
PIONEER 8272	8-12	56	0.4	3.0	0.0	0.0	4.9	7499	6476	8370**	
STAUFFER SEEDS 657YGT	8-12	52	0.4	3.0	0.0	0.0	--	7482	6160	--	
NC+ 271	8-12	54	0.0	2.3	0.0	--	--	7476	--	--	
PIONEER 8311	8-11	52	0.0	3.0	0.0	--	--	7464	--	--	
GOLDEN HARVEST H500B	8-12	53	0.1	3.0	0.0	--	--	7395	--	--	
DEKALB C-42Y+##	8-12	54	0.6	3.0	0.0	0.0	4.0	7364	6073	7251*	
TAYLOR-EVANS T-E DINERO	8-12	55	0.0	2.0	0.0	0.0	7.0	7360	5948	8046*	
DEKALB DK-57	8-13	57	0.2	4.0	0.0	0.0	6.2	7357	6627	7478*	
ASGROW CORRAL	8-10	62	0.2	2.0	0.0	0.0	5.6	7309	5937	7700*	
GOLDEN HARVEST 4600B	8-14	63	0.0	2.6	0.0	--	--	7297	--	--	
PAG 5514	8-11	55	0.2	3.3	0.0	0.0	6.1	7147	6297	6616	
MIGRO TEK 35R	8-11	53	0.6	3.0	0.0	--	--	7041	--	--	
GROWERS SG 10#	8- 9	56	0.6	2.6	0.0	0.0	7.2	6938	4207	6376	
CARGILL 50	8-11	58	0.4	4.3	0.0	0.0	--	6766	4873	--	



TABLE 3. CONTINUED.

BRAND-HYBRID	1981				LODGING			YIELD		
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	(%)			(LB/ACRE)		
					1981	1980	1979	1981	1980	1979
WARNER W-655T	8-10	55	0.1	2.3	0.0	0.0	--	6759	5846	--
PIONEER 8585	8-10	51	2.3	2.6	0.0	0.0	4.4	6758	4462	7782*
FUNK'S G-499GBR	8-12	50	0.6	3.0	0.0	--	--	6604	--	--
MARTIN	8-13	57	0.2	3.3	0.0	0.0	4.4	5877	4691	5564
TRIAL AVERAGE		55	0.3	2.6	0.0	0.2	9.9	7967	6025	6745
L.S.D. AT .05								947	1102	1414

-- DATA NOT AVAILABLE.

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

TABLE 4. PERFORMANCE OF GRAIN SORGHUM HYBRIDS EVALUATED NEAR COLUMBIA ON THE AGRONOMY RESEARCH CENTER IN 1979-81. PLANTED: 30 APRIL 1981. HARVESTED: 5 OCTOBER 1981. PLANTING RATE: 6 SEEDS/FT.

