



# 1989 Grain Sorghum Performance Tests in Texas

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**1989 GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS**

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# GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS--1989

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## INTRODUCTION

As the 1980's come to a close, we can look back at what has happened to grain sorghum production in Texas during this decade. Sorghum has been a major commodity in Texas, but during the 1980's acreage declined approximately 240,000 acres annually (Figure 1) to an all time low of 2.1 million acres in 1988. Some of the probable causes for acreage reduction were: (a) participation in various government supported programs, (b) price differential of different commodities and (c) precipitation patterns. Although acreage decreased, yields in Texas have increased through continuous improvements in hybrids developed by plant breeders. Yield per harvested acre has increased 63.5 lb/year during this 10-year period (Figure 1). As we enter the 1990's, more emphasis is being placed on using sorghum grain for a human food resource as well as for livestock feed. With this in mind, plant breeders are now being faced with the challenge of producing hybrids that have a white or cream colored grain, straw glume color, tan plant color, superior weathering ability, and yields comparable or exceeding the traditional red or bronze colored hybrids.

Today hybrids in Texas are being developed for different environments in which low input and marginal land is sometimes being used for production. As we move from South Texas to North Texas, it appears yield gains have been decreasing. Figures 2 and 3 show four irrigated locations where performance tests have been conducted for the past 20 years. According to Dr. Fred Miller, "During this period of time, mean yields at Weslaco, College Station, Lubbock, and Stratford/Dumas area indicate a regional improvement pattern. By using a regression analysis, the South Texas region, where sorghum is planted near February 1 and where day length and day and night temperatures increase during the crop season, the rate of yield improvement has been nearly 223 lb/year. The regression line for Weslaco shows small annual variation between test means and reflects the upward yield gains. However, regression values for College Station also planted in short-days and increasing temperatures but about one month later than Weslaco show only a 27.3 lb/year gain in yield. Even though planting at Lubbock occurs near the longest days and at an optimum day-night temperatures regime, yield gains are similar to those at College Station. At Stratford/Dumas, yields are decreasing at a rate of nearly 40 lb/year. This is a reflection of a changing type of sorghum from one in the early 1970's adapted to high intensity agriculture-i.e. multiple irrigations, best land for crop production and high rates of fertilizer." Although management is an important factor, we clearly see the trend of crop improvement in each area.

According to preliminary figures, farmers in Texas harvested 2.8 million acres of grain sorghum in 1989 (1). This figure represents a 30.2% increase in acreage over 1988. Although acreage increased, state yield is estimated to have decreased from 3,528 lb/A in 1988 to 3,248 lb/A or 7.9%.

Figure 4 shows acreage and percent harvested acreage for the major crop reporting districts in Texas. All of the districts reported an increase of acreage from 1988 to 1989

except for District 10-S, which reported a decrease of 5.9%. Districts 7 and 10-N reported the largest increase of acreage of 78 and 65.6% respectively.

### GRAIN SORGHUM PERFORMANCE TESTING IN TEXAS

This report gives results of five irrigated and five non-irrigated grain sorghum performance test sites. Approximate locations of test sites are shown in Figure 5 and represent the major grain sorghum production areas in Texas.

In addition, the results of supplementary grain sorghum tests conducted at Beaumont, Eagle Lake, and Halfway, Texas, are reported. The Halfway test was conducted separately from the state corn and grain sorghum performance tests. It was conducted as part of the sorghum and corn variety testing program at the Texas Agricultural Experiment Station (TAES) at Halfway in cooperation with the High Plains Research Foundation. The Beaumont and Eagle Lake tests were conducted by Dr. John Sij of the Texas Agricultural Research and Extension Center at Beaumont. Results from these tests will be useful in determining the adaptability of grain sorghum in this area.

Grain sorghum seed producers and TAES plant breeders enter sorghum hybrids in the state testing program at several locations for evaluation under different and changing environmental conditions. Entry of a hybrid at a given location does not imply that it is recommended for that area. Data contained herein are a measure of performance of grain sorghum hybrids planted during a particular season at the location shown.

Selection of a grain sorghum hybrid is a basic management decision. Yield is the predominant criterion of a hybrid, but other agronomic information as provided in this report should be evaluated before a final decision is made.

### ENTRIES

Official entry forms are mailed in December to everyone known to be interested in the grain sorghum testing program. Forms include the necessary information to make entries in any or all of the locations to be planted. No restrictions are placed on the number of hybrids a company may enter. Experimental materials are also accepted. All hybrids are entered on a fee basis under their brand name or number designation (Table 1). In addition, standard check hybrids are entered by TAES. After the test plantings are established, each participant receives a location sketch and planting plan for observation of the block during the growing season. After the data has been statistically analyzed, results from each individual test site are made available to participating companies, farmers, county extension agents, test cooperators, and anyone else who requests the information in a timely manner. A detailed publication combining all test results is produced at a later date.

## FIELD-PLOT TECHNIQUE

Excessive amounts of seed were packaged and distributed at all locations by one of the following methods:

1. Hand dropped through planter at Hondo, Danevang, Thrall, McKinney, and Dumas.
2. Cone planter at Weslaco, Gregory, College Station, and Lubbock.

After emergence, seedlings in each plot were hand thinned to a uniform spacing for a plant population recommended in the area.

Cultural practices were those adapted for general use in the area as determined by the cooperator. Field data were recorded at the appropriate time and other data collected at harvest. All locations were hand harvested and threshed with a plot thresher or plot harvester. Moisture was determined at harvest.

## DATA

The following data are reported and may or may not be quoted in this report for each respective location:

- Grain color**--determined at harvest; R = red, W = white, B = brown, M = mixed.
- Glume color**--Presented in Table 6A.
- Plant color**--Presented in Table 6A.
- Maturity class**--maturity designated by a respective seed company for that particular hybrid. Early (E), medium-early (ME), medium (M), medium-late (ML), and late (L) designations are used.
- Days to 50 percent flower**--number of days from planting to, and including, the day that an estimated 50 percent of the plants have reached anthesis.
- Plant height**--average inches from the ground to the tip of the panicle.
- Panicle exertion**--average inches from the flag leaf to the base of the panicle.
- Panicle length**--number of inches from base of panicle to tip of panicle.
- Stand**--visual estimate of plants in harvest area taken from all three replications.
- Moisture percentage**--determined with an electrical resistance meter from threshed grain from all replications.
- Test weight**--pounds per bushel of grain determined with an official test weight apparatus.
- Bird damage**--visual rating or percentage, not used in yield calculations.
- Lodging**--visual rating or percentage, not used in yield calculations.
- Midge damage**--percentage estimated but not used in yield calculations.
- MDMV rating**--Maize Dwarf Mosaic Virus rating, presented in Table 7A.
- Desirability rating**--based on a scale of 1-5. This rating is an overall index of potential for a hybrid in the market place. It is based primarily on seed color as affected by weathering, panicle exertion, leaf quality and retention, lodging, height uniformity, and other visible factors. The rating scale is presented in Table 6A.
- Greenleaf retention rating**--based on % of potential green leaves on the hybrid but which remain green at harvest.
- Smut per plot**--number of plants showing smut within the harvested area. Taken from all replications and averaged.

**Threshing percentage**--calculated by dividing plot grain weight by plot head weight x 100.

**Check hybrids**--those hybrids that are commonly used in a respective area that were not entered by a commercial company. They were included in the test on the basis of a survey taken by area county agents, farmers, and seed dealers.

**Yield**--determined as follows: plot panicle weight x threshing percentage x acre conversion factor x moisture correction factor. All yields are corrected to 13 percent moisture.

**Statistical significance**--shown for the yield of hybrids within each maturity group. Yields followed by the same letter are not significantly different at the 0.05 alpha level based on Duncan's multiple range test.

**Leaf disease rating**--visual rating of quality of green leaf area remaining at harvest

**LSD**--Least Significant Difference. A statistical tool measuring the difference between two entries. When two entries are compared and the difference between them is greater than the LSD, then the entries are judged to be significantly different.

**CV**--Coefficient of Variation. A statistical tool used to estimate the degree of confidence one may have in published data from replicated tests. C.V.'s below 15% generally indicate reliable, uniform data whereas C.V.'s over 15% are common and may lack precision, but the data may be useful for comparison.

## RESULTS

As in 1988, severe drought conditions, especially in the Coastal Bend Area, probably reduced potential yields. The season started with marginal sub-soil moisture in this area and received limited rainfall during the growing season. Consequently, plant growth and development was restricted, thus affecting grain yields.

Ten performance test locations were planted in 1989 with results secured from all test sites (Figure 5). The five irrigated test sites designated with an (I) had a mean yield of 6,186 lb/A while the five non-irrigated sites (NI) had a mean yields of 4,152 lb/A. General comments following each test site gives a brief summary of conditions during the growing season.

Results for each of the performance test locations are presented as follows:

1. Tables 2-11 summarize agronomic and test data information.
2. Tables 2A-11A present all performance test data obtained for hybrids entered at the respective locations. Some of these hybrids are in the experimental stage and seeds are not yet available in quantities for farm planting.
3. Tables 2B-11B are summaries of hybrids showing test yields and test ranks at respective locations for given time periods. The summaries are helpful in selection of hybrids for a particular area. Those hybrids not entered for a respective year are (--). Hybrids with same yields were ranked by computer.
4. Tables S1-S3 give agronomic and test results from supplementary grain sorghum tests conducted by Dr. John Sij at Beaumont and Eagle Lake, Texas.
5. Table S4-S5 gives results of a supplementary grain sorghum variety test conducted at Halfway, Texas, in cooperation with the High Plains Research Foundation.



Figure 1. Texas Grain Sorghum Acreage and Yield, 1980-1989

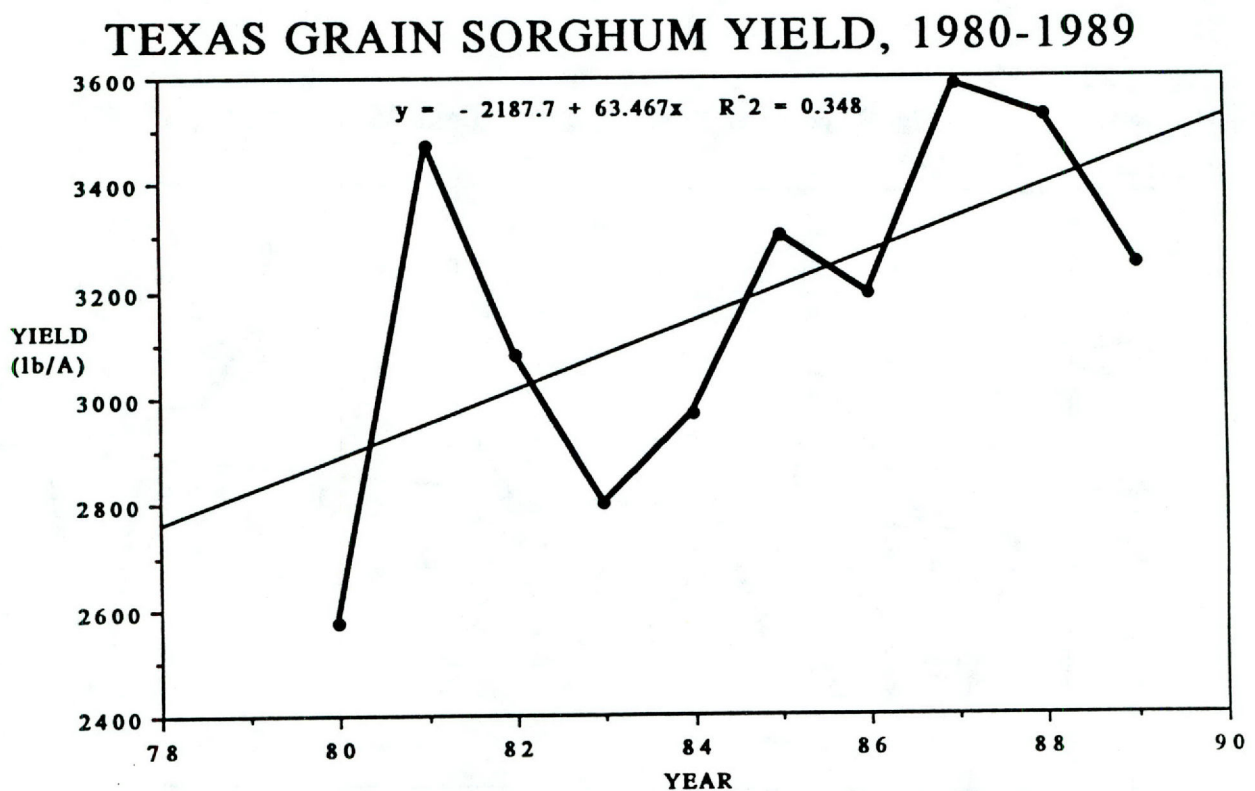
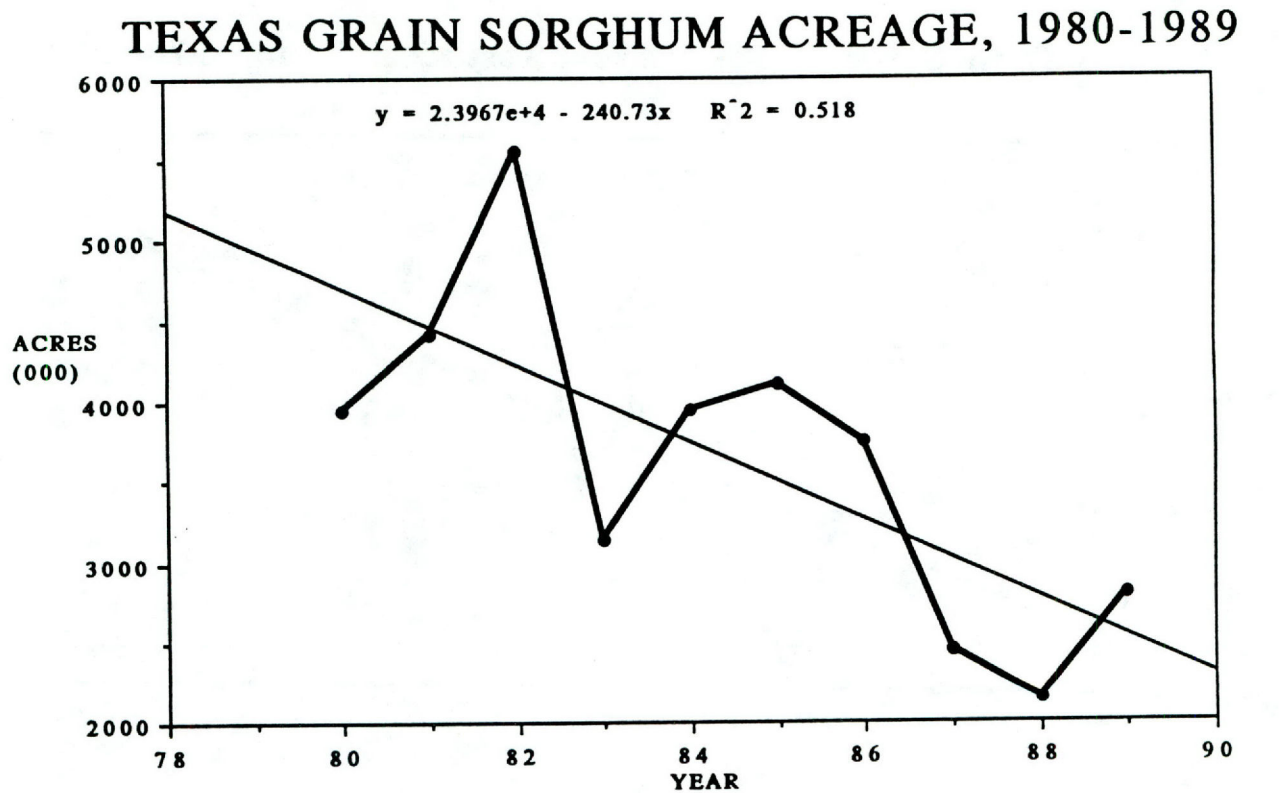
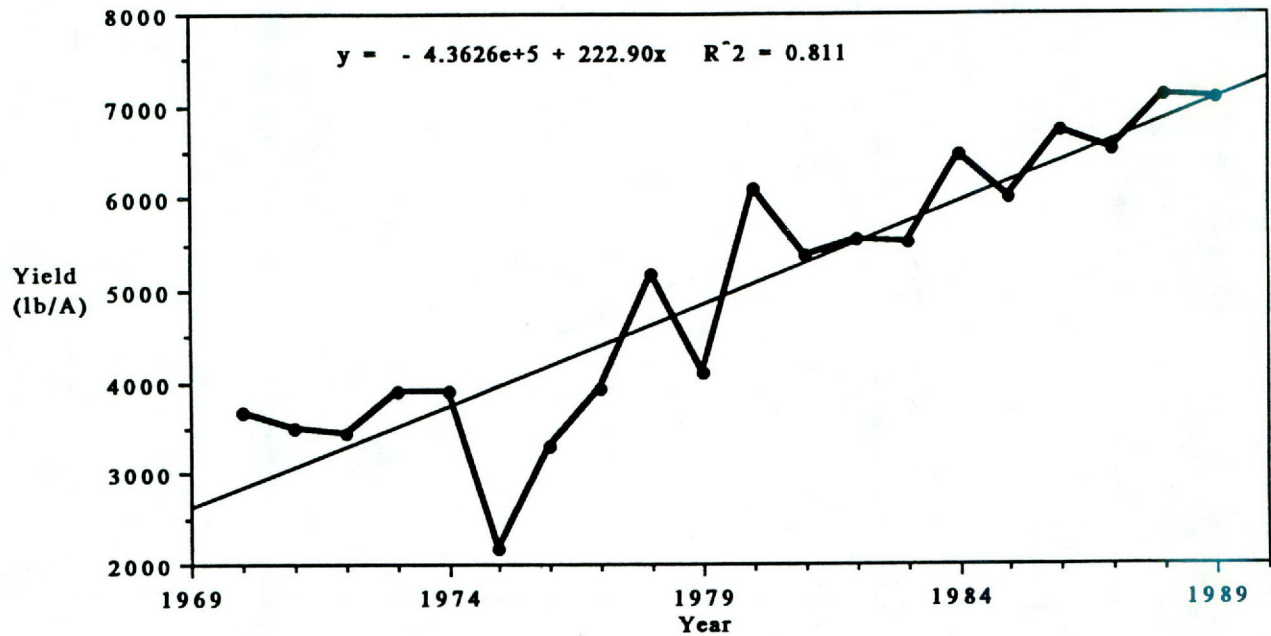


Figure 2. 20 Year Grain Sorghum Performance Test Mean Yield at Weslaco and College Station

Weslaco Grain Sorghum Performance Test Mean Yield, 1970-1989



College Station Grain Sorghum Performance Test Mean Yield, 1970-1989

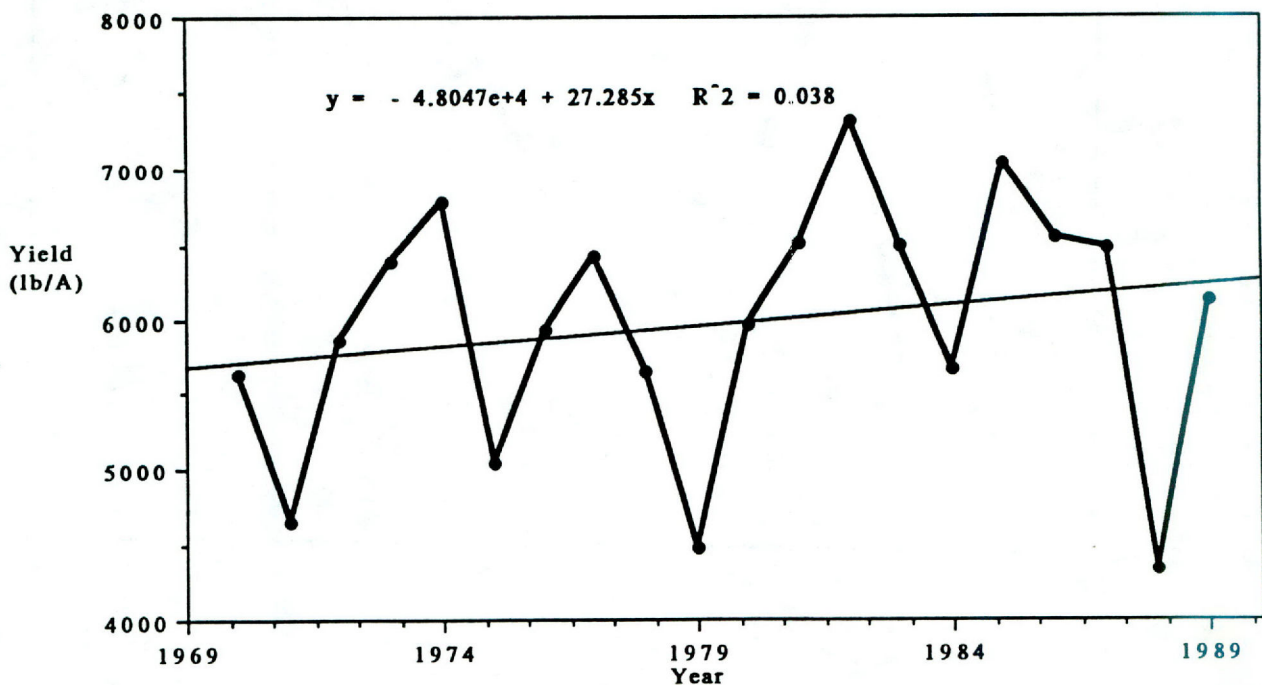


Figure 3. 20 Year Grain Sorghum Performance Test Mean Yield at Lubbock and Stratford/Dumas

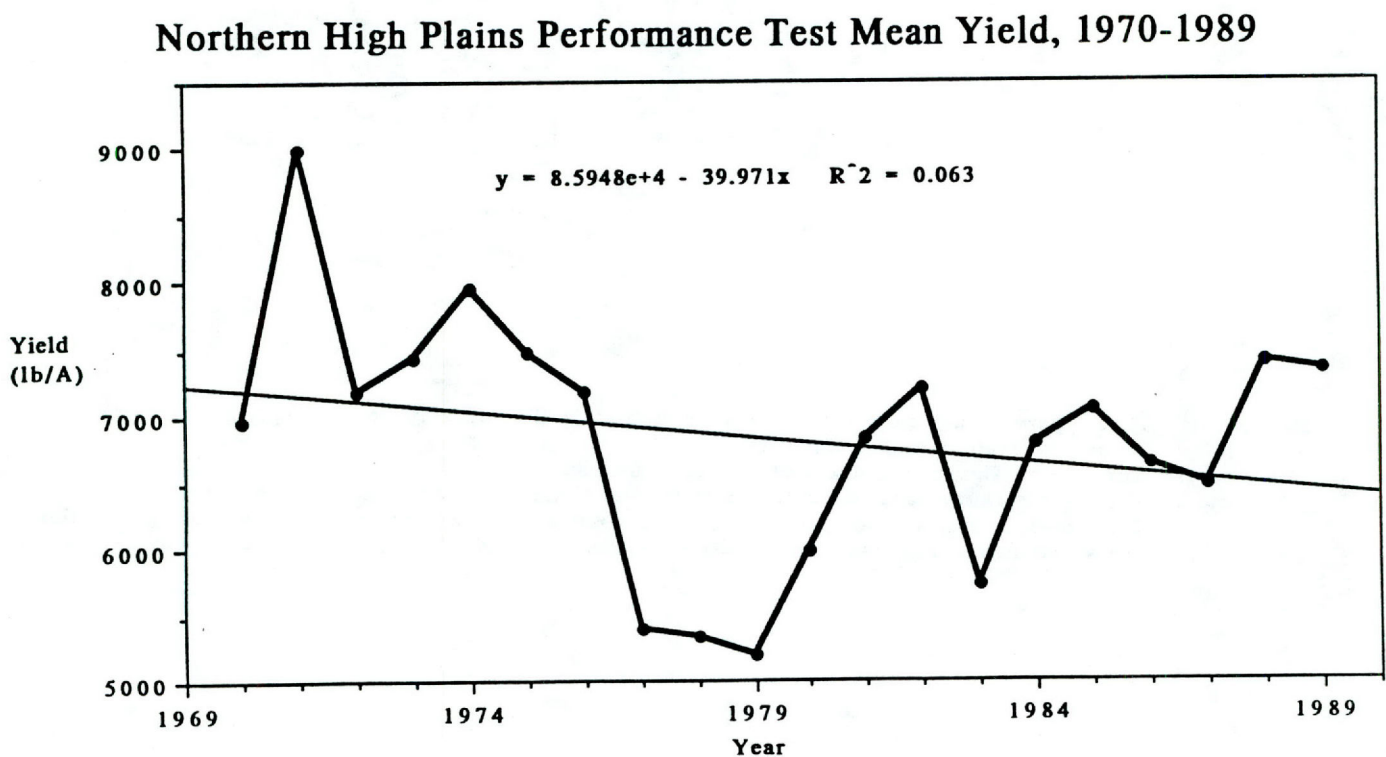
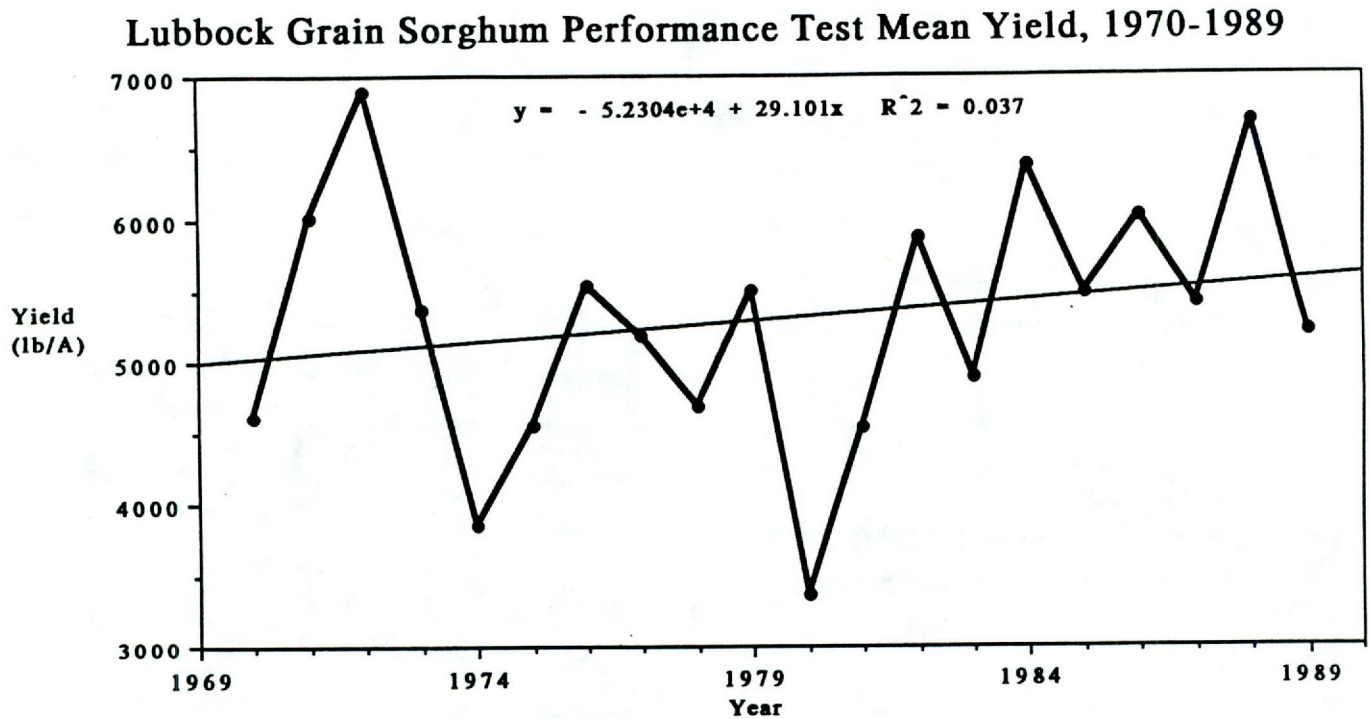
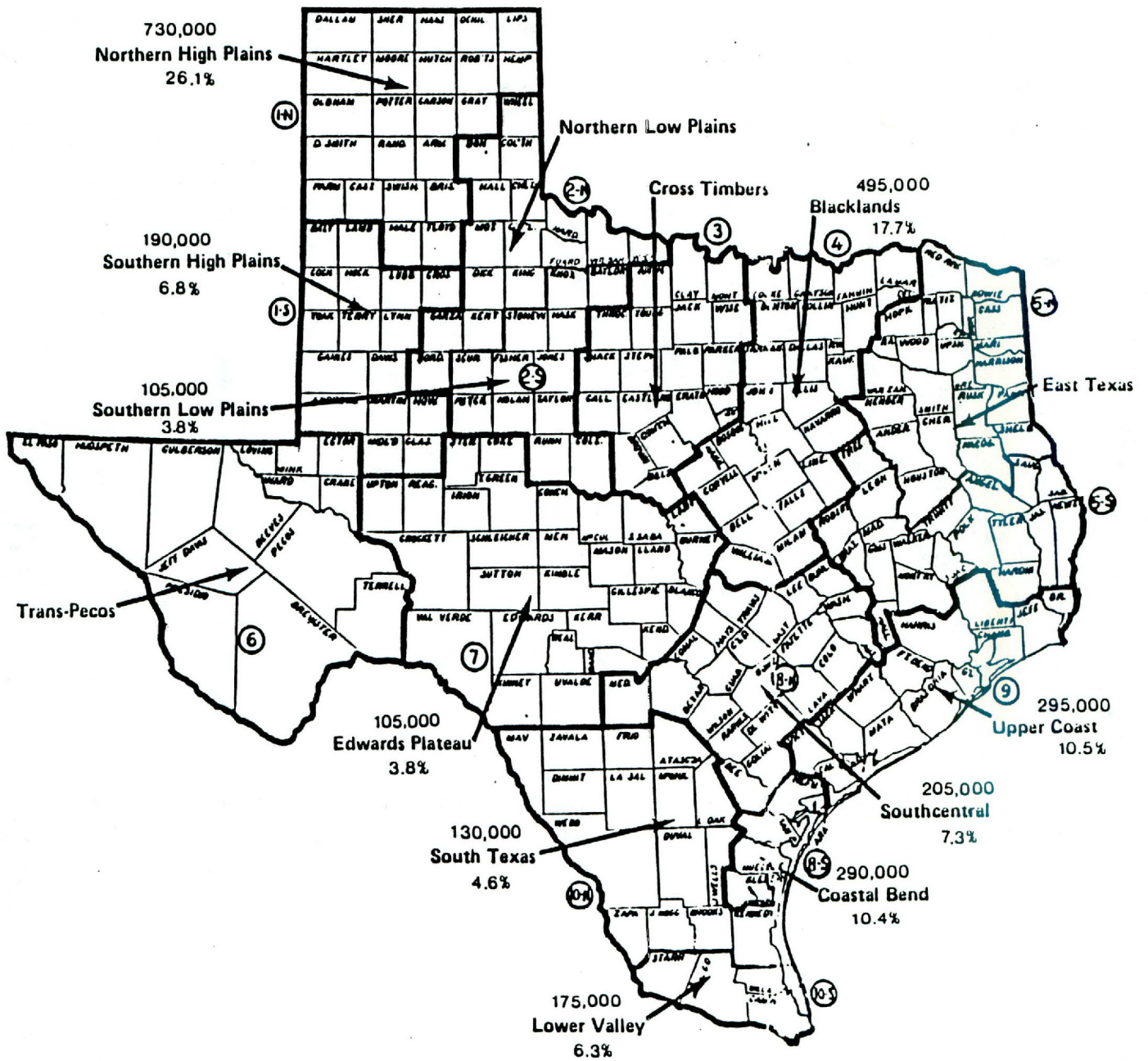


Figure 4. Acres and Percentage of Grain Sorghum Acreage Harvested by Texas Crop Reporting Districts, 1989 (1).



NOTES:

- A. The figure below each crop reporting district is that district's percentage of the total harvested grain sorghum in Texas.
- B. The circled figure is the number of each district.
- C. The figure above the district name is the total harvested acres for that district.
- D. The districts with no acreage presented are not considered major grain sorghum production areas. Grouped together, these districts account for 80,000 acres or 2.9% of state acreage (1).

Figure 5. 1989 Grain Sorghum Test Locations in Texas.

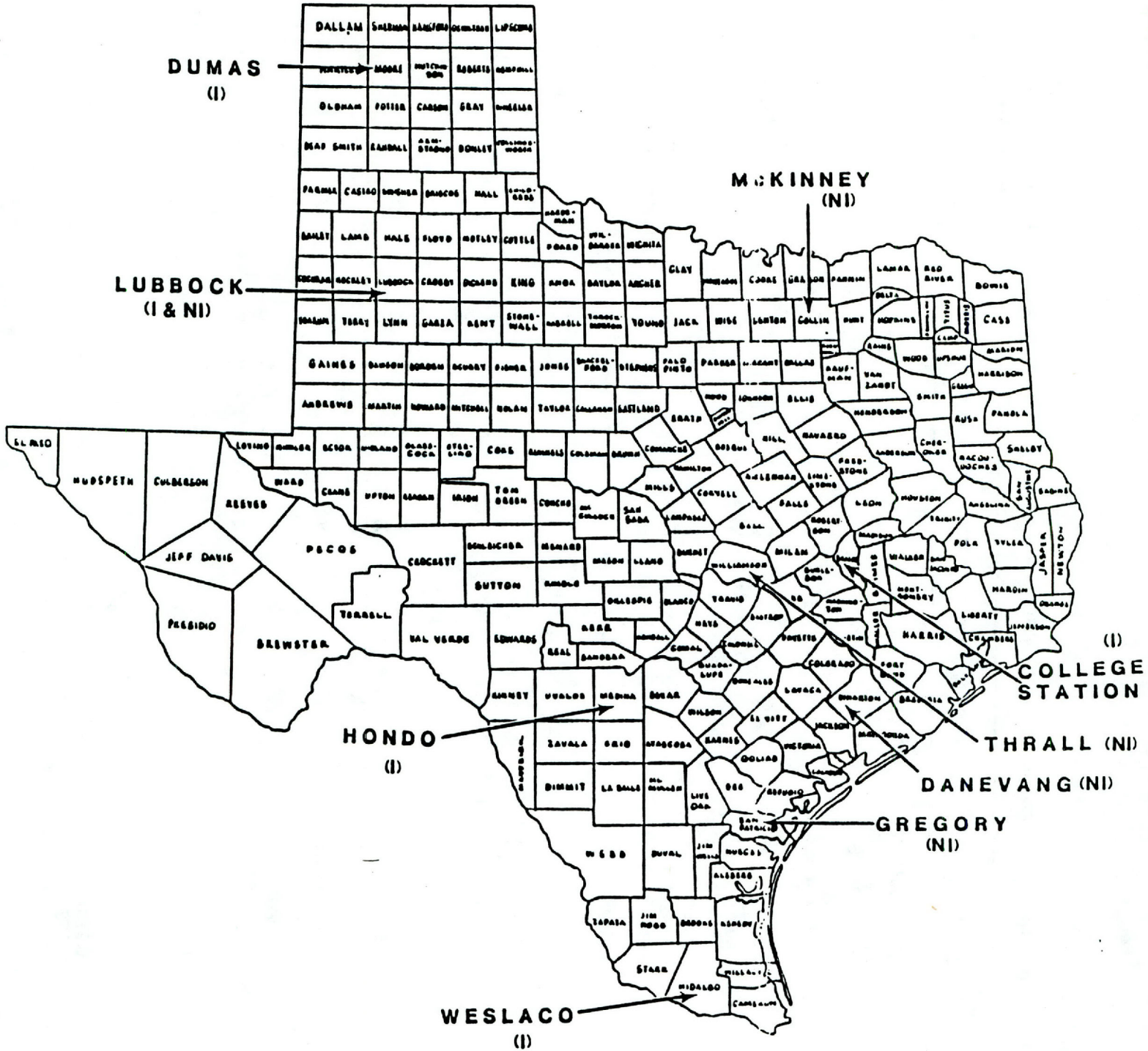


Table 1. Name, address and hybrid designation for participants in the 1989 Texas Grain Sorghum Performance Test

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub"1"	Lub"D"	Dumas
AgriPro Seeds P.O. Box 237 Tekamah, NE 68061	AgriPro AP 965G	-	-	-	-	-	-	-	-	-	X
	AgriPro AP 979G	-	-	-	-	-	-	-	-	-	X
	AgriPro AP 984G	-	-	-	-	-	-	-	-	-	X
	AgriPro AP 985G	-	-	-	-	-	-	-	-	-	X
ASGROW SEED CO. Box 1945 Plainview, TX 79072	X6038(X)	X	X	X	X	X	X	X	X	-	X
	GS 712	X	X	X	X	X	X	X	X	-	X
	OSAGE	X	-	X	X	-	-	-	X	-	X
	TOPAZ	-	X	X	-	-	-	-	X	X	X
	XP 5128(X)	-	X	X	-	X	X	X	X	X	X
	SENECA	-	-	-	-	-	X	X	-	X	-
	X4039(X)	-	-	-	-	-	X	X	-	X	-
	X5049(X)	-	-	-	-	-	X	X	X	X	X
	MADERA	-	-	-	-	-	-	-	-	X	-
	Big Crop Seed, Inc. P.O. Box 5866 Lubbock, TX 79417	Toro Brand Maxima	X	X	-	X	X	-	-	-	-
Toro Brand Ole		X	X	-	-	-	-	-	-	-	-
Toro Brand Optima		X	X	-	X	X	X	-	X	-	X
Toro Mocho		-	-	-	-	-	-	X	-	X	-
Cargill Hybrid Seeds P.O. Box 5645 Minneapolis, MN 55440	6670	X	X	X	X	X	X	-	X	-	X
	DR1125	X	X	X	-	X	-	-	X	X	-
	X15277	X	X	X	-	X	-	-	X	X	-
	847(X77039)	X	X	X	X	X	X	X	X	X	X
	4462	-	X	-	X	X	X	X	X	-	-
	X15276	-	X	-	X	X	X	X	X	-	-
	5572	-	-	-	-	X	X	X	-	-	-
	40	-	-	-	-	-	-	-	-	X	X
	X31010C	-	-	-	-	-	-	-	-	X	X
	630	-	-	-	-	-	-	-	-	-	X
Columbia Seed Co. 1607 57 th St. Lubbock, TX 79412	CS747	X	-	-	-	-	-	-	-	-	-
	CS737	X	X	-	-	-	-	-	-	-	-
	CS720DR	X	-	-	-	-	-	-	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub"l"	Lub"D"	Dumas
Conlee Seed Co., Inc. P.O. Box 23219 Waco, TX 76702-3219	Rustler	X	X	X	X	X	X	X	X	-	X
	Wrangler II	X	X	X	X	X	X	X	-	-	-
	Towhead	-	-	-	-	-	X	X	X	-	X
DEKALB-PFIZER GENETICS Rt. 2, Box 56 Lubbock, TX 79415	X-829(X)	-	X	-	X	X	X	X	-	-	-
	X-832(X)	-	-	-	-	-	X	X	-	X	-
	DK66	X	-	-	-	-	-	-	-	-	-
	DK50	X	-	-	-	-	-	-	-	-	-
DELTA AND PINE LAND CO. 1301 E. 50th St. Lubbock, TX 79404	DK37	-	-	-	-	-	X	X	-	-	-
	Funks G-1711	X	-	-	X	-	-	-	-	-	-
	Funks G-522DR	X	-	-	X	-	-	-	-	-	-
	Funks G-1555	-	X	-	X	-	-	-	-	-	-
	Funks HW 7518	-	X	-	X	-	-	-	-	-	-
	Funks RA-787	-	-	-	-	-	X	X	-	-	-
	Funks G-1655	-	-	-	-	-	X	X	-	-	-
	Funks 6006X	-	-	-	-	-	X	X	-	-	-
	Funks 6012X	-	-	-	-	-	X	-	-	-	-
	Funks G-1492	-	-	-	-	-	-	X	-	-	-
DOUGLASS W. KING CO. P.O. Box 200320 San Antonio, TX 78220	DK776	X	X	X	X	X	X	-	X	X	X
	DK760	X	X	X	X	X	X	-	X	X	X
DyNA Seeds, LTD 6414 N. Sheridan Wichita, KS 67212	DN31	-	-	-	-	-	-	X	-	-	X
Frontier Hybrids Inc. P.O. Box 177 Abernathy, TX 79311	Frontier F-333Y	X	X	X	X	X	X	X	X	X	X
	Frontier F-524	-	-	X	-	-	-	-	X	-	X
	Frontier F-457D	-	-	-	-	X	-	-	-	-	-
	Frontier F-200	-	-	-	-	X	X	X	-	X	-
	Frontier F-270	-	-	-	-	-	-	-	-	X	-
Garrison Seed & Co., Inc. Drawer 2420 Hereford, TX 79045	S.G. 925	X	X	-	-	X	-	-	X	-	-
	S.G. 932	X	X	-	X	X	X	-	X	-	X
	S.G. 922	X	X	-	-	X	X	-	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub*1"	Lub*D"	Dumas
	S.G. 942	X	-	-	X	-	-	-	X	-	X
	S.G. 944	X	-	-	X	-	-	-	X	-	X
	S.G. 688	-	-	-	-	-	-	X	-	X	-
	S.G. 822	-	-	-	-	-	-	X	-	X	-
Garst Seed Co. Eminence Route Garden City, KS 67846	5329	X	X	-	X	-	-	-	-	-	-
	5319	X	X	-	X	-	X	-	X	-	-
	5521	-	-	-	-	-	X	-	-	-	-
	5511	-	-	-	-	-	-	-	-	X	-
	5517	-	-	-	-	-	-	-	-	X	-
Gro Agri Seed Co. P.O. Box 1656 Lubbock, TX 79408	EXP 3605X	X	-	-	-	-	-	-	-	-	-
	EXP 3146X	X	X	-	X	-	-	-	-	-	-
	EXP 3148X	X	X	-	X	-	X	-	X	-	X
	EXP 3150X	X	-	-	X	-	-	-	-	-	X
	GSC 1313	-	X	-	X	-	X	-	X	-	X
EXP 3143X	-	-	-	-	-	X	-	-	-	-	
EXP 3147X	-	-	-	-	-	X	-	-	X	-	
HyPerformer Seed Co. 5100 Poplar Suite 3200 Memphis, TN 38137	HSC Cherokee	-	X	X	X	X	-	X	-	-	-
	HSC Wings	-	X	X	X	X	-	X	-	-	-
	HSC Honcho	-	-	-	-	-	-	X	-	-	-
	HSC Exp 89-3	-	-	-	-	X	-	X	-	-	-
HSC Exp 89-4	-	-	-	-	X	-	X	-	-	-	
Jacques Seed Company 720 St. Croix Prescott, WI 54021	377W	-	-	-	-	-	-	-	-	-	X
	477W	-	-	-	-	-	-	-	-	-	X
	606E	-	-	-	-	-	-	-	-	-	X
NC + Hybrids 3820 N. 56th P.O. Box 4408 Lincoln, NE 68504	NC+ 9674 EX	X	X	-	X	-	-	-	-	-	-
	NC+ 174	-	-	-	X	-	-	-	-	-	-
	NC+ 371	-	-	-	-	-	X	-	-	-	-
	NC+ 472	-	-	-	-	-	X	-	-	-	-



Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub*I"	Lub*D"	Dumas
The New Northrup King 6139 37th St. Lubbock, TX 79407	S9750	X	X	X	X	X	X	-	X	-	X
	2665	X	X	-	X	X	X	X	X	-	X
	KS780 (8539X)	X	X	X	X	-	-	-	-	-	-
	8642X	-	-	X	-	-	-	X	-	-	-
	KS737 (8641X)	-	-	-	-	-	X	X	X	-	X
	2244	-	-	-	-	-	-	X	-	-	-
	2030	-	-	-	-	-	-	-	-	X	-
	2656	-	-	-	-	-	-	-	-	X	-
	2884R	X	-	-	-	-	-	-	-	-	-
	2660	X	-	-	-	-	-	-	-	-	-
ORO Hybrids 624 27th St. Lubbock, TX 79404	ORO G XTRA	X	X	X	X	X	X	X	X	X	X
	ORO BARON	X	X	X	X	X	X	X	X	X	X
	ORO Amigo (Exp. 8906x)	X	-	X	X	-	X	X	-	-	-
	ORO Exp. 8903	-	-	-	-	-	-	X	-	-	-
Pioneer Hi-Bred Int'l., Inc. P.O. Box 788 Plainview, TX 79072	8260	X	X	X	X	-	-	-	X	-	X
	8278	X	X	X	X	-	X	X	X	-	X
	8313	X	X	X	X	-	X	X	X	-	X
	8573	-	-	-	-	-	X	X	-	X	-
	8452	-	-	-	-	-	X	X	X	X	-
	8500	-	-	-	-	-	X	X	-	X	-
	8379	-	-	-	-	-	X	X	X	-	X
	9300	X	-	-	-	-	-	-	-	-	X
RICHARDSON SEEDS, INC. Drawer B Vega, TX 79092	9344	X	-	-	-	-	-	-	-	-	X
	Sprint	-	-	-	-	-	-	-	-	X	-
	ST-D701G	X	X	X	X	-	X	X	X	X	X
SeedTec, Div. of NAPB, Inc. 1420 Ebeling Dr. Plainview, TX 79072	X-62830	X	-	-	-	X	-	X	-	X	-
	ST-686	X	X	X	X	X	X	X	X	X	X
	ST-3308	-	X	X	X	X	X	X	-	X	X
	WAC 715DR	-	-	-	X	-	-	-	X	-	-
	ST-3258	-	-	-	-	-	X	X	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub "I"	Lub "D"	Dumas
SEMILLAS MASTER de MEX. P.O. Box 615 Progreso, TX 78579	M-ELITE	X	-	-	-	-	-	-	-	-	-
	M-929-M	X	-	-	-	-	-	-	-	-	-
	M-VICTORIA	X	-	-	-	-	-	-	-	-	-
	M-IDEAL	X	-	-	-	-	-	-	-	-	-
Taylor-Evans Seed Co. P.O. Box 68 Tulla, TX 79088	T-E Y-75	X	X	X	X	X	X	X	X	-	X
	T-E DINERO	X	X	X	X	X	X	-	X	-	X
	T-E Y-76	X	X	X	X	X	-	-	X	-	X
	T-E Y-77	X	-	X	X	-	-	-	X	-	-
	T-E RANGER	X	X	X	X	X	-	-	X	-	-
	T-E WAHOO	X	-	-	-	-	-	-	-	-	-
	T-E Y-77E	-	X	-	-	X	-	-	-	-	X
	T-E 35	-	-	-	-	-	X	X	-	X	-
	T-E 42	-	-	-	-	-	X	X	-	X	-
	T-E EMPIRE	-	-	-	-	-	X	X	-	-	-
	T-E 150X	-	-	-	-	-	-	X	-	X	-
	T-E Y-101G	-	-	-	-	-	-	-	X	-	X
	T-E Y-60	-	-	-	-	-	-	-	-	X	-
TEXAS SEED CO., INC. P.O. Drawer 599 221 Airport Boulevard Kenedy, TX 78119	TS477	X	X	X	X	-	-	-	-	-	-
	TS488	X	X	X	X	-	-	-	-	-	-
Triumph Seed Company, Inc. P.O. Box 1050 Ralls, TX 79357	Two 80-D	X	-	-	-	-	-	-	-	-	-
	Two 70-D	X	-	-	-	-	-	-	-	-	-
	TR 65-G	X	-	-	-	-	-	-	-	-	-
WARNER SEED CO., INC. 120 S. Lawton Box 1448 Hereford, TX 79045	W-917-E (Wx 88117)	X	X	X	X	X	X	X	X	-	X
	W-902-W	X	X	-	X	X	X	X	X	-	X
	W-844-E	X	X	X	X	X	X	X	X	X	X
	W-876DR	X	X	-	X	-	-	-	-	-	-
	W-632-W	-	-	-	-	-	-	X	-	X	X

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub"1"	Lub"D"	Dumas
Western Heritage Seed Co. Box 756 Winters, TX 79567	Rio Grande	X	-	-	-	-	-	-	-	X	-
	Rio Bravo	X	-	-	-	-	-	-	-	X	-
Texas Agricultural Experiment Station (TAES) College Station, TX 77843	A.Tx631 x RTx435	X	X	X	X	X	X	X	X	X	X
	A.Tx631 x R8505	X	X	X	X	X	X	X	X	X	X
	A.Tx631 x R8504	X	X	X	X	X	X	X	X	X	X
	A.Tx631 x 80C2241	X	X	X	X	X	X	X	X	X	X
	A.Tx631 x R8511	X	X	X	X	X	X	X	X	X	X
	A.Tx626 x R8503	X	X	X	X	X	X	X	X	X	X
	A.Tx629 x R8503	X	X	X	X	X	X	X	X	X	X
	A.Tx631 x Dorado	X	X	X	X	X	X	X	X	X	X
	A.Var x 80C2241	X	X	X	X	X	X	X	X	X	X
	A.Var x RTx435	X	X	X	X	X	X	X	X	X	X
	A.8610 x RTx435	X	X	X	X	X	X	X	X	X	X
	A.8618 x RTx435	X	X	X	X	X	X	X	X	X	X
	RS610	X	X	X	X	X	X	X	X	X	X
	A.Tx 399 x RTx430	X	X	X	X	X	X	X	X	X	X
	A.Tx 378 x RTx430	X	X	X	X	X	X	X	X	X	X
	A.Tx2752 x RTx430	X	X	X	X	X	X	X	X	X	X
	A.Tx399 x Tx2536	X	X	X	X	X	X	X	X	X	X
	A1 x Tx430	X	X	X	X	X	X	X	X	X	X
	A4R x Tx430	X	X	X	X	X	X	X	X	-	-
	A1 x Tx435	X	X	-	X	X	X	X	X	X	-
A1 x R8505	X	X	-	X	X	X	-	-	X	-	
A1 x R8507	X	-	-	-	X	X	X	-	-	X	
A1 x TAM428	X	X	X	X	X	-	-	X	-	-	
A1 x Tx2817	X	-	-	X	-	-	-	X	-	-	
A1 x R3224(+)	X	-	-	-	-	-	-	-	X	X	
A.Tx630 x R3338wx	X	X	X	X	X	X	X	X	X	X	
A35 x Tx430	-	X	-	-	-	X	X	X	X	X	

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub "I"	Lub "D"	Dumas
TAES (continued)	A8201-2 x R6078	-	X	-	X	-	-	-	X	-	-
	A1 x Tx2794	-	X	-	X	-	X	-	X	X	-
	A1 x Tx2737	-	X	X	-	-	-	X	X	X	X
	A1 x R6078	-	-	-	-	X	-	-	-	-	-
	A1 x R2241	-	-	X	-	-	X	X	-	-	X
	A1 x C2181	-	-	-	-	X	X	-	-	-	-
	A8201 x R4317	-	-	-	-	X	-	-	-	-	-
	AOK11 x Tx430	-	-	-	-	-	X	-	X	X	-
	A.Tx 631 x 86EO361	-	-	-	X	X	-	-	-	-	-
	A.1 x R8503	-	-	-	-	-	X	-	-	X	-
	A.Tx631 x R3338wx	-	-	-	-	X	-	-	-	-	-
	A1 x Tx433	-	-	-	-	-	-	X	-	-	-
	A35 x R2241	-	-	-	-	-	X	X	-	-	-
	A1 x Tx2864	-	X	-	-	-	-	-	-	-	-
	A35 x GR104-1	-	X	-	-	-	-	-	-	-	-
	A.Tx378 x Tx2862	-	X	-	-	-	-	-	-	-	-
	A.Tx623 x Tx2868	-	X	-	-	-	-	-	-	-	-
	A.Tx2752 x Tx2868	-	-	-	X	-	-	-	-	-	-
	A.Tx378 x Tx2861	-	-	-	X	-	-	-	-	-	-
	A.Tx2755 x Tx2870	-	-	-	X	-	-	-	-	-	-
	A.Tx2801 x Tx2874	-	-	-	X	-	-	-	-	-	-
	A.Tx378 x GR107-2	-	-	-	-	-	X	-	-	-	-
	A1 x GR107-PR-687	-	-	-	-	-	X	-	-	-	-
	A.Tx 2755 x Tx 2872	-	-	-	-	-	X	-	-	X	-
	A.Tx2801 x Tx2876	-	-	-	-	-	X	-	-	-	-
	A35 x Tx2862	-	-	X	-	-	-	-	-	X	-
	A.Tx2801 x Tx2872	-	-	X	-	-	-	-	-	-	-
	A1 x Tx2862	-	-	-	-	X	-	-	X	-	-
	A1 x GR107-56	-	-	-	-	X	-	X	-	-	-
	A.Tx2752 x Tx2859	-	-	-	-	X	-	-	-	-	X

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Hondo	Danevang	College Station	Thrall	McKinney	Lub "I"	Lub "D"	Dumas	
TAES (continued)	A.Tx2801 x Tx2876	-	-	-	-	X	-	-	-	X	-	
	A.Tx626 x Tx2864	-	-	-	-	-	-	X	-	-	-	
	A.Tx2755 x Tx2873	-	-	-	-	-	-	X	-	X	-	
	A1 x GR107B-78	-	-	-	-	-	-	X	X	-	-	
	A.Tx626 x GR105-8	-	-	-	-	-	-	-	X	-	-	
	A.Tx2801 x Tx2873	-	-	-	-	-	-	-	-	X	-	
	A.Tx2755 x Tx2871	-	-	-	-	-	-	-	-	X	-	
	A35 x Tx2864	-	-	-	-	-	-	-	-	X	-	
	A35 x Tx2863	-	-	-	-	-	-	-	-	X	-	
	A.Tx2752 x Tx2864	-	-	-	-	-	-	-	X	-	X	
	A.Tx399 x Tx2863	-	-	-	-	-	-	-	X	-	-	
	A.Tx2752 x Tx2866	-	-	-	-	-	-	-	-	-	X	
	A.Tx399 x Tx2737	-	-	-	-	-	-	-	X	X	X	
	A.Tx3042 x Tx2737	-	-	-	-	-	-	-	-	X	-	
	A35 x Tx435	-	-	-	-	-	-	-	-	X	-	
	A1 x (Tx430 x R9188)	-	-	-	-	-	-	-	-	X	X	
	A1 x 86EO328	-	-	-	-	-	-	-	-	X	-	
	A.Tx x 87BH8459	-	-	-	-	-	-	-	-	X	-	
	A1 x Tx7078	-	-	-	-	-	-	-	-	-	X	
	A-VAR x 87BH8459	-	-	-	-	-	-	-	X	-	-	
	Check 1		X	X	X	X	X	X	X	X	X	X
	Check 2		X	X	X	X	X	X	X	X	X	X
	Check 3		-	X	X	-	-	X	X	-	-	X
	Check 4		-	X	-	-	-	-	-	-	-	X
	Check 5		-	X	-	-	-	-	-	-	-	X
	Check 6		-	X	-	-	-	-	-	-	-	-
	Check 7		-	X	-	-	-	-	-	-	-	-

TABLE 2. AGRONOMIC AND TEST INFORMATION: WESLACO

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TEST:	1989 Irrigated Grain Sorghum Performance Test
LOCATION:	Texas A&M University Research and Extension Center, Weslaco, Texas
COOPERATORS:	John Drawe, Ray Castaneda, Dennis Pietsch, and Ralph Morgan
SOIL TYPE:	Hidalgo clay loam
ROW WIDTH:	27"
PREVIOUS CROP:	Grain sorghum
LAND PREPARATION:	Disked, moldboard, disked, bedded
DATE PLANTED:	2-23-89
DATE THINNED:	3-22; thinned to approximately 4-5 plants/foot
PLOT LENGTH:	30'
FERTILIZER:	152-0-0; applied 232 lb/A liquid 32-0-0 on 2-16-89, and 243 lb/A liquid 32-0-0 on 4-6-89
HERBICIDE:	AATREX (Atrazine) 1.5 lb/A on 2-28-89
INSECTICIDE:	None
RAINFALL:	February = 0.47"; March = 0.06"; April = 2.68"; May = 0.00"; June = 1.96"; July = 0.20"; Total = 5.17"
IRRIGATIONS:	3-29-89 and 5-10-89; approx. 4" each
DATE HARVESTED:	6-26-89 by hand, threshed 6-27-89
SIZE HARVESTED PLOT:	1/1,000 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	99
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	3
TEST MEAN:	7,076 lb/A; yields corrected to 13% moisture
TEST C.V:	6.5 percent

**GENERAL INFORMATION:** Twenty-three commercial seed companies in addition to the Texas Agricultural Experiment Station entered 99 hybrids at this test site. This was the largest of 10 grain sorghum performance tests in Texas for 1989.

Excellent yields were attained as a result of good management and excellent agronomic practices. Although hot and dry weather conditions persisted during the growing season, a timely irrigation schedule was followed to insure continuous plant growth and development. The test mean yield was 7,076 lb/A with 66 hybrids producing between 7,048 lb/A to 7,950 lb/A. This was a very uniform test as indicated by the low coefficient of variation (C.V.). The incidence of midge and bird damage were very low. Lodging was not observed in the test. Several areas or "hot spots" of corn leaf aphids were observed, but damage was minimal, and did not warrant chemical control.

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM- AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., O.05 ****
A4R x Tx430	Tx. Agri. Exp. Sta.	R	ML	77	48	4	0	0.0	0.0	56.6	16.9	80.6	7950	A
S.G. 942	Garrison Seed & Co.	R	ML	74	53	2	0	0.0	0.7	58.6	16.9	81.4	7845	A-B
Toro Brand Maxima	Big Crop Seed Inc.	R	ML	75	53	3	0	0.0	0.0	57.3	16.2	78.7	7729	A-C
S9750	New Northrup King	R	L	76	53	5	0	0.0	0.0	57.1	16.8	80.0	7728	A-C
T-E Y-75	Taylor-Evans Seed	R	M	75	51	4	0	0.0	0.0	57.3	15.9	79.8	7728	A-C
5329	Garst Seed Company	R	ML	75	54	4	0	0.0	0.0	54.9	16.2	78.6	7649	A-D
EXP 3148X	GroAgri Seed Co.	R	M	74	47	3	0	0.0	0.0	52.3	15.9	77.9	7645	A-E
DEKALB DK-50	DEKALB-PFIZER GEN.	R	ML	77	51	4	0	0.0	0.0	55.4	16.5	75.7	7619	A-E
TS 477	TEXAS SEED CO.	R	ML	76	54	3	0	0.0	0.0	59.6	16.3	80.5	7610	A-F
ORD Amigo (Exp. 8906X)	ORD Hybrids	R	ML	74	52	4	0	0.0	0.0	57.6	16.4	79.9	7607	A-F
CHECK 1	Tx. Agri. Exp. Sta.			74	48	5	0	0.0	0.0	55.5	16.5	77.2	7591	A-F
DR1125	Cargill Hybrid	R	ML	74	49	4	0	0.0	0.3	54.7	16.2	77.0	7587	A-F
Funk's G-522DR	DELTA AND PINE LAND	R	M	76	53	3	0	0.0	0.0	53.5	16.1	77.1	7561	A-F
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	73	48	4	0	0.0	0.0	56.0	16.3	77.5	7557	A-F
T-E 76	Taylor-Evans Seed	R	ML	74	46	3	0	0.0	0.0	53.9	16.4	77.9	7555	A-F
ST-686	SeedTec, Div. NAPB	R	M	74	50	4	0	0.0	0.0	58.4	16.6	78.8	7546	A-F
S.G. 944	Garrison Seed & Co.	R	ML	74	51	2	0	0.0	0.3	57.7	17.0	78.0	7542	A-F
8278	Pioneer Hi-Bred	R	ML	75	52	4	0	0.0	0.0	58.0	16.6	79.1	7539	A-F
5319	Garst Seed Company	R	ML	74	52	4	0	0.0	0.0	57.6	16.5	79.4	7508	A-G
9344	RICHARDSON SEEDS	R	L	75	53	4	0	0.0	0.0	59.3	16.8	79.7	7507	A-G
S.G. 922	Garrison Seed & Co.	R	ML	75	49	5	0	0.0	0.0	54.2	16.1	76.6	7506	A-G
T-E Y-77	Taylor-Evans Seed	R	ML	75	52	5	0	0.0	0.0	56.8	16.7	78.3	7477	A-G
6670	Cargill Hybrid	R	ML	75	52	2	0	0.0	0.0	57.1	16.8	79.0	7475	A-G
Toro Brand Optima	Big Crop Seed Inc.	R	ML	75	54	3	0	0.0	0.0	53.7	15.6	77.0	7472	A-G
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	74	46	7	0	0.0	0.0	53.2	16.1	77.3	7461	A-G
dk 775	DOUGLASS W. KING	R	ML	75	52	3	0	0.0	0.0	58.2	17.0	81.3	7460	A-G
ST-D701G	SeedTec, Div. NAPB	R	ML	75	52	4	0	0.0	0.0	57.2	16.4	78.8	7449	A-H
CHECK 2	Tx. Agri. Exp. Sta.			74	50	5	0	0.0	0.0	57.1	16.9	78.0	7449	A-H
2665	New Northrup King	R	ML	75	49	5	0	0.0	0.0	56.5	16.3	77.9	7440	A-H
EXP 3150X	GroAgri Seed Co.	R	ML	75	53	4	0	0.0	0.0	56.9	16.1	79.7	7432	A-H
ORO G XTRA	ORD Hybrids	R	ML	75	52	3	0	0.0	0.0	57.1	16.4	79.6	7426	A-H
X15277	Cargill Hybrid	R	ML	80	50	4	0	0.3	0.0	54.5	17.5	78.5	7409	A-H
Funk's G-1711	DELTA AND PINE LAND	R	ML	75	51	4	0	0.3	0.0	57.0	16.5	79.6	7393	A-H
EXP 3146X	GroAgri Seed Co.	R	M	74	51	7	0	0.0	0.0	58.0	16.3	78.3	7390	A-H
X6038X	ASGROW SEED COMPANY	R	ML	76	55	5	0	0.0	0.3	58.6	17.6	79.4	7387	A-H
A.Tx378 x RTx430	Tx. Agri. Exp. Sta.	R	M	74	57	5	0	0.0	0.0	56.5	16.7	80.2	7367	A-I
dk 760	DOUGLASS W. KING	R	ML	75	51	4	0	0.0	0.0	57.3	16.7	79.2	7341	A-J
Two 80-D	Triumph Seed Co.	R	ML	75	52	3	0	0.0	0.0	57.3	16.1	78.7	7339	A-J
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	76	54	4	0	0.3	0.0	56.4	16.6	78.7	7337	A-J
Rio Grande	Western Heritage	R	ML	74	50	5	0	0.0	0.0	53.3	16.3	78.1	7336	A-J
Rustler	Conlee Seed Company	R	ML	74	52	4	0	0.0	0.0	57.2	16.2	78.5	7333	A-J



Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU-RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM-AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS-TURE %	THRESH-ING %	YIELD lb/A	STAT. SIG., O.05 ****
9300	RICHARDSON SEEDS	R	ML	75	49	5	0	0.0	0.0	57.3	16.3	79.4	7322	A-J
GS712	ASGROW SEED COMPANY	B	ML	76	51	5	0	0.0	0.0	56.5	16.9	78.6	7301	A-J
2660	New Northrup King	R	ML	74	50	7	0	0.0	0.0	54.6	16.3	76.0	7274	A-K
NC+ 9674 EX	NC+ Hybrids	R	M	75	55	4	0	0.0	0.0	59.0	16.4	80.2	7272	A-K
Wrangler II	Conlee Seed Company	M	ML	76	54	3	0	0.0	0.0	56.2	16.2	79.0	7268	A-K
S.G. 925	Garrison Seed & Co.	R	M	74	49	4	0	0.0	0.0	57.9	16.3	79.3	7261	A-K
TS 488	TEXAS SEED CO.	R	ML	74	50	4	0	0.0	0.0	57.4	16.1	79.0	7258	A-K
TR 65-G	Triumph Seed Co.	R	M	77	48	4	0	0.0	0.0	57.8	15.5	79.0	7237	A-K
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	77	55	4	0	0.7	0.0	57.6	16.8	77.3	7208	A-K
A1 x Tx430	Tx. Agri. Exp. Sta.	W	ML	77	54	4	0	0.0	0.0	55.0	16.8	75.9	7204	A-K
M-ELITE	SEMILLAS MASTER	R	M	76	53	4	0	0.0	0.0	57.1	16.5	79.1	7202	A-K
M-929-R	SEMILLAS MASTER	R	ML	77	53	4	0	0.3	0.0	56.0	17.1	78.0	7195	A-K
Two 70-D	Triumph Seed Co.	R	M	74	48	4	0	0.0	0.0	53.3	16.6	77.1	7187	A-K
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	77	54	5	0	0.0	0.0	56.4	16.7	79.4	7171	A-K
CS 737	Columbia	R	ML	75	51	4	0	0.0	0.0	54.3	16.6	77.5	7146	A-L
ORO BARON	ORO Hybrids	R	ML	76	49	5	0	0.0	0.0	57.5	16.4	78.8	7138	A-L
A1 x Tx435	Tx. Agri. Exp. Sta.	W	ML	80	54	6	0	0.0	0.0	54.5	16.6	76.5	7125	A-L
W-876 DR	WARNER SEED CO.	R	L	73	52	4	0	0.0	0.0	56.4	16.9	78.7	7113	A-L
M-VICTORIA	SEMILLAS MASTER	R	M	76	52	4	0	0.0	0.0	55.8	16.2	78.8	7096	A-L
OSAGE	ASGROW SEED COMPANY	R	M	74	51	5	0	0.0	0.0	58.0	16.7	79.3	7087	A-L
847 (X77039)	Cargill Hybrid	R	ML	76	51	3	0	0.0	0.0	57.8	16.2	77.6	7078	A-L
T-E RANGER	Taylor-Evans Seed	R	ML	73	49	6	0	0.0	0.0	57.8	16.6	77.8	7075	A-L
8313	Pioneer Hi-Bred	R	ML	75	50	3	0	0.0	0.0	57.3	17.7	78.1	7068	A-L
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	78	54	5	0	0.7	0.0	57.3	17.1	78.1	7056	A-L
T-E DINERO	Taylor-Evans Seed	R	M	74	49	4	0	0.0	0.0	53.8	16.5	75.6	7048	A-L
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	77	55	4	0	0.7	0.0	56.9	16.5	76.6	6997	A-L
Rio Bravo	Western Heritage	R	ML	74	56	6	0	0.0	0.0	56.4	16.2	79.7	6968	B-L
8260	Pioneer Hi-Bred	R	ML	74	50	4	0	0.3	0.0	58.6	17.1	76.5	6956	B-L
2884R	New Northrup King	R	ML	75	55	4	0	0.0	0.0	56.5	16.4	79.0	6956	B-L
X-62830	SeedTec, Div. NAPB	R	L	82	56	2	0	0.7	0.0	57.6	17.3	77.1	6945	B-L
S.G. 932	Garrison Seed & Co.	R	ML	75	51	4	0	0.0	0.0	56.3	16.6	78.4	6909	B-M
dk 776	DOUGLASS W. KING	R	ML	74	49	3	0	0.0	0.0	57.0	16.7	77.4	6903	B-M
W-844-E	WARNER SEED CO.	R	ML	74	50	4	0	0.0	0.0	58.2	16.7	75.0	6888	B-M
T-E WAH00	Taylor-Evans Seed	W	ML	77	50	3	0	0.7	0.0	57.8	15.7	78.0	6847	C-M
CS 747	Columbia	R	ML	75	55	5	0	0.0	0.0	57.0	16.3	78.7	6845	C-M
Toro Brand Die'	Big Crop Seed Inc.	R	M	72	51	5	0	0.0	0.3	54.5	16.2	77.3	6817	C-M
A1 x TAM428	Tx. Agri. Exp. Sta.	W	ML	78	54	4	0	0.0	0.0	56.9	16.7	76.2	6816	C-M
A.Tx629 x R.8503	Tx. Agri. Exp. Sta.	R	M	78	54	5	0	0.7	0.0	54.8	16.8	78.3	6781	C-M
A1 x R.8505	Tx. Agri. Exp. Sta.	W	ML	76	53	5	0	0.0	0.0	56.5	17.1	73.3	6765	D-M
W-917-E	WARNER SEED CO.	R	L	74	53	4	0	0.0	0.3	59.0	16.6	81.6	6763	D-M
EXP 3605X	GroAgri Seed Co.	W	ML	78	52	5	0	1.3	0.0	57.9	16.1	78.3	6711	D-N

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU-RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT. IN.	HEAD EXS. IN.	LOGGE %	MIDGE DAM-AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS-TURE %	THRESH-ING %	YIELD lb/A	STAT. SIG. O.05 ****
A1 x R3224(t)	Tx. Agri. Exp. Sta.	R	ML	77	52	3	0	0.0	0.0	53.9	17.0	72.6	6688	E-N
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	78	55	4	0	1.0	0.0	55.2	16.7	73.9	6652	F-N
KS 780	New Northrup King	R	ML	77	50	5	0	0.3	0.0	53.3	16.4	74.7	6569	G-O
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	81	61	7	0	0.0	0.0	58.8	16.7	78.9	6550	G-O
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	82	56	5	0	0.7	0.0	53.9	16.6	76.0	6497	H-O
A1 x Tx2817	Tx. Agri. Exp. Sta.	W	ML	81	54	4	0	0.0	0.0	57.3	16.2	76.1	6415	I-O
A1 x R.8507	Tx. Agri. Exp. Sta.	R	ML	78	51	4	0	0.0	0.0	56.5	17.6	75.0	6407	J-O
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	78	58	5	0	0.3	0.0	55.5	16.6	78.4	6341	K-P
M-IDEAL	SEMILLAS MASTER	R	E	69	48	6	0	0.0	0.7	53.3	15.3	74.3	6209	L-P
A.Var x RTx435	Tx. Agri. Exp. Sta.	W	M	81	56	6	0	0.0	0.0	56.8	15.6	76.8	6205	M-P
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	81	51	5	0	0.7	0.0	55.4	17.2	74.8	5986	N-Q
CS 72ODR	Columbia	R	ML	68	53	7	0	0.0	2.3	57.9	16.2	78.5	5811	N-Q
RS610	Tx. Agri. Exp. Sta.	R	M	68	51	7	0	0.0	1.0	55.6	16.1	77.0	5714	O-Q
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	81	59	5	0	0.7	0.0	53.4	16.7	74.5	5512	P-Q
FRONTIER F-333Y	Frontier Hybrids	Y	M	81	50	5	0	0.3	0.7	50.6	15.9	72.2	5315	Q-R
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	83	77	5	1	0.3	0.0	57.5	16.4	80.8	5245	Q-R
W-902-W	WARNER SEED CO.	W	L	83	59	4	0	1.3	0.0	52.5	17.1	70.4	4874	R

TEST MEAN= 7076 TEST C.V.= 6.5 LSD .05=744.9

Note: Hybrid name starting or ending with an "X" denote a commercial experimental. Hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Individuals may contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* Cargill 5572 and Asgrow Topaz were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

\*\* Grain color designated by respective seed companies: R=Red W=White B=Brown M=Mixed.

\*\*\* Maturity classification for hybrids designated by the respective seed companies. E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Duncan's multiple range test was used at the .05 level.

Table 2B. Three-year summary, Grain Sorghum Performance Test, Weslaco, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A4R x Tx430	Tx. Agri. Exp. Stat.	1	7950	1	8054	63	6455
S.G. 942	Garrison Seed & Company, Inc.	2	7845	-	-	-	-
Toro Brand Maxima	Big Crop Seed, Inc.	3	7729	24	7411	-	-
S 9750	The New Northrup King	4	7728	47	7188	-	-
T-E Y-75	Taylor-Evans Seed Company	5	7728	27	7395	79	6224
5329	Garst Seed Company	6	7649	-	-	-	-
Exp. 3148X	GroAgri Seed Company	7	7649	-	-	-	-
DEKALB DK-50	DEKALB-PFIZER GENETICS	8	7619	-	-	8	7109
TS 477	TEXAS SEED COMPANY, INC.	9	7610	-	-	-	-
ORO Amigo (Exp. 8906X)	ORO Hybrids	10	7607	-	-	-	-
5572	Cargill Hybrid Seeds	11	7591	15	7458	26	6874
DR1125	Cargill Hybrid Seeds	12	7587	56	7148	72	6356
Funk's G-522DR	DELTA AND PINE LAND COMPANY	13	7561	-	-	-	-
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	14	7557	68	7101	24	6904
T-E 76	Taylor-Evans Seed Company	15	7555	-	-	-	-
ST-686	SeedTec, Division of NAPB, Inc.	16	7546	64	7122	-	-
S.G. 944	Garrison Seed & Company, Inc.	17	7542	-	-	-	-
8278	Pioneer Hi-Bred International, Inc.	18	7539	-	-	-	-
5319	Garst Seed Company	19	7508	-	-	46	6638
9344	RICHARDSON SEEDS, INC.	20	7507	-	-	-	-
S.G. 922	Garrison Seed & Company, Inc.	21	7506	66	7115	87	6131
T-E Y-77	Taylor-Evans Seed Company	22	7477	63	7124	27	6854
6670	Cargill Hybrid Seeds	23	7475	37	7291	58	6526
Toro Brand Optima	Big Crop Seeds, Inc.	24	7472	-	-	-	-
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	25	7461	74	6985	82	6202

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
dk 775	DOUGLASS W. KING COMPANY	26	7460	4	7738	-	-
ST-D701G	SeedTec, Division of NAPB, Inc.	27	7449	51	7159	31	6803
CHECK 2	Tx. Agri. Exp. Stat.	28	7449	-	-	-	-
2665	The New Northrup King	29	7440	78	6883	62	6459
EXP 3150X	GroAgri Seed Company	30	7432	-	-	-	-
ORO G XTRA	ORO Hybrids	31	7426	36	7302	50	6600
X 15277	Cargill Hybrid Seeds	32	7409	-	-	-	-
Funk's G-1711	DELTA AND PINE LAND COMPANY	33	7393	-	-	-	-
EXP 3146X	GroAgri Seed Company	34	7390	-	-	-	-
X6038X	ASGROW SEED COMPANY	35	7387	-	-	-	-
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	36	7367	89	6704	11	7011
dk 760 DR	DOUGLASS W. KING COMPANY	37	7341	65	7120	-	-
Two 80-D	Triumph Seed Company, Inc.	38	7339	54	7150	-	-
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	39	7337	46	7203	-	-
Rio Grande	Western Heritage Seed Company	40	7336	-	-	-	-
Rustler	Conlee Seed Company, Inc.	41	7333	19	7436	25	6888
9300	RICHARDSON SEEDS, INC.	42	7322	-	-	-	-
GS 712	ASGROW SEED COMPANY	43	7301	10	7597	54	6570
2660	The New Northrup King	44	7274	-	-	10	7023
NC+ 9674 EX	NC+ Hybrids	45	7272	-	-	-	-
Wrangler II	Conlee Seed Company, Inc.	46	7268	33	7327	-	-
S.G. 925	Garrison Seed & Company, Inc.	47	7261	-	-	-	-
TS 488	TEXAS SEED COMPANY, INC.	48	7258	-	-	-	-
TR 65-G	Triumph Seed Company, Inc.	49	7237	-	-	-	-
A.Tx631 x R8505	Tx. Agri. Exp. Stat.	50	7208	7	7685	39	6714

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A1 x Tx430	Tx. Agri. Exp. Stat.	51	7204	2	7902	3	7236
M-Elite	SEMILLAS MASTER DE MEXICO S.A.	52	7202	53	7152	7	7133
M-929-R	SEMILLAS MASTER DE MEXICO S.A.	53	7195	17	7452	56	6566
Two 70-D	Triumph Seed Company, Inc.	54	7187	42	7254	-	-
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	55	7171	12	7558	5	7142
CS 737	Columbia Seed Company	56	7146	59	7138	-	-
ORO BARON	ORO Hybrids	57	7138	43	7253	81	6203
A1 x Tx435	Tx. Agri. Exp. Stat.	58	7125	22	7418	68	6408
W-876 DR	WARNER SEED COMPANY, INC.	59	7113	32	7344	47	6631
M-VICTORIA	SEMILLAS MASTER DE MEXICO S.A.	60	7096	11	7567	2	7275
OSAGE	ASGROW SEED COMPANY	61	7087	-	-	-	-
847 (X77039)	Cargill Hybrid Seeds	62	7078	-	-	-	-
T-E RANGER	Taylor-Evans Seed Company	63	7075	-	-	-	-
8313	Pioneer Hi-Bred International, Inc.	64	7068	-	-	-	-
A.Tx631 x R8511	Tx. Agri. Exp. Stat.	65	7056	16	7454	-	-
T-E DINERO	Taylor-Evans Seed Company	66	7048	23	7413	29	6817
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	67	6997	28	7393	-	-
Rio Bravo	Western Heritage Seed Company	68	6968	-	-	-	-
8260	Pioneer Hi-Bred International, Inc.	69	6956	75	6941	-	-
2884R	The New Northrup King	70	6956	-	-	21	6920
X-62830	SeedTec, Division of NAPB, Inc.	71	6945	76	6906	-	-
S.G. 932	Garrison Seed & Company, Inc.	72	6909	52	7156	28	6851
dk 776	DOUGLASS W. KING COMPANY	73	6903	21	7422	-	-
W-844-E	WARNER SEED COMPANY, INC	74	6888	-	-	-	-
T-E WAHOO	Taylor-Evans Seed Company	75	6847	-	-	-	-

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
CS 747	Columbia Seed Company	76	6845	71	7037	-	-
Toro Brand Ole'	Big Crop Seed, Inc.	77	6817	-	-	-	-
A1 x TAM426	Tx. Agri. Exp. Stat.	78	6816	-	-	-	-
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	79	6781	9	7620	-	-
A1 x R8505	Tx. Agri. Exp. Stat.	80	6765	6	7693	-	-
W-917-E	WARNER SEED COMPANY, INC.	81	6763	3	7765	-	-
EXP 3605X	GroAgri Seed Company	82	6711	-	-	-	-
A1 x R3224(t)	Tx. Agri. Exp. Stat.	83	6688	-	-	97	5708
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	84	6652	103	6334	-	-
KS 780	The New Northrup King	85	6569	61	7132	-	-
A.Var x 80C2241	Tx. Agri. Exp. Stat.	86	6550	-	-	-	-
A.8610 x RTx435	Tx. Agri. Exp. Stat.	87	6497	-	-	-	-
A1 x Tx2817	Tx. Agri. Exp. Stat.	88	6415	-	-	-	-
A1 x R.8507	Tx. Agri. Exp. Stat.	89	6407	45	7209	-	-
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	90	6341	92	6593	32	6791
M-IDEAL	SEMILLAS MASTER DE MEXICO, S.A.	91	6209	-	-	85	6166
A.Var x RTx435	Tx. Agri. Exp. Stat.	92	6205	-	-	-	-
A.8618 x RTx435	Tx. Agri. Exp. Stat.	93	5986	-	-	-	-
CS 720 DR	Columbia Seed Company	94	5811	-	-	-	-
RS610	Tx. Agri. Exp. Stat.	95	5714	107	5905	93	5889
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	96	5512	101	6351	6	7138
Frontier F-333Y	Frontier Hybrids Inc.	97	5315	-	-	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	98	5245	-	-	-	-
W-902-W	WARNER SEED COMPANY, INC.	99	4874	-	-	-	-
5560	CARMEX	-	-	13	7496	38	6722

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
5572	Cargill Hybrid Seeds	--	--	15	7458	26	6874
HSC Cherokee	HyPerformer Seed Company	--	--	31	7363	74	6344
W-851 DR	WARNER SEED COMPANY, INC.	--	--	35	7310	51	6577
NC+ 174	NC+ Hybrids	--	--	39	7279	23	6906
HSC Wings	HyPerformer Seed Company	--	--	41	7258	37	6744
SS69	Big Crop Seed, Inc.	--	--	49	7171	43	6672
WAC D701G	SeedTec, Division of NAPB, Inc.	--	--	51	7159	31	6803
PAGADOR	CARMEX	--	--	55	7148	42	6683
M-911-R	SEMILLAS MASTER DE MEXICO S.A.	--	--	58	7142	9	7043
M-GOLD-R	SEMILLAS MASTER DE MEXICO S.A.	--	--	72	7035	53	6571
XS 7711X	Big Crop Seed, Inc.	--	--	73	7001	69	6398
A.Tx378 x RTx434	Tx. Agri. Exp. Stat.	--	--	82	6843	35	6751
A8201-2 x R6078	Tx. Agri. Exp. Stat.	--	--	86	6821	89	6101
XT 6770X	Big Crop Seed, Inc.	--	--	93	6528	75	6317
A1 x Tx433	Tx. Agri. Exp. Stat.	--	--	95	6471	59	6510
A.Tx2801 x MR102-2	Tx. Agri. Exp. Stat.	--	--	104	6264	90	6043
Number Entries:		99		107		102	
Test Mean Yield:			7076		7099		6528

Note: Hybrids with the same yields were ranked by computer.