BRAND-HYBRID	1981									
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	LODGING (%)			YIELD (LB/ACRE)		
					1981	1980	1979	1981	1980	1979
PIONEER 8311	7-18	47	0.0	3.3	0.2	--	--	6949**	--	--
WARNER W-851DR	7-18	54	0.0	2.3	4.9	0.0	--	6940*	2033	--
GOLDEN HARVEST 4600B	7-18	59	0.0	2.6	3.7	--	--	6888*	--	--
DEKALB DK-57	7-19	51	0.2	3.3	1.2	0.0	0.5	6795*	3173*	7159*
TAYLOR-EVANS T-E Y-101G	7-17	47	0.0	2.3	0.8	--	--	6776*	--	--
TAYLOR-EVANS T-E DINERO	7-18	51	0.0	3.3	0.6	0.0	0.2	6715*	2635	6306
ASGROW MUSTANG	7-18	47	0.0	2.6	0.7	0.0	0.6	6711*	2183	6532
PFIZER GENETICS M56G	7-18	49	0.2	3.3	0.0	--	0.0	6667*	--	6472
PFIZER GENETICS M568G	7-18	48	0.0	2.3	0.0	--	0.6	6632*	--	6568
NORTHRUP KING 2244	7-18	46	0.0	2.6	0.5	--	--	6620*	--	--
TAYLOR-EVANS T-E DINERO-R	7-19	51	0.4	2.0	0.6	0.0	--	6594*	2672	--
PAG 5514	7-19	49	1.3	3.3	0.0	0.0	0.0	6580*	2807*	5998
PIONEER 8272	7-18	52	0.2	3.3	0.0	0.0	0.0	6538*	2974*	7222*
CARGILL 70	7-18	46	0.0	2.0	0.6	0.0	0.2	6530*	1850	6720
STAUFFER SEEDS 677GR	7-19	56	0.0	2.0	2.1	0.0	0.0	6529*	2530	7178*
DEKALB DK-61	7-19	53	0.0	3.3	4.8	0.0	--	6526*	3574*	--
WARNER W-744DR	7-19	49	0.0	4.6	0.4	0.0	0.6	6404*	2596	7196*
O'S GOLD GS 712	7-20	54	0.8	2.0	3.0	0.0	--	6372*	2855*	--
DEKALB DK-59	7-20	53	0.3	3.6	1.5	0.0	--	6372*	2198	--
YOUNG ORO G XTRA	7-18	54	0.0	2.3	18.1	0.0	--	6336*	2454	--
NC+ 271	7-18	56	0.0	2.3	8.9	--	--	6290*	--	--
NC+ 174	7-19	55	0.0	2.3	1.0	--	--	6241*	--	--
PFIZER GENETICS EXP 7957	7-20	58	0.0	2.0	4.9	--	--	6221*	--	--
STAUFFER SEEDS 729GT##	7-18	47	0.0	3.3	0.0	0.0	0.0	6216*	2174	6891*
COKER 7638	7-18	49	0.0	2.6	0.2	0.0	--	6214*	2894*	--
MIGRO TEK 1021R	7-18	54	0.0	2.0	4.2	--	--	6211*	--	--
ASGROW COLT	7-20	56	0.0	3.0	3.5	0.0	0.0	6198	3656**	7663**
MIGRO TEK 1094R	7-19	50	0.0	2.0	0.0	--	--	6198	--	--
WARNER W-839DR	7-19	51	0.0	2.6	0.4	0.0	0.0	6180	2580	6681
TRIUMPH TWO 64YG	7-18	49	0.0	2.6	0.6	--	--	6159	--	--
FUNK'S G-522DR	7-19	55	0.0	3.0	5.2	0.7	0.0	6135	1749	7432*
FUNK'S G-522A##	7-18	48	0.0	4.3	0.0	--	0.5	6119	--	6148
COKER 7675	7-21	52	0.0	3.6	0.2	--	--	6071	--	--
CARGILL 60	7-18	48	0.0	3.0	0.2	0.0	0.2	6068	2537	6083
ASGROW TOPAZ	7-19	54	0.2	2.3	0.0	0.0	--	6065	2775	--
NC+ 172	7-19	49	0.0	2.6	0.0	--	--	6035	--	--
GOLD TAG 585	7-19	52	0.0	2.3	0.4	--	--	6025	--	--
O'S GOLD GS 5100	7-18	47	0.0	2.6	0.2	--	--	6009	--	--
TAYLOR-EVANS Y-101-R##	7-18	48	0.0	3.6	0.6	0.0	0.0	6008	1904	6661
GOLD TAG 565	7-18	47	0.0	2.3	0.0	--	--	6007	--	--
GOLDEN HARVEST H500B	7-19	48	0.0	3.0	0.0	--	--	6001	--	--
RING AROUND RA 733GB	7-19	49	0.2	3.0	0.4	0.0	0.0	5976	2387	6516
NORTHRUP KING 2778	7-18	52	0.0	2.3	0.4	0.0	0.0	5976	2655	6642
DEKALB DK-42Y	7-19	56	0.0	2.3	0.4	0.0	--	5957	2519	--
NORTHRUP KING 2884	7-18	57	0.2	2.0	20.5	0.0	--	5955	2746	--
MFA GS-301A	7-18	49	0.0	2.6	0.7	0.0	0.5	5953	2232	6802
DEKALB DK-58	7-18	52	0.2	2.6	4.8	0.0	--	5930	2768	--
PIONEER 8585	7-18	48	0.0	3.0	0.0	0.0	0.0	5899	2640	5710
COKER 7623	7-17	59	0.2	2.6	1.4	--	--	5862	--	--
GROWERS SG 10#	7-16	50	0.0	3.3	0.0	0.0	0.0	5855	3105*	5907
STAUFFER SEEDS 734GR	7-18	50	0.2	2.3	0.0	0.0	0.0	5835	2332	6478
M-F-A GS-10##	7-18	49	0.0	4.0	0.2	0.0	0.0	5820	2191	6763
WARNER W-655T	7-16	52	0.0	2.6	6.5	0.0	--	5818	3130*	--
FUNK'S G-550	7-18	52	0.2	2.0	15.0	0.0	--	5791	3475*	--
AMERICANA 1240GBR	7-20	49	0.3	3.0	1.5	--	--	5772	--	--
FUNK'S G-611	7-18	53	0.0	3.3	0.7	0.0	0.0	5770	2770	6553
FUNK'S G-623GBR	7-18	48	0.0	3.3	0.2	--	0.0	5762	--	6834
GROWERS GSA 1310A	7-18	47	0.0	2.6	2.4	--	--	5752	--	--
GROWERS SG 40GBR#	7-19	50	0.2	3.3	0.0	0.0	0.0	5731	2576	6838
GROWERS SG 17GBR#	7-18	51	1.1	2.6	1.5	0.0	0.0	5729	2082	5129
PAG 6662	7-19	52	0.0	4.3	0.0	0.0	0.0	5697	2811*	6318
GREEN SEED G820	7-21	49	0.0	3.0	0.2	--	--	5678	--	--
PIONEER 8515	7-17	52	0.2	2.6	9.7	--	--	5654	--	--
NC+ 160	7-17	53	0.0	2.3	20.6	--	--	5604	--	--
PAG 5550	7-18	47	0.0	2.6	1.9	--	--	5590	--	--
YOUNG ORO G	7-17	47	0.5	3.6	1.9	0.0	--	5559	2823*	--
FUNK'S G-499GBR	7-20	43	0.3	5.0	0.0	--	--	5554	--	--
MIGRO TEK 1055R	7-17	52	0.4	3.0	4.1	--	--	5530	--	--
TRIUMPH TWO 62Y	7-18	47	0.0	4.3	1.0	--	--	5515	--	--
STAUFFER SEEDS 708GR	7-18	54	0.0	2.0	14.5	0.0	0.2	5497	2453	6945*
STAUFFER SEEDS 657YGT	7-19	54	0.0	3.0	9.0	0.0	--	5474	1672	--
STAUFFER SEEDS 535GR	7-18	51	0.0	3.0	19.7	0.0	0.4	5449	3411*	6999*
MIGRO TEK 35R	7-18	46	0.0	3.3	0.0	--	--	5438	--	--
DEKALB C-42Y+##	7-19	51	0.8	3.3	0.5	0.0	0.0	5438	2840*	6932*
COKER 7723	7-19	63	0.0	4.0	35.4	0.0	--	5423	3118*	--
ASGROW CORRAL	7-17	54	0.0	2.6	23.5	0.0	0.0	5341	2588	6510
DEKALB E-59+##	7-21	51	0.0	2.3	0.0	0.0	0.0	5325	2340	7049*

TABLE 4. CONTINUED.

BRAND-HYBRID	1981				LODGING (%)			YIELD (LB/ACRE)		
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1980	1979	1981	1980	1979
CARGILL 50	7-18	48	0.0	4.3	0.0	0.0	--	5150	2542	--
STAUFFER SEEDS 530GR	7-19	53	0.0	2.0	15.2	0.0	0.2	5091	2280	6227
COKER 7605	7-17	54	0.0	3.0	13.2	--	--	5070	--	--
MARTIN	7-21	50	0.0	3.0	0.0	0.0	0.4	4406	1090	4218
TRIAL AVERAGE		51	0.1	2.8	3.7	0.0	0.1	5997	2583	6477
L.S.D. AT .05								745	850	805

-- DATA NOT AVAILABLE.