TABLE 3. AGRONOMIC AND TEST INFORMATION: GREGORY

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TEST:	1989 Dryland Grain Sorghum Performance Test
LOCATION:	John Hunt's Farm, San Patricio County, Gregory, Texas
COOPERATORS:	Wesley Schmidt, Darwin Anderson, Dennis Pietsch, Randy Gaas, Leon Synatschk, and Kenneth Schaefer
SOIL TYPE:	Victoria clay
ROW WIDTH:	38"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Cut stalks, chiseled 14" deep, disked, bedded
DATE PLANTED:	3-2-89 with cone planter
DATE THINNED:	3-30-89; approximately 4-5 plants/foot
PLOT LENGTH:	36'
FERTILIZER:	350 lb/A of 24-8-0 pre-plant
HERBICIDE:	Broadcast 1.5 lb/A AAtrex (atrazine) when grain sorghum was 8-10" tall
INSECTICIDE:	1/2 pt/A Cygon (dimethoate) applied mid-May for greenbug control
RAINFALL:	Jan = 0.0"; Feb = 0.0"; March = 0.9"; April = 1.0"; May = 0.0"; June = 0.0"; July = 0.0"; Total = 1.9"
IRRIGATIONS:	None
DATE HARVESTED:	6-29 & 30-89 by hand
SIZE HARVESTED PLOT:	1/500 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	96
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	3,005 lb/A; yields corrected to 13% moisture
TEST C.V.:	20.4 percent



**GENERAL INFORMATION:** Due to the high coefficient of variation (C.V.) in this test, caution should be used in interpreting these results. Extended periods of hot and dry weather conditions and marginal subsoil moisture were contributing factors that resulted in below normal yields at this test site. Many grain sorghum fields in the Coastal Bend Area received less rainfall than the test block and produced virtually no grain. Ample moisture was available at planting and seedling emergence was good. The test block received only 1.9" of rainfall in March and April which resulted in good plant growth and development. No additional rainfall was recorded during the growing season causing severe plant stress. Charcoal rot was observed in the test block thus causing extensive lodging in most hybrids.

The test mean yield was 3,005 lb/A which is 1,327 lb/A less than the past 5 year average of 4,332 lb/A. Greenbugs were observed in the test block in mid-May but were controlled with an insecticide.

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION, INCHES	% STAND	% LODGE	TEST WT. lb/bu	MOIS- TURE %	YIELD, lb/A	STAT. SIG., O.05 ****
T-E Y-77E	Taylor-Evans Seed	R	ML	76	45	2	96.7	3	57.5	15.4	3922	A
5329	Garst Seed Co.	R	ML	77	48	4	95.0	12	54.9	15.2	3850	A-B
A.Tx378 x Tx2862	Tx. Agri. Exp. Sta.	R	ML	77	48	4	95.0	32	58.3	14.5	3746	A-C
A.Tx378 x RTx430	Tx. Agri. Exp. Sta.	R	M	77	53	4	93.3	23	56.5	14.9	3670	A-C
DR 1125	Cargill Hybrid	R	ML	77	43	4	95.0	23	51.8	13.7	3641	A-D
RS610	Tx. Agri. Exp. Sta.	R	M	74	49	9	98.3	15	54.9	14.2	3626	A-D
8260	Pioneer Hi-Bred	R	ML	76	44	4	96.7	3	59.7	14.2	3605	A-E
EXP 3148X	GroAgri Seed Co.	R	M	76	37	0	93.3	27	50.9	12.7	3591	A-E
A35 x Tx430	Tx. Agri. Exp. Sta.	R	ML	78	47	4	96.7	0	53.5	18.5	3575	A-E
CHECK 3	Tx. Agri. Exp. Sta.			76	43	3	95.0	15	53.6	13.9	3574	A-E
CHECK 4	Tx. Agri. Exp. Sta.			77	46	3	93.3	24	56.4	14.9	3569	A-E
EXP 3146	GroAgri Seed Co.	R	M	76	43	5	95.0	10	58.7	14.4	3566	A-E
CHECK 2	Tx. Agri. Exp. Sta.			74	48	7	96.7	0	57.6	15.8	3562	A-E
S.G. 932	Garrison Seed & Co.	R	ML	78	44	3	91.7	32	56.2	15.3	3501	A-F
A1 x Tx435	Tx. Agri. Exp. Sta.	W	ML	81	48	1	95.0	3	50.9	17.5	3465	A-F
W-876DR	WARNER SEED CO.	R	L	76	45	2	93.3	9	56.4	15.5	3454	A-F
ORO BARON	ORO Hybrids	R	ML	77	44	4	95.0	30	59.5	14.6	3423	A-G
Wrangler II	Conlee Seed Co.	M	ML	79	47	1	93.3	33	55.8	15.0	3404	A-G
5319	Garst Seed Co.	R	ML	77	48	3	93.3	25	57.0	15.4	3384	A-G
CHECK 9	Tx. Agri. Exp. Sta.			79	43	3	90.0	23	53.4	14.5	3377	A-H
4462	Cargill Hybrid	R	M	75	45	5	91.7	17	57.7	15.3	3375	A-I
ST-D701G	SeedTec Div. NAPB	R	ML	77	43	1	95.0	26	55.5	15.2	3365	A-I
6670	Cargill Hybrid	R	ML	77	46	2	93.3	32	56.7	15.3	3336	A-I
XP 5128	ASGROW SEED CO.	R	M	75	44	5	91.7	12	59.4	15.1	3327	A-I
A1 x Tx430	Tx. Agri. Exp. Sta.	W	ML	81	49	0	93.3	13	53.0	16.1	3309	A-I
A35 x GR104-1	Tx. Agri. Exp. Sta.	R	ML	81	45	2	91.7	1	57.9	18.0	3300	A-I
CHECK 8	Tx. Agri. Exp. Sta.			74	43	6	95.0	7	56.8	14.5	3277	A-J
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	76	43	4	93.3	37	54.1	13.4	3255	A-J
8313	Pioneer Hi-Bred	R	ML	77	44	1	91.7	22	58.0	15.3	3247	A-J
CHECK 5	Tx. Agri. Exp. Sta.			76	46	4	95.0	12	57.3	15.0	3244	A-J
8278	Pioneer Hi-Bred	R	ML	77	43	2	91.7	38	57.1	14.4	3237	A-J
CS 737	Columbia	R	ML	77	41	2	91.7	48	51.6	13.6	3197	A-J
S.G. 925	Garrison Seed & Co.	R	M	77	44	3	95.0	42	58.9	14.3	3174	A-J
Toro Ole'	Big Crop Seed, Inc.	R	M	76	43	3	90.0	50	51.8	13.4	3162	A-J
847	Cargill Hybrid	R	ML	79	43	1	93.3	28	57.6	14.5	3159	A-J
CHECK 7	Tx. Agri. Exp. Sta.			78	42	4	98.3	28	55.4	15.8	3127	A-J
A1 x Tx2864	Tx. Agri. Exp. Sta.	M	ML	81	47	0	91.7	12	53.3	16.0	3118	A-J
Toro Optima	Big Crop Seed, Inc.	R	ML	77	45	3	95.0	48	51.3	13.1	3117	A-J
W-844-E	WARNER SEED CO.	R	ML	78	41	1	91.7	32	57.4	14.1	3108	A-J
2665	New Northrup King	R	ML	78	40	1	96.7	5	56.7	16.0	3107	A-J

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION, INCHES	% STAND	% LODGE	TEST WT. lb/bu	MOIS- TURE %	YIELD, lb/A	STAT. SIG., O.05 ****
S9750	New Northrup King	R	L	78	43	2	90.0	27	56.0	14.5	3096	A-J
dk 775	Douglass King Seed	R	ML	78	47	1	91.7	51	57.6	15.0	3072	A-J
ORO G XTRA	ORO Hybrids	R	ML	78	44	2	93.3	32	56.1	14.8	3064	A-J
T-E 76	Taylor-Evans Seed	R	M	77	40	0	90.0	55	48.2	11.9	3041	A-J
Toro Maxima	Big Crop Seed, Inc.	R	ML	78	45	3	90.0	37	54.8	14.5	3035	A-J
TS 477	TEXAS SEED CO.	R	ML	79	46	0	93.3	22	59.0	15.0	3032	A-J
T-E RANGER	Taylor-Evans Seed	R	ML	77	41	4	96.7	21	57.7	14.0	3025	A-J
HSC Wings	HyPerformer Seed	R	ML	78	44	2	88.3	41	55.5	15.5	3006	A-J
A4R x Tx430	Tx. Agri. Exp. Sta.	R	ML	79	41	2	95.0	3	57.6	15.4	2988	A-J
X15276	Cargill Hybrid	R	M	84	42	0	98.3	0	59.5	17.4	2977	A-J
TOPAZ	ASGROW SEED CO.	R	M	76	41	6	90.0	68	56.8	13.9	2971	A-J
X6038	ASGROW SEED CO.	R	ML	82	44	1	90.0	10	58.8	16.0	2942	A-J
dk 760	Douglass King Seed	R	ML	77	44	2	93.3	33	54.8	14.4	2941	A-J
ST-686	SeedTec Div. NAPB	R	M	79	42	1	91.7	33	58.5	14.6	2940	A-J
A1 x Tx2794	Tx. Agri. Exp. Sta.	W	ML	78	49	2	86.7	43	52.9	14.1	2935	A-J
Funk's HW 7518	DELTA AND PINE LAND	R	M	78	44	3	91.7	35	59.3	15.0	2914	A-J
NC+ 9674EX	NC+ Hybrids	R	M	77	46	3	93.3	22	58.7	14.4	2902	A-J
W-917-E	WARNER SEED CO.	R	L	77	47	3	88.3	18	59.0	14.7	2894	A-J
A8201-2 x R6078	Tx. Agri. Exp. Sta.	R	ML	81	43	1	88.3	23	57.7	14.4	2880	A-J
T-E DINERO	Taylor-Evans Seed	R	M	76	42	3	91.7	45	51.7	13.8	2877	A-J
CHECK 6	Tx. Agri. Exp. Sta.			77	41	2	95.0	43	55.4	14.9	2867	A-J
KS 780	New Northrup King	R	ML	80	41	1	93.3	12	52.6	15.9	2854	A-J
dk 776	Douglass King Seed	R	M	79	43	1	90.0	53	58.0	14.2	2849	A-J
DEKALB X-829 (X)	DEKALB-PFIZER GEN.	R	ML	80	44	1	95.0	5	55.5	15.8	2848	A-J
HSC Cherokee	HyPerformer Seed	R	M	79	43	2	93.3	43	56.6	15.0	2817	A-J
TS 488	TEXAS SEED CO.	R	ML	77	44	3	91.7	40	58.0	14.5	2797	A-J
CHECK 1	Tx. Agri. Exp. Sta.			75	49	7	93.3	8	57.3	15.8	2754	A-J
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	76	39	4	90.0	28	52.6	13.5	2744	A-J
Funk's G-1555	DELTA AND PINE LAND	R	M	78	42	2	91.7	62	55.1	14.0	2733.	A-J
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	83	46	0	88.3	5	57.4	16.8	2733	A-J
Rustler	Conlee Seed Co.	R	ML	77	45	2	91.7	32	54.6	14.4	2726	A-J
GS712	ASGROW SEED CO.	R	ML	77	44	3	91.7	60	56.4	14.4	2722	A-J
A1 x R.8505	Tx. Agri. Exp. Sta.	W	ML	79	44	1	90.0	32	55.3	14.5	2720	A-J
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	79	49	1	91.7	6	55.6	19.6	2694	A-J
T-E Y-75	Taylor-Evans Seed	R	M	79	41	1	91.7	57	55.9	13.4	2688	A-J
S.G. 922	Garrison Seed & Co.	R	ML	76	41	2	88.3	43	50.7	12.6	2677	A-J
GSC 1313	GroAgri Seed Co.	R	M	79	43	1	90.0	52	57.6	14.1	2661	A-J
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	82	43	1	95.0	6	54.4	15.3	2640	B-J
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	85	59	0	91.7	5	58.1	16.5	2638	B-J
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	84	45	0	90.0	8	57.1	16.6	2623	B-J

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1989

HYBRID (* )	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION, INCHES	% STAND	% LODGE	TEST WT. lb/bu	MOIS- TURE %	YIELD, lb/A	STAT. SIG., 0.05 ****
A.Tx623 x Tx2868	Tx. Agri. Exp. Sta.	M	ML	81	49	1	86.7	18	56.0	14.6	2596	B-J
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	78	45	1	90.0	23	55.5	14.6	2588	B-J
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	82	50	2	88.3	10	55.3	16.7	2577	C-J
Frontier F-333Y	Frontier Hybrids	Y	M	83	42	2	96.7	0	53.2	17.6	2568	C-J
X15277	Cargill Hybrid	R	ML	84	43	0	95.0	7	53.6	16.1	2557	C-J
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	83	48	0	90.0	15	54.5	17.7	2550	C-J
A1 x Tx2737	Tx. Agri. Exp. Sta.	W	ML	76	47	5	88.3	8	57.4	15.9	2534	C-J
ST-3308	SeedTec Div. NAPB	R	M	84	41	0	93.3	18	57.5	15.7	2388	D-J
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	84	47	0	91.7	7	53.7	18.3	2374	D-J
A.Var x RTx435	Tx. Agri. Exp. Sta.	W	M	82	45	0	90.0	20	55.3	15.9	2354	E-J
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	80	45	1	93.3	72	54.4	13.9	2351	E-J
A1 x TAM428	Tx. Agri. Exp. Sta.	W	ML	83	46	0	90.0	38	57.2	14.8	2241	F-J
W-902-W	WARNER SEED CO.	W	L	87	48	0	83.3	1	52.3	20.1	2161	G-J
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	83	43	0	88.3	28	57.2	15.6	2110	H-J
A.Tx629 x R.8503	Tx. Agri. Exp. Sta.	R	M	81	46	1	91.7	63	51.8	14.1	2108	I-J
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	81	48	0	86.7	17	58.6	14.8	2022	J

TEST MEAN= 3005 TEST C.V.=20.4 LSD .05=986.2

Note: Hybrid name starting or ending with an "X" denotes a commercial experimental hybrid. Those hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Please contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* Delta and Pine Land Funk's G-522DR, Triumph Two 80-D, Warner W-632-W, Northrup King X8747 and KS737, Mitchell YG-76, DeKalb M 572G, Pogue AG 233 and Conlee Towhead were entered as commercial check hybrids at our discretion. They are intended to be used for comparison purposes only.

\*\* Grain color designated by respective seed companies : R=Red W=White M=Mixed

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Duncan's multiple range test was used at the .05 level.

Table 3B. Three-year summary, Grain Sorghum Performance Test, Gregory, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
T-E Y-77E	Taylor-Evans Seed Company	1	3922	—	—	—	—
5329	Garst Seed Company	2	3850	—	—	—	—
A.Tx378 x Tx2862	Tx. Agri. Exp. Stat.	3	3746	—	—	—	—
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	4	3670	62	3857	18	5449
DR 1125	Cargill Hybrid Seeds	5	3641	35	4245	48	5100
RS610	Tx. Agri. Exp. Stat.	6	3626	63	3836	83	3805
8260	Pioneer Hi-Bred International, Inc.	7	3605	72	3734	—	—
EXP 3148X	GroAgri Seed Company	8	3591	—	—	—	—
A35 x Tx430	Tx. Agri. Exp. Stat.	9	3575	28	4310	55	5018
G-522 DR	DELTA AND PINE LAND COMPANY	10	3574	69	4786	—	—
CHECK 4	Tx. Agri. Exp. Stat.	11	3569	—	—	—	—
EXP 3146	GroAgri Seed Company	12	3566	—	—	—	—
CHECK 2	Tx. Agri. Exp. Stat.	13	3562	—	—	—	—
S.G. 932	Garrison Seed & Company, Inc.	14	3501	7	4632	22	5421
A1 x Tx435	Tx. Agri. Exp. Stat.	15	3465	56	3932	45	5131
W-876DR	WARNER SEED COMPANY, INC.	16	3454	57	3928	24	5406
ORO BARON	ORO Hybrids	17	3423	19	4398	7	5568
Wrangler II	Conlee Seed Company, Inc.	18	3404	33	4258	—	—
5319	Garst Seed Company	19	3384	—	—	3	5591
CHECK 9	Tx. Agri. Exp. Stat.	20	3377	—	—	—	—
4462	Cargill Hybrid Seeds	21	3375	84	3404	50	5074
ST-D701G	SeedTec, Division of NAPB, Inc.	22	3365	55	3961	5	5578
6670	Cargill Hybrid Seeds	23	3336	82	3510	1	5760
XP 5128	ASGROW SEED COMPANY	24	3327	—	—	—	—
A1 x Tx430	Tx. Agri. Exp. Stat.	25	3309	39	4182	16	5511

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A35 x GR104-1	Tx. Agri. Exp. Stat.	26	3300	-	-	-	-
CHECK 8	Tx. Agri. Exp. Stat.	27	3277	-	-	-	-
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	28	3255	13	4456	40	5171
8313	Pioneer Hi-Bred International, Inc.	29	3247	-	-	-	-
CHECK 5	Tx. Agri. Exp. Stat.	30	3244	-	-	-	-
8278 (XS278)	Pioneer Hi-Bred International, Inc.	31	3237	-	-	-	-
CS 737	Columbia Seed Company	32	3197	-	-	-	-
S.G. 925	Garrison Seed & Company, Inc.	33	3174	-	-	-	-
Toro Ole'	Big Crop Seed, Inc.	34	3162	-	-	-	-
847	Cargill Hybrid Seeds	35	3159	-	-	-	-
CHECK 7	Tx. Agri. Exp. Stat.	36	3127	-	-	-	-
A1 x Tx2864	Tx. Agri. Exp. Stat.	37	3118	-	-	-	-
Toro Optima	Big Crop Seed, Inc.	38	3117	-	-	-	-
W-844-E	WARNER SEED COMPANY, INC	39	3108	24	4340	23	5421
2665	The New Northrup King	40	3107	6	4640	-	-
S9750	The New Northrup King	41	3096	16	4432	-	-
dk 775	DOUGLASS W. KING COMPANY	42	3072	2	4921	-	-
ORO G XTRA	ORO Hybrids	43	3064	41	4162	25	5391
T-E 76	Taylor-Evans Seed Company	44	3041	-	-	-	-
Toro Maxima	Big Crop Seed, Inc.	45	3035	45	4092	-	-
TS 477	TEXAS SEED COMPANY, INC.	46	3032	14	4444	-	-
T-E RANGER	Taylor-Evans Seed Company	47	3025	-	-	-	-
HSC Wings	HyPerformer Seed Company	48	3006	76	3684	44	5149
A4R x Tx430	Tx. Agri. Exp. Stat.	49	2988	36	4241	42	5164
X15276	Cargill Hybrid Seeds	50	2977	-	-	-	-

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
TOPAZ	ASGROW SEED COMPANY	51	2971	—	—	33	5303
X6038	ASGROW SEED COMPANY	52	2942	—	—	—	—
dk 760	DOUGLASS W. KING COMPANY	53	2941	37	4228	—	—
ST-686	SeedTec, Division of NAPB, Inc.	54	2940	4	4706	11	5557
A1 x Tx2794	Tx. Agri. Exp. Stat.	55	2935	—	—	—	—
Funk's HW 7518	DELTA AND PINE LAND COMPANY	56	2914	—	—	—	—
NC+ 9674EX	NC+ Hybrids	57	2902	—	—	—	—
W-917-E	WARNER SEED COMPANY, INC.	58	2894	26	4316	—	—
A8201-2 x R6078	Tx. Agri. Exp. Stat.	59	2880	—	—	52	5039
T-E DINERO	Taylor-Evans Seed Company	60	2877	61	3859	37	5220
CHECK 6	Tx. Agri. Exp. Stat.	61	2867	—	—	—	—
KS 780	The New Northrup King	62	2854	—	—	—	—
dk 776	DOUGLASS W. KING COMPANY	63	2849	15	4437	—	—
DEKALB X-829(X)	DEKALB-PFIZER GENETICS	64	2848	—	—	—	—
HSC Cherokee	HyPerformer Seed Company	65	2817	11	4507	31	5313
TS 488	TEXAS SEED COMPANY, INC.	66	2797	—	—	—	—
CHECK 1	Tx. Agri. Exp. Stat.	67	2754	—	—	—	—
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	68	2744	—	—	49	5077
Funk's G-1555	DELTA AND PINE LAND COMPANY	69	2733	—	—	—	—
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	70	2733	—	—	68	4801
Rustler	Conlee Seed Company, Inc.	71	2726	66	3814	6	5576
GS 712	ASGROW SEED COMPANY	72	2722	58	3900	17	5455
A1 x R.8505	Tx. Agri. Exp. Stat.	73	2720	—	—	—	—
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	74	2694	93	2851	—	—
T-E Y-75	Taylor-Evans Seed Company	75	2688	18	4404	4	4486