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

TABLE 5. PERFORMANCE OF GRAIN SORGHUM HYBRIDS EVALUATED NEAR CLINTON ON THE BARNHART FARM IN 1981 AND THE GOODBRAKE FARM IN 1979.  
 PLANTED: 6 JULY 1981. HARVEST: 13 NOVEMBER 1981. PLANTING RATE: 6 SEEDS/FT.

BRAND-HYBRID	1981						LODGING (%)		YIELD (LB/ACRE)	
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1979	1981	1979		
ASGROW CORRAL	9-2	59	0.0	3.6	0.0	0.7	--	5087**	5317	--
NORTHROP KING 2244	9-2	51	0.0	3.6	0.0	--	--	4624*	--	--
GROWERS SG 10#	9-2	51	0.0	3.6	0.0	1.4	--	4606*	4534	--
NORTHROP KING 2778	9-3	58	0.0	3.3	0.0	1.7	--	4555*	6060	--
O'S GOLD GS 712	9-5	55	0.0	3.0	0.0	--	--	4552*	--	--
STAUFFER SEEDS 535GR	9-3	60	0.0	3.3	0.0	1.9	--	4542*	5465	--
PIONEER 8585	9-4	51	0.0	3.3	0.0	0.0	--	4514*	5838	--
ASGROW COLT	9-5	58	0.0	3.6	0.0	0.5	--	4492*	6575*	--
STAUFFER SEEDS 729GT##	9-5	47	0.0	3.6	0.0	0.3	--	4456*	7208**	--
PFIZER GENETICS M568G	9-3	51	0.0	3.0	0.0	0.5	--	4455*	5304	--
NC+ 160	9-3	61	0.0	3.3	0.0	--	--	4391*	--	--
FUNK'S G-522A##	9-3	52	0.0	4.6	0.0	0.4	--	4348*	7012*	--
TRIUMPH TWO 64YG	9-2	53	0.0	3.0	0.7	--	--	4336*	--	--
WARNER W-744DR	9-6	59	0.0	5.0	0.0	0.7	--	4325*	6961*	--
STAUFFER SEEDS 734GR	9-4	50	0.0	3.0	0.0	0.3	--	4293*	5689	--
MFA GS-301A	9-3	48	0.0	3.3	0.0	0.2	--	4204	6170*	--
GROWERS SG 17GBR#	9-5	55	0.0	3.0	0.0	0.0	--	4184	5916	--
YOUNG ORO G XTRA	9-3	58	0.0	3.3	0.0	--	--	4106	--	--
TAYLOR-EVANS T-E DINERO	9-5	57	0.1	3.3	0.7	0.0	--	4098	6954*	--
STAUFFER SEEDS 657YGT	9-5	56	0.0	4.0	0.0	--	--	4096	--	--
MIGRO TEK 1021R	9-2	56	0.0	2.0	0.0	--	--	4093	--	--
DEKALB DK-61	9-4	56	0.0	3.3	0.0	--	--	4092	--	--
YOUNG ORO G	9-4	50	0.0	3.6	0.0	--	--	4073	--	--
COKER 7605	9-2	58	0.0	3.0	0.0	--	--	4069	--	--
WARNER W-655T	9-3	57	0.0	3.0	2.3	--	--	4066	--	--
COKER 7675	9-4	54	0.0	3.0	0.0	--	--	4066	--	--
NC+ 172	9-4	52	0.0	3.0	0.0	--	--	4059	--	--
GROWERS GSA 1310A	9-3	48	0.0	3.0	0.0	--	--	4050	--	--
TAYLOR-EVANS T-E Y-101G	9-3	51	0.0	3.0	0.0	--	--	4048	--	--
MIGRO TEK 1055R	9-3	55	0.0	3.0	0.0	--	--	4032	--	--
NC+ 174	9-3	60	0.0	3.3	3.7	--	--	4013	--	--
NORTHROP KING 2884	9-3	61	0.0	2.6	6.0	--	--	4002	--	--
WARNER W-851DR	9-5	55	0.0	2.6	0.0	--	--	3991	--	--
STAUFFER SEEDS 530GR	9-3	56	0.0	2.0	0.6	1.0	--	3984	6060	--
RING AROUND RA 733GB	9-4	52	0.0	4.0	0.0	0.8	--	3980	6471*	--
COKER 7638	9-2	50	0.0	3.0	0.0	--	--	3948	--	--
M-F-A GS-10##	9-4	49	0.0	4.3	0.0	0.0	--	3922	6122*	--
ASGROW MUSTANG	9-4	51	0.0	2.6	0.0	0.5	--	3915	6129*	--
STAUFFER SEEDS 708GR	9-5	59	0.0	2.6	0.0	0.3	--	3909	6527*	--
TAYLOR-EVANS T-E DINERO-R	9-5	53	0.0	3.3	4.3	--	--	3887	--	--
NC+ 271	9-4	58	0.0	3.6	0.0	--	--	3887	--	--
PAG 6662	9-6	58	0.0	3.6	0.0	0.0	--	3838	5703	--
PIONEER 8272	9-5	55	0.0	3.3	0.0	0.6	--	3822	6045	--
PAG 5514	9-6	52	0.0	4.0	0.0	1.3	--	3810	5809	--
PFIZER GENETICS M56G	9-3	52	0.0	3.6	0.0	1.0	--	3797	4985	--
COKER 7623	9-4	64	0.0	2.6	2.3	--	--	3795	--	--
TRIUMPH TWO 62Y	9-4	54	0.0	4.0	1.2	--	--	3792	--	--
DEKALB DK-57	9-6	58	0.0	4.3	0.0	0.0	--	3757	6136*	--
PIONEER 8515	9-5	58	0.0	3.3	0.0	--	--	3745	--	--
PIONEER 8311	9-5	51	0.0	4.0	0.0	--	--	3745	--	--
GREEN SEED G820	9-4	51	0.0	4.0	0.0	--	--	3739	--	--
GOLD TAG 565	9-3	50	0.0	3.0	0.0	--	--	3732	--	--
GOLD TAG 585	9-5	58	0.0	3.0	0.0	--	--	3731	--	--
MIGRO TEK 1094R	9-3	50	0.0	3.0	0.0	--	--	3722	--	--
O'S GOLD GS 5100	9-5	56	0.0	4.3	0.0	--	--	3702	--	--
CARGILL 60	9-4	51	0.0	3.6	0.0	0.3	--	3693	5875	--
FUNK'S G-623GBR	9-4	48	0.0	3.6	0.0	0.4	--	3682	5731	--
AMERICANA 1240GBR	9-5	51	0.0	3.6	0.0	--	--	3658	--	--
FUNK'S G-611	9-4	58	0.0	3.6	1.9	0.0	--	3652	5733	--
MIGRO TEK 35R	9-3	48	0.0	4.0	0.0	--	--	3625	--	--
COKER 7723	9-5	65	0.0	2.3	8.3	--	--	3624	--	--
PAG 5550	9-3	54	0.0	3.3	0.0	--	--	3511	--	--
CARGILL 70	9-3	50	0.0	3.0	0.0	0.4	--	3493	5096	--
WARNER W-839DR	9-6	52	0.0	3.0	0.0	0.0	--	3483	6178*	--
FUNK'S G-522DR	9-4	56	0.0	2.6	2.2	0.0	--	3449	6459*	--
FUNK'S G-550	9-5	58	0.0	2.0	1.2	--	--	3440	--	--
GROWERS SG 40GBR#	9-5	50	0.0	3.3	0.0	0.4	--	3423	6175*	--
GOLDEN HARVEST H500B	9-5	49	0.0	4.0	0.0	--	--	3407	--	--
STAUFFER SEEDS 677GR	9-6	55	0.0	2.3	0.0	0.9	--	3363	6481*	--
DEKALB C-42Y+##	9-4	57	0.0	3.6	0.0	0.0	--	3298	5844	--
DEKALB DK-58	9-6	56	0.0	2.3	0.0	--	--	3283	--	--
DEKALB DK-59	9-7	55	0.0	4.0	0.0	--	--	3266	--	--
TAYLOR-EVANS Y-101-R##	9-4	49	0.0	4.0	0.0	0.0	--	3250	6493*	--
ASGROW TOPAZ	9-6	54	0.0	2.6	0.0	--	--	3227	--	--
GOLDEN HARVEST 4600B	9-3	62	0.0	4.0	5.5	--	--	3184	--	--
DEKALB E-59+##	9-8	55	0.0	3.6	0.0	0.3	--	3106	6528*	--
MARTIN	9-5	53	0.0	4.3	0.0	0.0	--	3075	4410	--

TABLE 5. CONTINUED.

BRAND-HYBRID	1981					LODGING		YIELD	
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1979	1981	1979	
							(LB/ACRE)		
PFIZER GENETICS EXP 7957	9- 4	55	0.0	3.0	0.0	--	2993	--	--
DEKALB DK-42Y	9- 4	52	0.0	2.6	0.0	--	2902	--	--
FUNK'S G-499GBR	9- 4	43	0.0	5.0	0.0	--	2870	--	--
CARGILL 50	9- 5	49	0.0	4.3	0.0	--	2473	--	--
TRIAL AVERAGE		54	0.0	3.3	0.5	0.4	3845	5859	
L.S.D. AT .05							874	1142	

-- DATA NOT AVAILABLE.

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

TABLE 6. PERFORMANCE OF GRAIN SORGHUM HYBRIDS EVALUATED NEAR MT. VERNON ON THE SOUTHWEST CENTER IN 1979-81. PLANTED: 29 MAY 1981. HARVESTED: 25 SEPTEMBER 1981. PLANTING RATE: 6 SEEDS/FT.

BRAND-HYBRID	1981									
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	LODGING (%)			YIELD (LB/ACRE)		
					1981	1980	1979	1981	1980	1979
TAYLOR-EVANS T-E Y-101G	7-25	44	0.0	3.6	0.7	--	--	7203**	--	--
TRIUMPH TWO 64YG	7-25	46	0.0	4.3	1.1	--	--	7109*	--	--
WARNER W-839DR	7-28	52	0.0	4.0	2.2	0.4	28.0	6947*	3378	5588
TAYLOR-EVANS T-E DINERO	7-30	50	0.3	4.0	2.1	0.0	35.3	6792*	4189	5641
DEKALB DK-57	7-31	50	0.1	5.0	0.7	0.0	27.1	6778*	4457*	5300
DEKALB DK-59	7-31	54	0.0	4.3	2.8	0.0	--	6655*	3189	--
COKEK 7638	7-26	45	0.0	4.0	4.6	0.2	--	6647*	4672*	--
FUNK'S G-522DR	7-27	50	0.0	3.6	1.4	0.4	49.3	6594*	3993	4823
CARGILL 70	7-26	46	1.2	4.0	6.5	1.6	20.4	6557*	4573*	5589
AMERICANA 1240GBR	7-27	47	0.2	4.6	2.2	--	--	6502*	--	--
O'S GOLD GS 5100	7-27	45	0.0	4.6	2.5	--	--	6495*	--	--
ASGROW MUSTANG	7-26	44	0.0	4.3	11.5	0.2	40.2	6468*	5337**	4441
GOLD TAG 565	7-26	45	0.8	4.0	6.7	--	--	6446*	--	--
PFIZER GENETICS M568G	7-26	48	0.3	3.3	11.7	--	59.8	6429*	--	3037
ASGROW TOPAZ	7-27	51	0.0	3.6	11.4	0.0	--	6383*	3911	--
GROHERS GSA 1310A	7-26	46	0.0	3.6	7.1	--	--	6382*	--	--
COKEK 7675	7-27	51	0.0	3.6	9.9	--	--	6342*	--	--
TAYLOR-EVANS Y-101-R##	7-26	46	0.0	5.0	0.5	0.3	31.2	6334*	4127	5105
COKEK 7623	7-28	59	0.0	3.6	9.2	--	--	6326*	--	--
STAUFFER SEEDS 734GR	7-26	45	0.0	4.3	4.6	0.2	17.3	6314*	4674*	6352
GROHERS SG 40GBR#	7-26	45	0.3	4.3	3.3	0.0	31.9	6299	4605*	4837
NC+ 271	7-27	50	0.0	4.6	24.3	--	--	6288	--	--
MFA GS-301A	7-26	44	0.1	4.0	1.9	0.0	2.6	6250	4705*	7901**
FUNK'S G-611	7-29	54	0.1	4.0	3.3	0.0	54.6	6220	3023	--
PIONEER 8311	7-26	43	0.0	4.3	0.9	--	--	6193	--	--
MIGRO TEK 35R	7-26	44	0.0	4.6	0.7	--	--	6192	--	--
STAUFFER SEEDS 677GR	7-27	53	0.1	4.0	20.8	0.0	26.6	6179	4131	6348
MIGRO TEK 1094R	7-26	46	0.0	4.0	7.4	--	--	6166	--	--
RING AROUND RA 733GB	7-27	45	0.0	5.0	1.8	0.0	46.1	6144	4291*	4406
PAG 5514	7-26	48	0.0	5.0	3.4	0.2	27.2	6143	4531*	5107
O'S GOLD GS 712	7-29	51	0.1	3.0	21.0	0.0	--	6138	4749*	--