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
S.G. 922	Garrison Seed & Company, Inc.	76	2677	44	4098	59	4953
GSC 1313	GroAgri Seed Company	77	2661	-	-	15	5522
A.8618 x RTx435	Tx. Agri. Exp. Stat.	78	2640	-	-	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	79	2638	-	-	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	80	2623	74	3724	-	-
A.Tx623 x Tx2868	Tx. Agri. Exp. Stat.	81	2596	-	-	-	-
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	82	2588	21	4367	10	5561
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	83	2577	89	3069	79	4354
FRONTIER F-333Y	Frontier Hybrids Inc.	84	2568	-	-	-	-
X15277	Cargill Hybrid Seeds	85	2557	-	-	-	-
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	86	2550	92	2857	78	4431
A1 x Tx2737	Tx. Agri. Exp. Stat.	87	2534	-	-	-	-
ST-3308	SeedTec, Division of NAPB, Inc.	88	2388	8	4597	63	4885
A.8610 x RTx435	Tx. Agri. Exp. Stat.	89	2374	-	-	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	90	2354	-	-	-	-
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	91	2351	27	4314	38	5182
A1 x TAM428	Tx. Agri. Exp. Stat.	92	2241	-	-	-	-
W-902-W	WARNER SEED COMPANY, INC.	93	2161	-	-	-	-
A.Tx631 x R8511	Tx. Agri. Exp. Stat.	94	2110	-	-	-	-
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	95	2108	80	3628	-	-
A.Var x 80C2241	Tx. Agri. Exp. Stat.	96	2022	-	-	-	-
XS 7711X	Big Crop Seed, Inc.	-	-	20	4395	8	5568
PS 466	TEXAS SEED COMPANY, INC.	-	-	25	4326	14	5526
DEKALB X-749-X	DEKALB-PFIZER GENETICS	-	-	29	4303	2	5711
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	-	-	31	4208	68	4801



Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
5572	Cargill Hybrid Seeds	--	--	38	4201	26	5390
HT 126DR	Big Crop Seed, Inc.	--	--	47	4021	57	4492
SS69	Big Crop Seed, Inc.	--	--	51	3996	20	5438
A8201-1 x R6078	Tx. Agri. Exp. Stat.	--	--	64	3836	52	5039
XT 6770X	Big Crop Seed, Inc.	--	--	65	3824	61	4925
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	--	--	67	3795	75	4601
A8201-2 x R4317	Tx. Agri. Exp. Stat.	--	--	83	3488	28	5364
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	--	--	94	2833	49	5077
DEKALB DK50	DEKALB-PFIZER GENETICS	--	--	95	2795	27	5366
Number Entries:		96		96		84	
Test Mean Yield:		3005		3988		5093	

Note: Hybrids with the same yields were ranked by computer.

TABLE 4. AGRONOMIC AND TEST INFORMATION: HONDO

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TEST:	1989 Irrigated Grain Sorghum Performance Test
LOCATION:	Vandenburg Farms; Wayne and Pat Stein, Hondo, Texas
COOPERATORS:	Wayne and Pat Stein Wayne Scholtz, Bobby Ainsley, Dennis Pietsch, Randy Gaas, and Leon Synatschk
SOIL TYPE:	Knippa clay
ROW WIDTH:	38"
PREVIOUS CROP:	Corn
LAND PREPARATION:	Disked twice in September, chiseled in November, bedded, and applied fertilizer in December
DATE PLANTED:	3-13-89, by hand using JD80 Planter
DATE THINNED:	4-5; thinned by hand to approximately 5-6 plants/foot
PLOT LENGTH:	30'
FERTILIZER:	Applied 250 lb/A of 8-20-0-6 with Zn, Mn and B in January and sidedress 100 lb/A of 82-0-0 in April
HERBICIDE:	1 qt/A of AAtrex (atrazine) when sorghum was 5-6" tall on 14" band
INSECTICIDE:	None
RAINFALL:	March = 1.00"; April = 0.00"; May = 1.50"; June = 0.00"; July = 0.00"; Total = 2.50"
IRRIGATIONS:	6 irrigations from May 1 thru July 4 of approximately 3" each
DATE HARVESTED:	7-25-89, by hand
SIZE HARVESTED PLOT:	1/750 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	67
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	3
TEST MEAN:	5,174 lb/A; yields corrected to 13% moisture
TEST C.V.:	7.3 percent

**GENERAL INFORMATION:** This test site is representative of conditions in and around the Medina County area. Above average yields were attained at this location despite very dry weather conditions throughout the growing season in this area. An optimum planting date was secured and an excellent seedbed resulted in rapid seedling emergence. Only 2.5 inches of rainfall was recorded at the test block during the growing season thus six irrigations were needed for continuous plant growth and development.

The test mean yield was 5,174 lb/A which is 638 lb/A more than the past 3 year average of 4,536 lb/A in this area. Lodging, midge damage, and bird damage were not observed. The incidence of smut was low with 23 hybrids having between 0.3 and 3.7 diseased plants per plot.

Table 4A. GRAIN SORGHUM PERFORMANCE TEST; HONDO, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	SMUT PER- PLOT ****	BIRD DAMAGE %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., O.05 *****
A4R x Tx430	Tx. Agri. Exp. Sta.	R	ML	77	48	9	0	0.3	0.0	59.2	15.3	77.2	5976	A
KS 780	New Northrup King	R	ML	80	52	9	0	0.0	0.0	55.9	14.9	74.7	5875	A-B
T-E 76	Taylor-Evans Seed	R	M	77	49	8	0	0.0	0.0	54.4	14.6	76.6	5820	A-B
T-E DINERO	Taylor-Evans Seed	R	M	77	47	9	0	0.0	0.0	56.4	14.9	76.4	5802	A-B
HSC Cherokee	HyPerformer Seed	R	M	78	52	8	0	0.0	0.0	59.9	14.7	77.7	5789	A-C
ST-686	SeedTec, Div. NAPB	R	M	77	52	9	0	0.0	0.0	60.3	14.8	78.4	5769	A-D
W-844-E	WARNER SEED CO.	R	ML	77	50	8	0	0.0	0.0	60.4	14.7	77.7	5751	A-E
DR 1125	Cargill Hybrid	B	ML	76	49	8	0	0.0	0.0	56.5	14.8	75.9	5737	A-F
847 (77039)	Cargill Hybrid	B	ML	78	51	8	0	0.0	0.0	60.2	14.5	77.9	5728	A-F
Rustler	Conlee Seed Co.	R	ML	77	55	7	0	0.3	0.0	57.9	15.2	76.6	5718	A-F
GS 712	ASGROW SEED CO.	B	ML	78	53	7	0	0.0	0.0	58.6	15.2	75.4	5696	A-G
TS 488	TEXAS SEED CO.	R	ML	78	50	7	0	0.0	0.0	59.8	14.7	79.1	5692	A-G
T-E Y-77	Taylor-Evans Seed	R	ML	78	53	8	0	0.0	0.0	58.2	15.4	75.3	5659	A-H
6670	Cargill Hybrid	B	ML	77	50	7	0	0.0	0.0	57.7	14.8	77.5	5656	A-H
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	77	50	8	0	0.0	0.0	56.2	15.1	75.2	5651	A-H
TOPAZ	ASGROW SEED CO.	B	M	77	51	8	0	1.0	0.0	59.3	14.5	76.7	5643	A-H
T-E Y-75	Taylor-Evans Seed	R	M	78	49	7	0	0.0	0.0	60.1	14.7	78.6	5594	A-I
ORO BARON	ORO Hybrids	R	ML	78	52	8	0	0.0	0.0	59.9	14.7	78.6	5582	A-I
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	86	64	6	0	0.0	0.0	59.9	15.1	77.7	5578	A-I
X15277	Cargill Hybrid	B	ML	80	50	7	0	0.0	0.0	58.5	15.4	75.1	5565	A-I
S9750	New Northrup King	R	L	78	52	7	0	0.3	0.0	58.0	15.2	76.1	5503	A-J
ST-D701G	SeedTec, Div. NAPB	R	ML	78	51	6	0	0.0	0.0	58.7	14.9	76.2	5499	A-K
CHECK 3	Tx. Agri. Exp. Sta.	R	ML	77	50	9	0	0.7	0.0	56.7	14.8	76.8	5486	A-L
ORO G XTRA	ORO Hybrids	R	ML	78	53	8	0	0.0	0.0	57.5	14.9	76.4	5482	A-L
T-E RANGER	Taylor-Evans Seed	R	ML	79	49	10	0	0.0	0.0	58.9	14.8	77.4	5439	A-L
dk 760	DOUGLASS W. KING	R	ML	77	52	7	0	0.3	0.0	56.7	15.0	76.5	5435	A-L
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	77	46	7	0	0.3	0.0	56.0	15.4	74.6	5320	A-M
8313	Pioneer H1-Bred	R	ML	78	49	5	0	0.0	0.0	59.9	15.6	75.2	5300	A-N
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	83	57	6	0	0.0	0.0	57.5	15.8	74.6	5283	A-O
Frontier F-524	Frontier Hybrid	R	ML	78	50	7	0	0.0	0.0	58.0	15.1	76.1	5269	A-O
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	82	54	5	0	0.7	0.0	58.4	15.7	75.1	5249	A-O
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	85	50	5	0	0.0	0.0	56.8	15.1	74.5	5215	A-O
A1 x Tx430	Tx. Agri. Exp. Sta.	W	ML	76	54	8	0	0.7	0.0	55.0	15.7	73.4	5202	B-O
HSC Wings	HyPerformer Seed	R	ML	77	51	7	0	0.3	0.0	58.0	15.1	77.3	5196	B-O
8278	Pioneer H1-Bred	R	ML	77	53	8	0	0.0	0.0	56.8	15.2	75.1	5166	B-O
8642X	New Northrup King	W	ML	77	52	8	0	0.3	0.0	57.5	15.9	73.6	5139	B-O
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	79	53	8	0	0.0	0.0	58.5	15.3	76.3	5137	B-O
ORO Amigo (Exp. 8906X)	ORO Hybrids	R	ML	78	50	8	0	0.0	0.0	56.6	14.7	76.0	5136	B-O
XP 5128(X)	ASGROW SEED CO.	B	M	81	48	7	0	0.0	0.0	59.1	15.2	74.2	5135	B-O
dk 776	DOUGLASS W. KING	R	ML	78	50	9	0	0.0	0.0	60.2	14.7	78.0	5129	B-O
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	82	56	6	0	0.0	0.0	58.3	15.4	75.9	5107	B-O
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	79	57	11	0	0.3	0.0	57.6	16.0	71.8	5099	B-O

Table 4A. GRAIN SORGHUM PERFORMANCE TEST; HONDO, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU-RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	SMUT PER-PLOT ****	BIRD DAMAGE %	TEST WT. lb/bu	MOIS-TURE %	THRESH-ING %	YIELD lb/A	STAT. SIG., O.05 *****
A.Var x RTx435	Tx. Agri. Exp. Sta.	W	M	86	61	6	0	0.0	0.0	58.4	14.4	75.7	5097	B-0
8260	Pioneer Hi-Bred	R	ML	81	52	7	0	0.0	0.0	60.4	14.4	73.8	5017	C-0
TS 477	TEXAS SEED CO.	R	ML	80	52	7	0	0.0	0.0	60.8	14.5	77.9	5000	D-0
A.Tx378 x RTx430	Tx. Agri. Exp. Sta.	R	M	77	57	9	0	0.3	0.0	56.7	14.6	76.4	4978	E-0
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	83	63	6	0	1.0	0.0	55.6	14.9	74.5	4977	E-0
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	84	63	6	0	1.7	0.0	56.7	14.7	74.9	4969	F-0
X6038 (X)	ASGROW SEED CO.	R	ML	81	52	6	0	0.0	0.0	59.5	15.5	73.4	4960	F-0
ST-3308	SeedTec, Div. NAPB	R	M	78	50	8	0	0.0	0.0	59.3	14.9	72.6	4932	G-0
A.Tx629 x R.8503	Tx. Agri. Exp. Sta.	R	M	77	52	7	0	0.0	0.0	57.0	15.5	75.4	4898	H-0
W-917-E	WARNER SEED CO.	R	L	77	57	7	0	0.0	0.0	59.5	14.4	78.5	4889	H-0
OSAGE	ASGROW SEED CO.	R	M	78	50	9	0	0.0	0.0	60.4	15.1	77.3	4847	I-0
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	77	59	10	0	0.3	0.0	56.7	14.3	76.3	4832	I-0
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	85	77	5	0	0.0	0.0	59.7	14.7	77.9	4829	I-0
dk 775	DOUGLASS W. KING	R	ML	78	52	5	0	0.3	0.0	60.2	15.0	78.3	4763	J-0
CHECK 2	Tx. Agri. Exp. Sta.			78	52	9	0	0.0	0.0	58.4	15.1	74.7	4727	K-P
A35 x Tx2862	Tx. Agri. Exp. Sta.	R	ML	78	51	11	0	0.0	0.0	58.2	17.7	73.6	4721	L-P
Frontier F-333Y	Frontier Hybrid	Y	M	80	53	7	0	0.3	0.0	54.8	14.7	72.0	4642	M-Q
CHECK 1	Tx. Agri. Exp. Sta.			78	52	10	0	0.0	0.0	58.3	15.2	76.1	4601	M-Q
A1 x TAM428	Tx. Agri. Exp. Sta.	W	ML	77	55	9	0	0.0	0.0	58.5	16.1	73.7	4540	N-Q
A1 x R2241	Tx. Agri. Exp. Sta.	W	ML	79	49	7	0	0.0	0.0	57.2	16.8	72.5	4516	O-Q
Wrangler II	Conlee Seed Co.	M	ML	75	57	8	0	0.3	0.0	53.8	15.2	72.2	4511	O-Q
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	76	50	7	0	0.3	0.0	56.5	15.2	75.6	4037	P-R
A1 x Tx2737	Tx. Agri. Exp. Sta.	W	ML	76	52	9	0	0.7	0.0	56.7	16.9	64.4	3945	Q-R
ATx2801 x Tx2872	Tx. Agri. Exp. Sta.	M	ML	79	56	7	0	0.3	0.0	58.3	14.7	72.6	3739	R
RS610	Tx. Agri. Exp. Sta.	R	M	69	50	10	0	3.7	0.0	57.4	15.0	74.3	3511	R

TEST MEAN= 5174 TEST C.V.= 7.3 LSD .05=611.1

Note: Hybrid name starting or ending with an "X" denote a commercial experimental. Hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Individuals may contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* Cargill 5572, Warner W-632-W and Conlee Towhead were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

\*\* Grain color designated by respective seed companies : R=Red W=White B=Brown M=Mixed

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Smut counts were taken from the harvested area on all three replications and averaged for each hybrid.

\*\*\*\*\* Duncan's multiple range test was used at the .05 level.

Table 4B. Three-year summary, Grain Sorghum Performance Test, Hondo, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A4R x Tx430	Tx. Agri. Exp. Stat.	1	5976	22	5332	5	5147
KS 780	The New Northrup King	2	5875	43	5008	—	—
T-E 76	Taylor-Evans Seed Company	3	5820	—	—	—	—
T-E DINERO	Taylor-Evans Seed Company	4	5802	35	5109	3	5180
HSC Cherokee	HyPerformer Seed Company	5	5789	7	5605	17	4987
ST-686	SeedTec, Division of NAPB, Inc.	6	5769	2	5640	29	4760
W-844-E	WARNER SEED COMPANY, INC.	7	5751	12	5442	7	5133
DR 1125	Cargill Hybrid Seeds	8	5737	15	5370	28	4762
847 (77039)	Cargill Hybrid Seeds	9	5728	—	—	—	—
Rustler	Conlee Seed Company, Inc.	10	5718	47	4931	12	5088
GS 712	ASGROW SEED COMPANY	11	5696	41	5028	10	5120
TS 488	TEXAS SEED COMPANY, INC.	12	5692	—	—	—	—
T-E Y-77	Taylor-Evans Seed Company	13	5659	39	5051	—	—
6670	Cargill Hybrid Seeds	14	5656	21	5335	16	5008
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	15	5651	34	5111	31	4751
TOPAZ	ASGROW SEED COMPANY	16	5643	—	—	25	4780
T-E Y-75	Taylor-Evans Seed Company	17	5594	1	5875	8	5130
ORO BARON	ORO Hybrids	18	5582	6	5619	11	5110
A.Var x 80C2241	Tx. Agri. Exp. Stat.	19	5578	—	—	—	—
X 15277	Cargill Hybrid Seeds	20	5565	—	—	—	—
S 9750	The New Northrup King	21	5503	52	4862	—	—
ST-D701G	SeedTec, Division of NAPB, Inc.	22	5499	18	5354	21	4864
5572	Cargill Hybrid Seeds	23	5486	5	5624	22	4854
ORO G XTRA	ORO Hybrids	24	5482	56	4830	13	5057
T-E RANGER	Taylor-Evans Seed Company	25	5439	—	—	—	—
dk 650	DOUGLASS W. KING COMPANY	26	5435	44	5006	18	4987
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	27	5320	59	4666	23	4785

Table 4B. Hondo, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
8313	Pioneer Hi-Bred International, Inc.	28	5300	-	-	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	29	5283	66	4112	-	-
FRONTIER F-524	Frontier Hybrid Inc.	30	5269	-	-	-	-
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	31	5249	57	4763	27	4772
A.8618 x RTx435	Tx. Agri. Exp. Stat.	32	5215	-	-	-	-
A1 x Tx430	Tx. Agri. Exp. Stat.	33	5202	13	5405	38	4561
HSC Wings	HyPerformer Seed Company	34	5196	11	5450	9	5130
8278	Pioneer Hi-Bred International, Inc.	35	5166	-	-	-	-
8642X	The New Northrup King	36	5139	-	-	-	-
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	37	5137	32	5139	2	5268
ORO Amigo (Exp. 8906X)	ORO Hybrids	38	5136	-	-	-	-
XP 5128(X)	ASGROW SEED COMPANY	39	5135	-	-	-	-
dk 776	DOUGLASS W. KING COMPANY	40	5129	-	-	-	-
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	41	5107	46	4976	-	-
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	42	5099	58	4713	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	43	5097	-	-	-	-
8260	Pioneer Hi-Bred International, Inc.	44	5017	60	4594	-	-
TS 477	TEXAS SEED COMPANY, INC.	45	5000	4	5626	-	-
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	46	4978	53	4840	45	4323
A.8610 x RTx435	Tx. Agri. Exp. Stat.	47	4977	-	-	-	-
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	48	4969	67	3865	40	4516
X6038(X)	ASGROW SEED COMPANY	49	4960	-	-	-	-
ST-3308	SeedTec, Division of NAPB, Inc.	50	4932	26	5191	37	4585
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	51	4898	31	5170	-	-
W-917-E	WARNER SEED COMPANY, INC.	52	4889	9	5519	-	-
OSAGE	ASGROW SEED COMPANY	53	4847	-	-	-	-
A.Tx630 x R.3338wx	Tx. Agri. Exp. Stat.	54	4832	40	5032	44	4333

Table 4B. Hondo, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	55	4829	—	—	—	—
dk 775	DOUGLASS W. KING COMPANY	56	4763	8	5591	—	—
CHECK 2	Tx. Agri. Exp. Stat.	57	4727	—	—	—	—
A35 x GR104-7	Tx. Agri. Exp. Stat.	58	4721	—	—	—	—
FRONTIER F-333Y	Frontier Hybrids Inc.	59	4642	—	—	—	—
CHECK 1	Tx. Agri. Exp. Stat.	60	4661	—	—	—	—
A1 x TAM428	Tx. Agri. Exp. Stat.	61	4540	—	—	—	—
A1 x R2241	Tx. Agri. Exp. Stat.	62	4516	16	5361	—	—
Wrangler II	Conlee Seed Company, Inc.	63	4511	37	5062	—	—
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	64	4037	29	5180	48	4204
A1 x Tx2737	Tx. Agri. Exp. Stat.	65	3945	—	—	—	—
A.Tx2801 x MR102-2	Tx. Agri. Exp. Stat.	66	3739	—	—	—	—
RS610	Tx. Agri. Exp. Stat.	67	3511	68	3539	66	3057
A.Tx378 x RTx434	Tx. Agri. Exp. Stat.	—	—	20	5349	32	4687
S.G. 932	Garrison Seed & Company, Inc.	—	—	28	5188	30	4755
S.G. 922	Garrison Seed & Company, Inc.	—	—	50	4890	14	5034
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	—	—	54	4835	64	3423
DEKALB DK-49	DEKALB-PFIZER GENETICS	—	—	61	4580	4	5167
T-E X-8727	Taylor-Evans Seed Company	—	—	63	4553	61	3820
4462	Cargill Hybrid Seeds	—	—	65	4402	51	4151
Number Entries:		67		68		67	
Test Mean Yield:			5154		5073		4510

Note: Hybrids with the same yields were ranked by computer.