PIONEER 8272	7-30	47	0.0	4.6	4.2	0.1	15.7	6102	4676*	6851*
GOLDEN HARVEST H600B	7-26	55	0.8	3.0	12.7	--	--	6094	--	--
DEKALB DK-42Y	7-29	49	1.6	4.3	1.4	0.2	--	6083	4709*	--
WARNER W-744DR	7-28	54	0.0	5.0	21.1	2.0	70.1	6069	3985	2787
PFIZER GENETICS M56G	7-27	46	0.0	4.6	1.8	--	43.3	6063	--	3045
NORTHROP KING 2244	7-26	44	0.0	4.3	2.0	--	--	6019	--	--
MFA GS-10##	7-26	47	0.0	4.6	7.2	0.1	9.7	6018	4469*	6544*
NC+ 172	7-26	45	0.0	4.0	4.4	--	--	5975	--	--
CARGILL 60	7-26	50	0.0	4.3	3.5	1.3	41.9	5965	4424*	3342
FUNK'S G-623GBR	7-26	45	0.1	5.0	0.4	--	40.4	5948	--	5079
GROHERS SG 10#	7-22	45	0.3	4.6	0.6	0.0	5.3	5935	3634	5947
PFIZER GENETICS EXP 7957	7-31	52	0.0	4.0	18.2	--	--	5920	--	--
STAUFFER SEEDS 729GT##	7-27	48	0.0	4.6	1.2	0.0	16.2	5906	4792*	6356
DEKALB DK-61	7-29	55	0.0	5.0	2.7	0.0	--	5877	3633	--
CARGILL 50	7-27	49	0.0	5.0	10.8	0.4	--	5814	3693	--
DEKALB E-59+##	7-29	52	0.0	5.0	10.6	0.0	49.3	5703	4216	4074
WARNER W-851DR	7-29	53	0.0	3.3	20.9	0.1	--	5768	3571	--
FUNK'S G-522A##	7-26	46	0.0	5.0	6.7	--	20.7	5736	--	7350*
GROHERS SG 17GBR#	7-27	50	0.0	4.0	9.6	0.0	31.8	5716	3745	4591
YOUNG ORO G	7-26	50	0.0	4.6	2.6	0.4	--	5709	4477*	--
YOUNG ORO G XTRA	7-29	52	0.0	3.0	42.8	0.0	--	5698	4209	--
GOLDEN HARVEST H500B	7-27	45	0.0	5.0	2.9	--	--	5688	--	--
PIONEER 8585	7-26	45	0.0	3.0	1.1	0.1	13.5	5621	4321*	5684
GREEN SEED G-820	7-27	45	0.1	5.0	0.3	--	--	5599	--	--
PAG 6662	7-29	54	0.0	5.0	0.6	0.0	53.8	5535	4280*	3247
DEKALB DK-58	7-28	53	0.0	4.0	27.7	0.0	--	5493	3853	--
NC+ 174	7-29	54	0.0	3.0	45.1	--	--	5492	--	--
DEKALB C-42Y+##	7-29	56	3.6	5.0	4.9	0.0	50.5	5479	4482*	3513
STAUFFER SEEDS 657YGT	7-26	50	0.9	5.0	32.7	0.0	--	5479	4617*	--
FUNK'S G-550	7-30	53	0.3	3.0	20.4	0.0	--	5465	4958*	--
GOLD TAG 585	7-31	52	0.0	3.6	17.0	--	--	5434	--	--
FUNK'S G-499GBR	7-27	39	0.1	5.0	0.1	--	--	5309	--	--
PIONEER 8515	7-27	49	0.0	4.0	43.0	--	--	5234	--	--
MIGRO TEK 1055R	7-24	49	0.3	4.0	41.3	--	--	5126	--	--
TRIUMPH TWO 62Y	7-27	48	0.0	5.0	2.9	--	--	5109	--	--
NORTHROP KING 2778	7-26	50	0.1	4.0	38.6	0.0	30.4	5105	4072	5939
MIGRO TEK 1021R	7-26	47	0.0	2.6	33.7	--	--	4915	--	--
STAUFFER SEEDS 530GR	7-26	49	0.0	2.6	39.2	0.1	19.8	4849	4146	6769*
WARNER W-655T	7-24	51	0.0	4.0	44.6	0.4	--	4821	4099	--
PAG 5550	7-28	49	0.0	3.6	16.2	--	--	4636	--	--
TAYLOR-EVANS T-E DINERO-R	7-27	47	0.0	3.3	52.6	0.7	--	4561	3924	--
COKEK 7605	7-25	52	0.0	4.0	49.4	--	--	4534	--	--
ASGROW CORRAL	7-25	51	0.0	4.0	73.4	0.5	29.6	4494	3555	3578
STAUFFER SEEDS 708GR	7-26	51	0.0	4.0	71.4	0.0	33.0	4464	3628	5262
NC+ 160	7-25	48	0.0	4.0	70.7	--	--	4461	--	--
ASGROW COLT	7-30	49	0.1	5.0	70.4	0.0	28.5	4457	4867*	3759