TABLE 5. AGRONOMIC AND TEST INFORMATION: DANEVANG

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TEST:	1989 Dryland Grain Sorghum Performance Test
LOCATION:	Jimmy Barger Farm - Danevang, Texas
COOPERATORS:	Jimmy Barger, Dennis Pietsch, John Cospers, Benard Mitchell, Randy Gaas, and Leon Synatschk
SOIL TYPE:	Lake Charles clay
ROW WIDTH:	40"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Shredded stalks, disked, broadcast fertilizer, bedded, and hipped
DATE PLANTED:	3-7-89, by hand
DATE THINNED:	3-31-89; thinned to approximately 5 plants/foot
PLOT LENGTH:	30'
FERTILIZER:	135 lb/A of 18-46-0 in October '88 and 150 lb/A of anhydrous ammonia in November '88
HERBICIDE:	1 lb/A of AAtrex (atrazine) in Fall '88 and 1 lb/A of AAtrex (atrazine) at planting
INSECTICIDE:	8 lb/A Furadan (carbofuran) at planting
RAINFALL:	March = 1.3"; April = 3.4"; May = 4.6"; June = 6.1"; July = 4.6"; Total = 20"
IRRIGATIONS:	None
DATE HARVESTED:	7-13-89, by hand; threshed and moistured 7-14-89
SIZE HARVESTED PLOT:	1/500 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	90
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	5,259 lb/A; yields corrected to 13% moisture
TEST C.V.:	17.5 percent

**GENERAL INFORMATION:** Excellent yields were achieved at this test site despite adverse weather conditions during the growing season. Adequate moisture was available at planting resulting in good seedling emergence, but a period of cold weather followed retarding early plant growth. Warm weather and timely rainfall followed which enabled continuous plant growth and development.

Excessive rainfall prior to harvest resulted in germination of sorghum kernels in the panicle and severe weathering of some hybrids consequently reducing yield as reflected in the bushel weights.

The test mean yield was 5,259 lb/A with 10 hybrids in the test producing over 6000 lb/A.

Weeds were a problem in some areas of the field but were controlled by hoeing. Smut was observed in 51 hybrids with the range being from less than 1 plant per plot to 4.3 plants per plot. Lodging and midge were not a problem.

Table 5A. GRAIN SORGHUM PERFORMANCE TEST;DANEVANG, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM- AGE %	NO. SMUT ****	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., O.05 *****
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	81	62	6	0	0.0	0.0	57.7	18.3	75.7	6722	A
Funk's G-1711	DELTA AND PINE LAND	R	ML	77	49	6	0	0.0	0.3	51.6	17.0	75.7	6447	A-B
2665	New Northrup King	R	ML	77	47	5	0	0.0	0.0	53.7	16.8	79.2	6443	A-B
A.Tx631 x 86E0361	Tx. Agri. Exp. Sta.	W	ML	80	59	7	0	0.0	0.0	55.4	18.1	79.9	6383	A-C
TS 477	TEXAS SEED CO.	R	ML	80	50	5	0	0.0	0.3	58.6	17.3	80.4	6383	A-C
S.G. 942	Garrison Seed & Co.	R	ML	79	46	4	0	0.0	0.0	57.6	18.1	80.1	6258	A-D
HSC Wings	HyPerformer Seed	R	ML	78	50	5	0	0.0	0.0	54.3	17.4	72.0	6151	A-E
S.G. 932	Garrison Seed & Co.	R	ML	77	49	5	0	0.0	1.0	53.5	17.2	79.0	6090	A-E
ST-3308	SeedTec, Div. NAPB	R	M	79	52	4	0	0.0	0.3	55.0	18.1	75.0	6065	A-E
ORO Amigo (Exp. 8906X)	ORO Hybrids	R	ML	76	48	5	0	0.0	0.3	51.3	17.3	76.5	6001	A-E
NC+ 174	NC+ Hybrids	R	M	76	49	6	0	0.0	0.3	51.8	16.9	75.6	5982	A-E
Wrangler II	Conlee Seed Co.	R	ML	79	54	6	0	0.0	1.0	51.6	17.0	76.7	5964	A-E
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	79	49	6	0	0.0	1.3	52.8	17.5	74.8	5942	A-E
W-876DR	WARNER SEED CO.	R	L	77	50	5	0	0.0	0.7	50.1	17.5	77.2	5868	A-F
Rustler	Conlee Seed Co.	R	ML	75	48	7	0	0.0	0.3	50.4	16.7	74.8	5853	A-F
ST-D701G	SeedTec, Div. NAPB	R	ML	76	50	6	0	0.0	0.3	51.7	17.5	73.8	5849	A-F
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	76	48	6	0	0.0	0.7	48.0	17.3	73.5	5840	A-F
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	81	61	6	0	0.0	1.7	52.2	18.1	73.2	5832	A-F
NC+ 9674EX	NC+ Hybrids	R	M	78	50	4	0	0.0	0.7	55.7	17.3	75.2	5826	A-F
5329	Garst Seed Co.	R	ML	79	51	5	0	0.0	0.3	47.8	16.7	70.5	5791	A-G
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	82	75	3	5	0.0	0.0	56.4	17.4	75.7	5771	A-G
5319	Garst Seed Co.	R	ML	76	48	9	0	0.0	0.0	52.1	17.6	74.5	5719	A-H
8313	Pioneer Hi-Bred	R	ML	76	44	3	0	0.0	0.0	54.3	18.3	76.9	5712	A-H
Funk's HW 7518	DELTA AND PINE LAND	R	M	77	46	7	0	0.0	0.3	54.7	17.3	79.6	5696	A-I
EXP 3150X	GroAgri Seed Co.	R	M	77	47	5	0	0.0	0.3	50.4	17.5	77.9	5692	A-I
EXP 3148X	GroAgri Seed Co.	R	M	79	43	2	0	0.0	0.3	46.7	16.7	76.6	5692	A-I
A8201-2 x R6078	Tx. Agri. Exp. Sta.	R	ML	78	53	5	0	0.0	0.3	53.2	17.5	74.5	5654	A-I
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	81	55	5	0	1.7	1.3	56.0	18.4	71.5	5653	A-I
GSC 1313	GroAgri Seed Co.	R	M	78	46	5	0	0.0	0.0	52.5	16.4	76.1	5620	A-I
OSAGE	ASGROW SEED CO.	R	M	76	46	7	0	0.0	0.0	49.1	17.1	77.2	5607	A-I
T-E DINERO	Taylor-Evans Seed	R	M	74	47	7	0	0.0	0.0	46.6	16.6	75.2	5573	A-I
Toro Maxima	Big Crop Seed, Inc.	R	ML	77	47	6	0	0.0	0.0	49.6	16.6	76.4	5567	A-I
CHECK 2	Tx. Agri. Exp. Sta.	R	M	73	45	9	0	0.0	0.0	47.4	15.8	77.6	5566	A-I
8260	Pioneer Hi-Bred	R	ML	76	44	5	0	0.0	0.3	53.8	17.4	75.7	5558	A-I
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	77	44	7	0	0.0	0.3	46.1	16.8	78.3	5542	A-I
ORO BARON	ORO Hybrids	R	ML	75	46	5	0	0.0	0.0	51.0	16.4	78.9	5527	A-I
W-917-E	WARNER SEED CO.	R	L	77	49	5	0	0.0	0.3	54.7	16.7	79.6	5515	A-I
Funk's G-1555	DELTA AND PINE LAND	R	M	76	46	4	0	0.0	0.0	50.9	17.2	75.6	5514	A-I
A.Tx2801 x Tx2874	Tx. Agri. Exp. Sta.	W	ML	78	51	6	0	0.0	0.0	53.6	17.3	73.4	5404	A-I
dk 760	DOUGLASS W. KING	R	ML	78	50	4	0	0.0	0.0	51.9	17.6	68.5	5386	A-I
EXP 3146X	GroAgri Seed Co.	R	M	77	44	7	0	0.0	0.0	53.7	17.3	76.7	5373	A-I

Table 5A. GRAIN SORGHUM PERFORMANCE TEST;DANEVANG, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM- AGE %	NO. SMUT ****	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., O.05 *****
X6038(X)	ASGROW SEED CO.	R	ML	80	50	7	0	0.0	0.0	55.4	19.0	75.9	5358	A-I
T-E RANGER	Taylor-Evans Seed	R	ML	76	47	9	0	0.0	0.3	51.6	16.4	77.6	5338	A-I
A1 x Tx2817	Tx. Agril. Exp. Sta.	W	ML	81	48	3	0	0.0	0.7	57.0	18.6	66.4	5324	A-I
A1 x Tx435	Tx. Agril. Exp. Sta.	W	ML	80	55	5	0	0.0	0.7	49.4	17.5	73.2	5320	A-I
A1 x Tx430	Tx. Agril. Exp. Sta.	W	ML	79	52	5	0	0.0	4.3	51.8	17.8	65.9	5268	A-I
Toro Optima	Big Crop Seed, Inc.	R	ML	76	51	5	0	0.0	0.7	45.5	16.2	76.1	5198	A-I
dk 775	DOUGLASS W. KING	R	ML	79	51	3	0	0.0	0.0	55.0	17.9	75.8	5198	A-I
A.Tx629 x R.8503	Tx. Agril. Exp. Sta.	R	M	79	52	6	0	0.0	3.0	51.8	17.0	75.5	5178	A-I
T-E Y-77	Taylor-Evans Seed	R	ML	79	47	6	0	0.0	0.0	50.1	16.0	73.5	5161	A-I
CHECK 1	Tx. Agril. Exp. Sta.			73	46	8	0	0.0	0.0	46.9	15.3	81.7	5153	A-I
ST-686	SeedTec, Div. NAPB	R	M	77	47	6	0	0.0	0.0	53.1	16.2	76.6	5150	A-I
T-E Y-75	Taylor-Evans Seed	R	M	77	47	5	0	0.0	0.0	49.1	16.4	73.5	5147	A-I
A.Tx378 x RTx430	Tx. Agril. Exp. Sta.	R	M	76	50	7	0	0.0	1.7	48.4	16.4	77.1	5143	A-I
A.Tx630 x R3338wx	Tx. Agril. Exp. Sta.	W	ML	77	58	8	0	0.0	0.0	47.6	16.0	74.9	5128	A-I
X15276	Cargill Hybrid	R	M	81	49	4	0	0.0	0.0	56.6	18.3	75.5	5118	A-I
GS712	ASGROW SEED CO.	R	ML	77	47	6	0	0.0	0.3	50.2	16.7	75.2	5096	A-I
A.Tx2755 x Tx2870	Tx. Agril. Exp. Sta.	R	ML	78	48	6	0	0.0	0.0	51.9	15.7	75.9	5078	A-I
A.Var x RTx435	Tx. Agril. Exp. Sta.	W	M	81	54	3	0	0.0	0.0	53.8	17.5	73.7	5037	A-I
KS 780	New Northrup King	R	ML	78	46	7	0	0.0	0.7	48.4	17.2	73.6	5031	A-I
S9750	New Northrup King	R	L	77	50	4	0	0.0	0.3	50.8	17.0	67.8	5024	A-I
847	Cargill Hybrid	R	ML	78	42	5	0	0.0	0.0	51.6	17.0	76.3	4982	A-I
HSC Cherokee	HyPerformer Seed	R	M	77	49	3	0	0.0	0.3	51.9	16.8	71.2	4960	A-I
8278	Pioneer Hi-Bred	R	ML	77	48	4	0	0.0	0.0	49.5	18.0	71.3	4913	A-I
Funk's G-522DR	DELTA AND PINE LAND	R	M	76	46	6	0	0.0	0.3	46.0	16.6	74.8	4913	A-I
Frontier F-333Y	Frontier Hybrids	Y	M	80	50	5	0	0.0	0.7	48.8	18.1	74.7	4912	A-I
ORO G XTRA	ORO Hybrids	R	ML	76	46	5	0	0.0	0.0	46.0	16.4	76.0	4906	A-I
DEKALB X-829	DEKALB-PFIZER GEN.	R	ML	80	53	6	0	0.0	0.7	53.2	18.6	73.3	4877	A-I
W-844-E	WARNER SEED CO.	R	ML	77	47	6	0	0.0	0.0	51.1	17.1	73.3	4867	A-I
WAC 715DR	SeedTec, Div. NAPB	R	ML	75	51	7	0	0.0	0.0	46.8	17.1	76.2	4849	A-I
A.Tx631 x R.8511	Tx. Agril. Exp. Sta.	W	M	81	52	5	0	2.3	0.3	55.1	19.1	67.1	4762	B-I
A.8618 x RTx435	Tx. Agril. Exp. Sta.	W	M	82	49	5	0	0.0	1.0	50.8	17.1	72.9	4738	B-I
RS610	Tx. Agril. Exp. Sta.	R	M	73	46	7	0	0.0	1.3	46.9	16.3	76.1	4712	B-I
A.Tx2752 x RTx430	Tx. Agril. Exp. Sta.	R	ML	79	48	4	0	0.0	0.0	52.3	17.5	73.9	4616	B-I
W-902-W	WARNER SEED CO.	W	L	82	60	3	0	4.3	1.7	50.8	17.7	70.5	4591	B-I
A.Tx631 x RTx435	Tx. Agril. Exp. Sta.	W	M	81	60	5	0	0.0	0.7	51.6	18.0	73.1	4576	B-I
T-E 76	Taylor-Evans Seed	R	ML	75	42	4	0	0.0	0.3	42.3	16.2	72.9	4558	B-I
A.Tx631 x R.8504	Tx. Agril. Exp. Sta.	W	M	79	52	5	0	0.0	1.0	51.7	18.0	69.4	4544	B-I
dk 776	DOUGLASS W. KING	R	ML	79	45	6	0	0.0	0.3	51.6	16.4	73.5	4488	C-I
A1 x TAM428	Tx. Agril. Exp. Sta.	W	ML	80	51	4	0	0.0	0.0	53.3	18.1	66.8	4480	C-I
A1 x R.8505	Tx. Agril. Exp. Sta.	W	ML	79	52	4	0	0.0	0.3	52.6	18.3	64.5	4445	C-I
A.Tx631 x 80C2241	Tx. Agril. Exp. Sta.	W	M	81	54	5	0	1.7	0.3	54.3	19.5	64.7	4434	D-I

Table 5A. GRAIN SORGHUM PERFORMANCE TEST;DANEVANG, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM- AGE %	NO. SMUT ****	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., 0.05 *****
A.Tx2752 x Tx2868	Tx. Agri. Exp. Sta.	R	ML	78	48	6	0	0.0	0.7	48.2	16.6	73.6	4406	D-I
TS 488	TEXAS SEED CO.	R	ML	78	45	5	0	0.0	0.0	48.0	15.8	73.4	4317	D-I
S.G. 944	Garrison Seed & Co.	R	ML	77	44	3	0	0.0	0.0	49.9	17.3	66.9	4295	E-I
A4R x Tx430	Tx. Agri. Exp. Sta.	R	ML	79	44	8	0	0.0	0.3	49.2	17.1	74.9	3970	F-I
A1 x Tx2794	Tx. Agri. Exp. Sta.	W	ML	77	50	5	0	0.0	1.0	49.0	16.1	67.5	3872	G-I
6670	Cargill Hybrid	R	ML	77	45	6	0	0.0	0.0	44.9	16.9	69.2	3785	H-I
A.Tx378 x Tx2861	Tx. Agri. Exp. Sta.	R	ML	77	47	7	0	0.0	2.0	49.4	16.8	73.5	3762	I
4462	Cargill Hybrid	R	M	74	47	6	0	0.0	0.0	45.2	16.3	75.7	3754	I

TEST MEAN= 5259 TEST C.V.=17.5 LSD .05=1487.3

Note: Hybrid name starting or ending with an "X" denote a commercial experimental. Hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Individuals may contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* Warner W-632-W and Conlee Towhead were entered as commercial check hybrids at our discretion and should be used for comparison purpose only.

\*\* Grain color designated by respective seed companies: R=Red W=White B=Brown Y=Yellow M=Mixed.

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Smut counts were taken from the harvested area on all three replications and averaged for each hybrid.

\*\*\*\*\* Duncan's multiple range test was used at the .05 level.

Table 5B. Two-year summary, Grain Sorghum Performance Test, Danevang, Texas.