TABLE 6. CONTINUED.

BRAND-HYBRID	1981				LODGING			YIELD (LB/ACRE)		
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1980	1979	1981	1980	1979
	STAUFFER SEEDS 535GR	7-25	49	0.0	4.0	53.3	0.1	16.7	4428	4149
MARTIN	7-29	44	0.0	3.3	2.2	0.0	9.2	4214	2676	4227
NORTHROP KING 2884	7-26	48	0.0	3.3	55.2	0.7	--	4043	4999*	--
COKER 7723	7-29	57	0.0	3.3	81.6	0.0	--	3527	4460*	--
TRIAL AVERAGE		49	0.1	4.1	16.8	0.2	31.6	5774	4214	4881
L.S.D. AT .05								900	1063	1399

-- DATA NOT AVAILABLE.

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

TABLE 7. PERFORMANCE OF GRAIN SORGHUM HYBRIDS EVALUATED NEAR PARMA ON THE KEASLER FARM IN 1981 AND THE CONNER FARM 1980.  
 PLANTED: 6 MAY 1981. HARVESTED: 17 SEPTEMBER 1981. PLANTING RATE: 6 SEEDS/FT.

BRAND-HYBRID	1981				LODGING (%)		YIELD (LB/ACRE)	
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	1981	1980	1981	1980
COKER 7675	7-15	50	0.0	1.3	0.0	--	8764**	--
ASGROW TOPAZ	7-15	57	0.0	1.6	0.0	6.1	8764*	2738
STAUFFER SEEDS 530GR	7-14	60	0.0	1.0	0.0	3.7	8751*	2635
COKER 7623	7-14	65	0.0	1.0	0.0	--	8733*	--
STAUFFER SEEDS 708GR	7-14	63	0.0	1.3	0.4	17.4	8665*	2860
PIONEER 8515	7-12	63	0.1	2.3	0.0	--	8662*	--
PIONEER 8311	7-14	49	0.1	3.0	0.0	--	8653*	--
FUNK'S G-522A##	7-15	52	0.0	3.0	0.0	--	8638*	--
WARNER W-851DR	7-14	61	0.0	1.0	0.0	5.9	8615*	2590
NC+ 271	7-15	60	0.0	1.0	0.0	--	8579*	--
YOUNG ORO G XTRA	7-16	60	0.0	1.0	0.0	20.7	8571*	2479
NC+ 172	7-14	51	0.1	2.3	0.0	--	8449*	--
ASGROW CORRAL	7-13	61	0.0	2.0	0.0	8.2	8342*	2631
NC+ 174	7-15	60	0.0	1.3	0.1	--	8212*	--
COKER 7723	7-14	68	0.0	1.0	0.0	1.9	8191*	4010*
PFIZER GENETICS M56G	7-15	51	0.0	3.0	0.0	--	8179*	--
STAUFFER SEEDS 677GR	7-17	56	0.0	2.3	0.0	1.5	8105*	3289*
STAUFFER SEEDS 657YGT	7-15	55	0.9	3.0	0.0	13.9	8082*	2579
TAYLOR-EVANS T-E DINERO-R	7-14	56	0.0	1.3	0.0	40.5	8061*	2183
DEKALB DK-61	7-15	51	0.0	3.3	0.1	5.7	8048*	2319
FUNK'S G-522DR	7-14	53	0.1	1.6	0.0	18.5	8043*	2369
STAUFFER SEEDS 535GR	7-13	60	0.1	2.0	0.0	0.9	8039*	2217
FUNK'S G-550	7-15	51	0.2	1.0	0.0	3.0	8030*	3201*
DEKALB DK-42Y	7-16	54	0.4	2.3	0.0	13.3	8015*	2845
CARGILL 70	7-14	50	0.0	2.6	0.0	4.3	7915*	3637*
FUNK'S G-611	7-15	59	0.1	1.6	0.0	36.5	7909*	1782
O'S GOLD GS 712	7-14	60	0.1	1.6	0.0	6.7	7849*	2033
TAYLOR-EVANS Y-101-R##	7-14	51	0.1	2.6	0.0	12.4	7846*	3139
PFIZER GENETICS M568G	7-14	47	0.7	4.0	0.0	--	7839*	--
GOLD TAG 565	7-14	48	0.1	2.3	0.0	--	7830*	--
DEKALB C-42Y+##	7-15	58	0.6	3.3	0.0	2.3	7819*	2723
YOUNG ORO G	7-15	50	0.1	3.6	0.0	14.1	7805*	3160*
GREEN SEED G820	7-15	49	0.0	3.3	0.0	--	7760*	--
TAYLOR-EVANS T-E DINERO	7-16	54	0.0	2.3	0.0	26.3	7728*	2550
WARNER W-655T	7-12	61	0.2	3.0	0.1	24.9	7688*	2134
DEKALB DK-57	7-16	60	0.0	1.6	0.0	22.9	7688*	2807
NORTHROP KING 2778	7-12	53	0.2	3.6	0.8	5.0	7682*	3850*
MFA GS-301A	7-15	47	0.2	2.3	0.0	9.7	7678*	2452
CARGILL 60	7-14	50	0.0	2.0	0.2	3.4	7623*	3398*
TRIUMPH TWO 64YG	7-14	50	0.0	2.3	0.0	--	7613*	--
MIGRO TEK 1021R	7-13	60	0.0	2.6	0.0	--	7519*	--
MIGRO TEK 1094R	7-14	48	0.1	2.3	0.0	--	7517*	--
STAUFFER SEEDS 729GT##	7-16	54	0.0	2.3	0.0	22.5	7510*	2114
PAG 6662	7-17	56	0.0	3.6	0.0	50.3	7486	1443
STAUFFER SEEDS 734GR	7-14	50	0.1	2.0	0.0	10.4	7470	2413
NORTHROP KING 2884	7-14	62	0.0	2.0	0.0	5.5	7469	2893
GROWERS GSA 1310A	7-15	49	0.1	2.3	0.0	--	7431	--
GOLDEN HARVEST 4600B	7-12	62	0.2	2.6	0.1	--	7410	--
MIGRO TEK 1055R	7-13	63	0.0	3.0	0.3	--	7368	--
CARGILL 50	7-15	60	0.0	4.0	0.0	35.1	7366	2383
TRIUMPH TWO 62Y	7-16	48	0.1	4.0	0.0	--	7341	--
M-F-A GS-10##	7-14	51	0.0	4.3	1.8	11.3	7277	3619*
TAYLOR-EVANS T-E Y-101G	7-15	49	0.0	3.0	0.0	--	7248	--
PAG 5550	7-14	50	0.0	2.3	0.0	--	7225	--
DEKALB DK-58	7-15	60	0.0	2.0	0.0	4.0	7216	3066
AMERICANA 1240GBR	7-15	53	0.2	2.6	0.0	--	7216	--
PAG 5514	7-15	55	0.0	1.6	0.0	15.4	7190	2562
DEKALB DK-59	7-18	58	0.1	3.0	0.0	14.5	7174	4642**
GROWERS SG 10#	7- 8	52	0.1	4.3	0.0	4.6	7171	2938
PIONEER 8585	7-12	54	0.1	4.3	0.0	6.3	7156	2681
NORTHROP KING 2244	7-13	56	0.0	2.3	0.0	--	7142	--
NC+ 160	7-13	60	0.0	2.0	0.0	--	7098	--
GOLD TAG 585	7-16	53	0.0	1.6	0.0	--	7069	--
FUNK'S G-499GBR	7-16	45	0.0	5.0	0.0	--	7028	--
ASGROW COLT	7-16	56	0.1	3.6	5.2	9.2	7010	2463
WARNER W-744DR	7-17	55	0.0	4.0	0.0	25.0	6937	2086
COKER 7605	7-13	52	0.0	3.0	0.0	--	6912	--
PIONEER 8272	7-15	58	0.0	3.6	1.4	7.2	6884	3460*
FUNK'S G-623GBR	7-16	50	0.0	2.6	0.0	--	6879	--
WARNER W-839DR	7-16	53	0.0	2.6	0.0	27.8	6785	2095
DEKALB E-59+##	7-17	61	0.1	2.3	0.0	17.3	6754	4440*
COKER 7638	7-15	50	0.1	2.6	1.0	11.2	6748	3172*
GROWERS SG 40GBR#	7-15	52	0.0	2.3	0.0	10.5	6691	3281*
ASGROW MUSTANG	7-14	49	0.1	3.0	0.0	8.3	6690	3013
MIGRO TEK 35R	7-14	49	0.0	2.6	0.0	--	6565	--
RING AROUND RA 733GB	7-16	47	0.0	2.6	0.0	29.4	6504	1812
GROWERS SG 17GBR#	7-15	58	0.1	1.0	0.0	18.0	6355	2609



TABLE 7. CONTINUED.

BRAND-HYBRID	1981				LODGING			YIELD	
	50% BLOOM DATE	PLANT HEIGHT (IN)	OFF-TYPE HEADS (%)	CMPT-NESS SCORE	(%)		(LB/ACRE)		
					1981	1980	1981	1980	
PFIZER GENETICS EXP 7957	7-17	54	0.0	1.6	0.0	--	--	6239	--
GOLDEN HARVEST H500B	7-16	48	0.1	3.6	0.0	--	--	6203	--
O'S GOLD GS 5100	7-15	50	0.0	2.0	0.0	--	--	6095	--
MARTIN	7-17	46	0.0	4.6	0.6	4.6	--	5966	2556
TRIAL AVERAGE		54	0.0	2.5	0.1	14.6		7565	2792
L.S.D. AT .05								1271	1502

-- DATA NOT AVAILABLE.

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

TABLE 8. PERFORMANCE RECORD OF GRAIN SORGHUM HYBRIDS EVALUATED AT FIVE MISSOURI LOCATIONS (NOVELTY, COLUMBIA, CLINTON, MT. VERNON, AND PARMA) IN 1981.

BRAND-HYBRID	Y I E L D (LB/ACRE)					MEAN
	NOVELTY	COLUMBA	CLINTON	MT. VERN	PARMA	
YOUNG ORO G XTRA	9943**	6336*	4106	5698	8571*	6930**
TAYLOR-EVANS T-E Y-101G	9196*	6776*	4048	7203**	7248	6894*
O'S GOLD GS 712	8817	6372*	4552*	6138	7849*	6745*
COKER 7623	8914	5862	3795	6326*	8733*	6726*
PFIZER GENETICS M568G	8260	6632*	4455*	6429*	7839*	6723*
TRIUMPH TWO 64YG	8331	6159	4336*	7109*	7613*	6709*
WARNER W-851DR	8232	6940*	3991	5768	8615*	6709*
DEKALB DK-61	8955	6526*	4092	5877	8048*	6699*
NC+ 174	9437*	6241*	4013	5492	8212*	6679*
COKER 7675	8149	6071	4066	6342*	8764**	6678*
FUNK'S G-522A##	8484	6119	4348*	5736	8638*	6665*
STAUFFER SEEDS 677GR	9021*	6529*	3363	6179	8105*	6639*
PIONEER 8311	7464	6949**	3745	6198	8653*	6601*
NORTHRUP KING 2244	8521	6620*	4624**	6019	7142	6585*
ASGROW TOPAZ	8456	6065	3227	6383*	8764*	6579*
MFA GS-301A	8646	5953	4204	6250	7678*	6546*
TAYLOR-EVANS T-E DINERO	7360	6715*	4098	6792*	7723*	6538*
PFIZER GENETICS M56G	7919	6667*	3797	6063	8179*	6525*
NC+ 172	8100	6035	4059	5975	8449*	6523*
FUNK'S G-522DR	8374	6135	3449	6594*	8043*	6519*
NC+ 271	7476	6290*	3887	6288	8579*	6504*
DEKALB DK-57	7357	6795*	3757	6778*	7688*	6475*
CARGILL 70	7790	6530*	3493	6557*	7915*	6457*
FUNK'S G-611	8727	5770	3652	6220	7909*	6455*
DEKALB DK-59	8730	6372*	3266	6655*	7174	6439*
ASGROW MUSTANG	8318	6711*	3915	6468*	6690	6420
TAYLOR-EVANS Y-101-R##	8480	6008	3250	6334*	7846*	6383
GOLD TAG 565	7855	6007	3732	6446*	7830*	6374
STAUFFER SEEDS 729GT##	7773	6216*	4456*	5906	7510*	6372
GROWERS GSA 1310A	8213	5752	4050	6382*	7431	6365
MIGRO TEK 1094R	8194	6198	3722	6166	7517*	6359
STAUFFER SEEDS 734GR	7870	5835	4293*	6314*	7470	6356
NORTHRUP KING 2778	8389	5976	4555*	5105	7682*	6341
COKER 7638	8029	6214*	3948	6647*	6748	6317
CARGILL 60	8121	6068	3693	5965	7623*	6294
TAYLOR-EVANS T-E DINERO-R	8371	6594*	3887	4561	8061*	6294
STAUFFER SEEDS 708GR	8778	5497	3909	4464	8665*	6262
WARNER W-744DR	7557	6404*	4325*	6069	6937	6258
AMERICANA 1240GBR	8092	5772	3658	6502*	7216	6248
PIONEER 8515	7935	5654	3745	5234	8662*	6246
WARNER W-839DR	7786	6180	3483	6947*	6785	6236
RING AROUND RA 733GB	8404	5976	3980	6144	6504	6201
GOLD TAG 585	8695	6025	3731	5434	7069	6190
GREEN SEED G820	8120	5678	3739	5599	7760*	6179
GOLDEN HARVEST 4600B	7297	6888*	3184	6094	7410	6174
PAG 5514	7147	6580*	3810	6143	7190	6174
PIONEER 8272	7499	6538*	3822	6102	6884	6169
YOUNG ORD G	7589	5559	4073	5709	7805*	6147
MIGRO TEK 1021R	7929	6211*	4093	4915	7519*	6133
FUNK'S G-550	7935	5791	3440	5465	8030*	6132
PAG 6662	8085	5697	3838	5535	7486	6128
STAUFFER SEEDS 657YGT	7482	5474	4096	5479	8082*	6122
ASGROW COLT	8425	6198	4492*	4457	7010	6116
ASGROW CORRAL	7309	5341	5087**	4494	8342*	6114
O'S GOLD GS 5100	8257	6009	3702	6495*	6095	6111
M-F-A GS-10##	7511	5820	3922	6018	7277	6109
GROWERS SG 10#	6938	5855	4606*	5935	7171	6101
DEKALB DK-42Y	7527	5957	2902	6083	8015*	6096
STAUFFER SEEDS 535GR	7862	5449	4542*	4428	8039*	6064
MIGRO TEK 1055R	8233	5530	4032	5126	7368	6057
NORTHRUP KING 2884	8785	5955	4002	4043	7469	6050
STAUFFER SEEDS 530GR	7501	5091	3984	4849	8751*	6035
PIONEER 8585	6758	5899	4514*	5621	7156	5989
GROWERS SG 40GBR#	7730	5731	3423	6299	6691	5974
FUNK'S G-623GBR	7537	5762	3682	5948	6879	5961
NC+ 160	8196	5604	4391*	4461	7098	5950
GROWERS SG 17GBR#	7672	5729	4184	5716	6355	5931
DEKALB DK-58	7582	5930	3283	5493	7216	5900
TRIUMPH TWO 62Y	7723	5515	3792	5109	7341	5896
DEKALB C-42Y+##	7364	5438	3298	5479	7819*	5879
COKER 7605	8676	5070	4069	4534	6912	5852
WARNER W-655T	6759	5818	4066	4821	7688*	5830
PFIZER GENETICS EXP 7957	7539	6221*	2993	5920	6239	5782
MIGRO TEK 35R	7041	5438	3625	6192	6565	5772
DEKALB E-59+##	7713	5325	3106	5803	6754	5740
GOLDEN HARVEST H500B	7395	6001	3407	5688	6203	5738
PAG 5550	7703	5590	3511	4636	7225	5733

TABLE 8. CONTINUED.

BRAND-HYBRID	Y I E L D (LB/ACRE)					MEAN
	NOVELTY	COLUMBA	CLINTON	MT.VERN	PARMA	
COKER 7723	7813	5423	3624	3527	8191*	5715
CARGILL 50	6766	5150	2473	5814	7366	5513
FUNK'S G-499GBR	6604	5554	2870	5309	7028	5473
MARTIN	5877	4406	3075	4214	5966	4707
TRIAL AVERAGE	7967	5997	3845	5774	7565	6229
L.S.D. AT .05	947	745	874	900	1271	510

\*\* HIGHEST YIELDING HYBRID IN THE TEST.

\* HYBRID WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING HYBRID IN THE TEST.

## WIDELY-GROW HYBRID.

# BIRD RESISTANT.

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