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
A.Var x 80C2241	Tx. Agri. Exp. Stat.	1	6722	-	-
Funk's G-1711	DELTA AND PINE LAND COMPANY	2	6447	-	-
2665	The New Northrup King	3	6443	59	5440
A.Tx631 x 86EO361	Tx. Agri. Exp. Stat.	4	6383	-	-
TS 477	TEXAS SEED COMPANY, INC.	5	6383	-	-
S.G. 942	Garrison Seed & Company, Inc.	6	6258	-	-
HSC Wings	HyPerformer Seed Company	7	6151	-	-
S.G. 932	Garrison Seed & Company, Inc.	8	6090	-	-
ST-3308	SeedTec, Division of NAPB, Inc.	9	6065	46	5815
ORO Amigo (Exp. 8906X)	ORO Hybrids	10	6001	-	-
NC+ 174	NC+ Hybrids	11	5982	23	6282
Wrangler II	Conlee Seed Company, Inc.	12	5964	50	5632
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	13	5942	64	5311
W-876DR	WARNER SEED COMPANY, INC.	14	5868	4	6851
Rustler	Conlee Seed Company, Inc.	15	5853	18	6427
ST-D701G	SeedTec, Division of NAPB, Inc.	16	5849	43	5855
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	17	5840	11	6631
A.8610 x RTx435	Tx. Agri. Exp. Stat.	18	5832	-	-
NC+ 9674 EX	NC+ Hybrids	19	5826	-	-
5329	Garst Seed Company	20	5791	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	21	5771	-	-
5319	Garst Seed Company	22	5719	-	-
8313	Pioneer Hi-Bred International, Inc.	23	5712	-	-
Funk's HW 7518	DELTA AND PINE LAND COMPANY	24	5696	-	-
EXP 3150X	GroAgri Seed Company	25	5692	-	-

Table 5B. Danevang, Texas. (Continued)

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
EXP 3148X	GroAgri Seed Company	26	5692	-	-
A8201-2 x R6078	Tx. Agri. Exp. Stat.	27	5654	-	-
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	28	5653	33	6024
GSC 1313	GroAgri Seed Company	29	5620	-	-
OSAGE	ASGROW SEED COMPANY	30	5607	-	-
T-E DINERO	Taylor-Evans Seed Company	31	5573	2	7095
Toro Maxima	Big Crop Seed, Inc.	32	5567	5	6733
Towhead	Conlee Seed Company, Inc.	33	5566	-	-
8260	Pioneer Hi-Bred International, Inc.	34	5558	21	6362
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	35	5542	69	5122
ORO BARON	ORO Hybrids	36	5527	24	6275
W-917-E	WARNER SEED COMPANY, INC.	37	5515	-	-
Funk's G-1555	DELTA AND PINE LAND COMPANY	38	5514	-	-
A.Tx2801 x Tx2874	Tx. Agri. Exp. Stat.	39	5404	-	-
dk 760	DOUGLASS W. KING COMPANY	40	5386	44	5828
EXP 3146X	GroAgri Seed Company	41	5373	-	-
X6038(X)	ASGROW SEED COMPANY	42	5358	-	-
T-E RANGER	Taylor-Evans Seed Company	43	5338	-	-
A1 x Tx2817	Tx. Agri. Exp. Stat.	44	5324	-	-
A1 x Tx435	Tx. Agri. Exp. Stat.	45	5320	-	-
A1 x Tx430	Tx. Agri. Exp. Stat.	46	5268	51	5627
Toro Optima	Big Crop Seed, Inc.	47	5198	-	-
dk 775	DOUGLASS W. KING COMPANY	48	5198	20	6370
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	49	5178	56	5454
T-E Y-77	Taylor-Evans Seed Company	50	5161	-	-

Table 5B. Danevang, Texas. (Continued)

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
CHECK 1	Tx. Agri. Exp. Stat.	51	5153	-	-
ST-686	SeedTec, Division of NAPB, Inc.	52	5150	42	5864
T-E Y-75	Taylor-Evans Seed Company	53	5147	31	6071
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	54	5143	1	7095
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	55	5128	55	5480
X 15276	Cargill Hybrid Seeds	56	5118	-	-
GS712	ASGROW SEED COMPANY	57	5096	14	6597
A.Tx2755 x Tx2870	Tx. Agri. Exp. Stat.	58	5078	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	59	5037	-	-
KS 780	The New Northrup King	60	5031	9	6658
S 9750	The New Northrup King	61	5024	40	5904
847	Cargill Hybrid Seeds	62	4982	-	-
HSC Cherokee	HyPerformer Seed Company	63	4960	-	-
XS 278	Pioneer Hi-Bred International, Inc.	64	4913	-	-
Funk's G-522DR	DELTA AND PINE LAND COMPANY	65	4913	-	-
FRONTIER F-333Y	Frontier Hybrids Inc.	66	4912	-	-
ORO G XTRA	ORO Hybrids	67	4906	30	6103
DEKALB X-829	DEKALB-PFIZER GENETICS	68	4877	-	-
W-844-E	WARNER SEED COMPANY, INC.	69	4867	41	5898
WAC 715DR	SeedTec, Division of NAPB, Inc.	70	4849	8	6702
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	71	4762	-	-
A.Tx8618 x RTx435	Tx. Agri. Exp. Stat.	72	4738	-	-
RS610	Tx. Agri. Exp. Stat.	73	4712	77	4784
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	74	4616	6	6720
W-902-W	WARNER SEED COMPANY, INC.	75	4591	-	-



Table 5B. Danevang, Texas. (Continued)

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	76	4576	45	5828
T-E 76	Taylor-Evans Seed Company	77	4558	-	-
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	78	4544	63	5331
dk 776	DOUGLASS W. KING COMPANY	79	4488	58	5444
A1 x TAM428	Tx. Agri. Exp. Stat.	80	4480	-	-
A1 x R.8505	Tx. Agri. Exp. Stat.	81	4445	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	82	4434	70	5075
A.Tx2752 x Tx2868	Tx. Agri. Exp. Stat.	83	4406	-	-
TS 488	TEXAS SEED COMPANY, INC.	84	4317	-	-
S.G. 944	Garrison Seed & Company, Inc.	85	4295	-	-
A4R x Tx430	Tx. Agri. Exp. Stat.	86	3970	19	6424
A1 x Tx2794	Tx. Agri. Exp. Stat.	87	3872	-	-
6670	Cargill Hybrid Seeds	88	3785	37	5966
A.Tx378 x Tx2861	Tx. Agri. Exp. Stat.	89	3762	-	-
4462	Cargill Hybrid Seeds	90	3754	16	6451
Number Entries:		90		81	
Test Mean Yield:			5259		5841

Note: Hybrids with the same yields were ranked by computer

TABLE 6. AGRONOMIC AND TEST INFORMATION: COLLEGE STATION

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TEST:	1989 Irrigated Grain Sorghum Performance Test
LOCATION:	Texas A&M University Farm, College Station, Texas
COOPERATORS:	F. Miller, T. Dusek, K. Elms, and D. Pietsch
SOIL TYPE:	Miller clay loam
ROW WIDTH:	26 2/3"
PREVIOUS CROP:	Grain sorghum
LAND PREPARATION:	Shredded, disked, moldboard, disked, bedded, plant
DATE PLANTED:	3-31-89, cone planter
PLOT LENGTH:	19'
FERTILIZER:	180-40-10; applied 100-40-10 preplant and 80-0-0 at layby
HERBICIDE:	1 lb/A Milogard 4L (propazine) + 3 lb/A Ramrod 4L (propachlor) on 4-1
INSECTICIDE:	7 lb/A Furadan 15G at planting
RAINFALL:	March = 3.84"; April = .81"; May = 3.86"; June = 5.06"; July = 2.08"; August = 2.18"; Total = 17.83"
IRRIGATIONS:	1 application of approximately 3"
DATE HARVESTED:	8-10-89 by hand
SIZE HARVESTED PLOT:	1/994 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	78
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	3
MEAN PLANT POP.:	Estimated to be between 70,000 and 90,000 plants/A
TEST MEAN:	6,120 lb/A; yields corrected to 13% moisture
TEST C.V.:	11.5 percent

**GENERAL STATEMENT:** An excellent test with above average yields attained due to timely rainfall and good growing conditions. Ample soil moisture was available at planting from early seedbed preparation. Seedling emergence was rapid and excellent plant stands were secured after hand-thinning.

Due to timely rains in May and June, only one irrigation was applied to the test block.

The test mean yield was 6,120 lb/A which is 107 lb/A greater than the past five-year average of 6,013 lb/A. Seven hybrids in the test produced between 7,000 and 7,851 lb/A.

Lodging was not observed in the test. The incidence of midge and greenbugs were very low.

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1989

HYBRID 1	COMPANY OR BRAND NAME	SEED CLR. 2	GLM CLR 3	PLT CLR 4	MATU- RITY CLASS 5	DAYS TO 50% FLOWER	PLANT HT. IN.	PAN. LTH. IN.	PAN. EXSER- TION IN.	DES. RAT. 6	LEAF DIS. RAT. 7	SMUT PER PLOT 8	TEST WT. lb/bu	% MOIST	THR. %	GRAIN PER ACRE lb/A	STAT. SIG. O.05 9
ORD G XTRA	ORD Hybrids	Bz	Mg	P	ML	70	56	12	1	2.0	2.1	1.0	57.0	15.5	77.0	7851	A
Exp. 89-4	HyPerformer Seed	Rt	R	R	ML	73	60	11	2	1.6	2.5	0.0	60.3	15.6	79.9	7451	A-B
W-917-E	WARNER SEED CO.	Rt	R	R	L	70	58	10	6	1.7	2.3	0.0	59.6	15.6	78.9	7206	A-C
dk 775	DOUGLASS W. KING	Rt	R	R	ML	71	57	11	3	1.8	1.9	0.7	59.3	15.9	78.4	7132	A-D
A.Var x RTx435	Tx. Agril. Exp. Sta.	Ct	St	T	M	74	58	11	6	1.8	1.0	0.0	58.6	14.9	77.4	7086	A-E
dk 760	DOUGLASS W. KING	Bz	Mg	P	ML	70	56	12	3	2.0	2.3	0.7	56.7	15.7	77.3	7060	A-F
HSC Cherokee	HyPerformer Seed	Rt	R	R	M	72	56	12	4	1.7	1.9	0.0	58.7	15.5	77.8	7006	A-G
A1 x Tx430	Tx. Agril. Exp. Sta.	Ct	Mg	R	ML	70	59	14	4	1.9	2.5	4.7	54.9	15.6	74.1	6992	A-G
DEKALB X-829(X)	DEKALB-PFIZER GEN.	Rt	St	R	ML	72	56	11	7	1.6	1.8	0.0	58.5	16.0	75.7	6921	A-G
2665	New Northrup King	Bz	Mg	P	ML	71	54	10	5	2.2	2.3	0.0	57.6	15.7	76.7	6914	A-G
HSC Wings	HyPerformer Seed	Bz	Mg	P	ML	70	56	12	4	2.0	1.8	0.3	56.3	15.4	76.6	6853	A-H
A1 x R.8505	Tx. Agril. Exp. Sta.	Wt	Mg	R	ML	73	56	13	5	1.7	1.5	1.3	56.9	15.9	74.2	6800	A-H
X62830	SeedTec, Div. NAPB	Rt	R	R	L	76	61	14	1	1.4	1.4	0.0	58.5	15.9	75.1	6790	A-H
A4R x Tx430	Tx. Agril. Exp. Sta.	Rt	Mg	P	ML	69	55	15	6	2.2	2.0	0.7	57.8	15.8	76.4	6787	A-H
S.G. 932	Garrison Seed & Co.	Bz	Mg	P	M	69	55	12	5	2.1	2.2	1.0	56.9	15.5	76.6	6768	A-H
S9750	New Northrup King	Bz	Mg	P	L	71	56	12	4	2.1	1.8	1.0	56.2	15.4	76.4	6740	A-H
dk 776	DOUGLASS W. KING	Rt	R	R	ML	70	54	10	6	2.1	3.0	0.0	57.6	15.2	77.8	6637	A-I
A.Tx631 x 86E0361	Tx. Agril. Exp. Sta.	Wt	St	T	ML	75	60	19	5	1.5	1.1	0.0	58.9	15.7	74.9	6577	A-J
T-E Y-77E	Taylor-Evans Seed	Bz	Mg	P	ML	69	56	11	3	2.2	2.3	0.0	56.7	15.4	76.6	6556	A-K
S.G. 925	Garrison Seed & Co.	Rt	R	R	M	69	56	11	6	2.0	3.8	0.0	58.5	15.2	78.9	6549	A-K
A.Tx631 x 80C2241	Tx. Agril. Exp. Sta.	Wt	St	T	M	75	58	14	5	1.5	1.0	0.3	57.8	15.6	73.6	6534	A-K
A.Tx631 x Dorado	Tx. Agril. Exp. Sta.	Wt	St	T	M	75	79	14	2	1.8	1.9	0.0	58.9	15.5	79.3	6532	A-K
A.8610 x RTx435	Tx. Agril. Exp. Sta.	Ct	Br	T	M	73	66	15	5	1.8	1.2	0.7	55.7	15.5	73.9	6495	A-K
A.Tx629 x R.8503	Tx. Agril. Exp. Sta.	Rt	R	R	M	73	59	12	4	2.3	1.5	2.3	56.3	15.8	75.4	6484	A-K
A.Tx399 x RTx430	Tx. Agril. Exp. Sta.	Bz	Mg	P	M	69	54	12	4	2.4	2.1	0.7	54.1	14.9	74.5	6447	A-K
X15277	Cargill Hybrid	Bz	Mg	P	ML	71	54	14	3	2.1	1.6	0.0	55.1	15.5	73.3	6436	A-K
Rustler	Conlee Seed Co.	Bz	Mg	P	ML	72	57	11	5	2.1	1.8	0.7	56.1	15.5	75.6	6424	A-K
A8201-2 x R4317	Tx. Agril. Exp. Sta.	Rt	R	R	ML	73	58	13	4	1.6	2.6	2.0	60.8	15.9	79.8	6400	B-L
A.Tx631 x R.8504	Tx. Agril. Exp. Sta.	Wt	St	T	M	75	58	15	4	1.7	1.3	3.3	56.4	15.3	72.5	6392	B-L
Toro Maxima	Big Crop Seed, Inc.	Bz	Mg	P	ML	69	54	13	4	2.1	2.5	0.3	56.4	15.4	76.6	6378	B-L
T-E 76	Taylor-Evans Seed	Bz	Mg	P	ML	70	51	11	2	2.4	2.4	0.3	52.9	14.9	75.6	6363	B-M
X6038	ASGROW SEED CO.	Rt	Mg	P	ML	73	57	12	6	1.8	1.9	0.0	58.8	16.2	73.5	6337	B-M
847	Cargill Hybrid	Rt	R	R	ML	69	52	11	4	1.8	1.8	0.0	58.0	15.3	77.8	6311	B-M
T-E RANGER	Taylor-Evans Seed	Rt	Mg	P	ML	72	53	12	6	2.7	2.5	0.0	57.0	15.3	76.8	6305	B-M
A1 x TAM428	Tx. Agril. Exp. Sta.	Wt	R	R	ML	72	59	14	4	1.7	1.9	1.7	57.5	15.8	75.9	6290	B-M
A.Var x 80C2241	Tx. Agril. Exp. Sta.	Wt	T	T	M	76	63	13	2	1.6	1.0	0.0	60.0	15.1	75.8	6279	B-M
ORO BARON	ORD Hybrids	Rt	R	R	ML	69	51	11	4	2.1	4.0	0.0	58.2	15.3	78.1	6245	B-M
A1 x R.6078	Tx. Agril. Exp. Sta.	Rt	R	R	ML	75	55	15	4	1.8	1.8	2.7	59.5	16.3	74.0	6243	B-M
Toro Optima	Big Crop Seed, Inc.	Bz	Mg	P	ML	69	55	12	5	2.2	2.1	0.3	53.6	15.0	75.7	6242	B-M
ST-686	SeedTec, Div. NAPB	Rt	R	R	M	73	55	12	5	1.8	1.8	0.0	58.6	15.4	77.2	6225	B-M
A.Tx378 x RTx430	Tx. Agril. Exp. Sta.	Bz	Mg	P	M	70	60	12	4	1.8	1.7	1.3	55.8	15.1	76.2	6207	B-N

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1989

HYBRID 1	COMPANY OR BRAND NAME	SEED CLR. 2	GLM CLR 3	PLT CLR 4	MATU- RITY CLASS 5	DAYS TO 50% FLOWER	PLANT HT. IN.	PAN. LTH. IN.	PAN. EXSER- TION IN.	DES. RAT. 6	LEAF DIS. RAT. 7	SMUT PER PLOT 8	TEST WT. lb/bu	% MOIST	THR. %	GRAIN PER ACRE lb/A	STAT. SIG. O.05 9
W-844-E	WARNER SEED CO.	Rt	R	R	ML	71	54	12	3	2.0	3.0	0.0	58.5	15.5	77.5	6190	B-N
S.G. 922	Garrison Seed & Co.	Bz	Mg	P	ML	69	48	12	5	2.5	2.4	0.0	54.5	14.9	75.2	6174	B-0
A.Tx399 x Tx2536	Tx. Agril. Exp. Sta.	Bz	Mg	P	ML	69	51	12	5	3.2	2.0	0.7	52.6	14.6	75.1	6134	B-0
Frontier F-333Y	Frontier Hybrids	Ct	Bl	P	M	73	53	12	7	2.1	2.1	0.7	53.9	15.0	74.6	6120	B-0
T-E DINERO	Taylor-Evans Seed	Bz	Mg	P	M	70	52	13	2	2.4	1.8	0.3	52.8	14.5	75.3	6100	B-0
X15276	Cargill Hybrid	Bz	Mg	P	ML	70	51	12	4	2.3	2.5	0.0	58.6	16.0	76.8	6059	B-0
ST-3308	SeedTec, Div. NAPB	Rt	R	R	M	71	52	12	4	2.3	3.0	0.0	57.4	15.4	76.9	6056	B-0
Wrangler II	Conlee Seed Co.	Rt	R	R	ML	69	58	11	6	2.0	2.2	1.7	55.0	15.3	75.9	6051	B-P
6670	Cargill Hybrid	Bz	Mg	P	ML	72	56	12	3	1.9	1.8	0.0	56.6	15.5	76.1	6049	B-P
T-E Y-75	Taylor-Evans Seed	Rt	R	R	M	69	51	11	5	2.0	3.0	0.0	57.8	15.2	76.9	6000	B-P
Exp. 89-3	HyPerformer Seed	Rt	R	R	M	69	51	12	2	2.1	2.2	0.0	58.1	15.0	78.0	5988	C-P
5572	Cargill Hybrid	Bz	Mg	P	ML	72	54	12	4	2.2	1.8	0.0	55.6	15.3	73.4	5962	C-P
A.Tx631 x RTx435	Tx. Agril. Exp. Sta.	Ct	Br	T	M	72	62	14	5	1.7	1.8	2.3	56.6	15.3	74.9	5928	C-P
A.Tx2752 x RTx430	Tx. Agril. Exp. Sta.	Bz	Mg	P	M	70	56	12	4	2.3	2.0	0.0	55.2	15.0	75.0	5890	C-P
A1 x Tx435	Tx. Agril. Exp. Sta.	Ct	R	R	ML	71	60	15	6	1.9	1.5	5.0	55.4	15.5	76.4	5882	C-P
A.Tx631 x R.8505	Tx. Agril. Exp. Sta.	Wt	St	T	M	75	59	14	5	1.4	1.5	0.0	57.3	15.5	70.6	5810	C-P
Frontier F-457D	Frontier Hybrids	Bz	Mg	P	M	71	51	13	4	2.3	2.3	0.0	53.7	15.0	73.9	5795	C-P
XP5128(X)	ASGROW SEED CO.	Rt	R	R	M	68	48	12	5	2.1	2.8	0.0	58.3	15.8	74.3	5779	C-P
4462	Cargill Hybrid	Bz	Mg	P	ML	68	54	12	6	2.4	2.5	0.7	56.3	15.8	75.2	5673	D-Q
A1 x R.8507	Tx. Agril. Exp. Sta.	Rt	R	R	ML	72	53	13	3	1.8	1.5	0.3	58.5	15.9	74.6	5654	E-Q
A.Tx2752 x Tx2859	Tx. Agril. Exp. Sta.	Rt	R	R	ML	69	54	12	3	2.3	3.0	0.0	57.8	15.2	75.3	5601	F-Q
A1 x GR107-56	Tx. Agril. Exp. Sta.	Rt	R	R	ML	70	49	15	5	1.8	1.9	0.0	57.5	16.0	72.1	5567	G-Q
CHECK 2	Tx. Agril. Exp. Sta.	Wh	Mg	P		73	56	12	3	1.8	1.9	0.3	57.4	15.2	75.0	5551	G-Q
A.Tx631 x R.8511	Tx. Agril. Exp. Sta.	Wt	St	T	M	75	60	14	3	1.4	1.0	0.3	57.9	15.6	61.0	5438	H-Q
A.8618 x RTx435	Tx. Agril. Exp. Sta.	Rt	R	R	M	75	55	14	6	1.6	1.1	0.7	56.7	15.6	72.3	5416	H-Q
DR 1125	Cargill Hybrid	Bz	Mg	P	ML	69	49	12	6	2.8	3.0	0.0	55.0	15.0	74.4	5270	I-Q
A1 x Tx2862	Tx. Agril. Exp. Sta.	Rt	R	R	ML	75	57	15	4	2.1	2.0	1.7	59.3	16.7	72.7	5257	I-R
A35 x Tx430	Tx. Agril. Exp. Sta.	Rt	Mg	P	ML	68	56	14	4	3.3	3.8	0.0	56.7	16.1	72.9	5245	I-R
A.Tx631 x R3338wx	Tx. Agril. Exp. Sta.	Wt	Bl	P	ML	76	58	13	6	1.9	2.0	0.3	57.0	15.4	74.0	5131	J-R
CHECK 1	Tx. Agril. Exp. Sta.	Ct	St	P		70	54	12	10	2.5	2.0	0.0	55.1	14.9	74.5	5103	K-R
A.Tx630 x R3338wx	Tx. Agril. Exp. Sta.	Wt	Bl	P	ML	72	63	13	3	2.1	2.1	0.7	55.8	15.4	74.7	4961	L-R
A.Tx626 x R.8503	Tx. Agril. Exp. Sta.	Rt	R	R	M	70	56	12	6	2.3	2.0	3.3	57.3	15.8	75.6	4916	M-R
A1 x C3181	Tx. Agril. Exp. Sta.	Wt	Mg	P	ML	69	54	14	4	2.2	2.0	0.0	57.8	15.8	75.7	4768	N-R
Frontier F-200	Frontier Hybrids	Br	Mg	P	E	61	47	12	7	3.3	3.5	0.0	55.5	15.3	71.8	4737	O-R
A.Tx2801 x Tx2876	Tx. Agril. Exp. Sta.	Rt	R	R	ML	68	54	12	5	3.2	3.2	1.3	57.7	14.8	76.8	4620	P-R
RS610	Tx. Agril. Exp. Sta.	R	Mg	P	M	63	48	13	6	4.0	3.5	1.7	54.0	14.4	73.1	4367	Q-R
W-901-W	WARNER SEED CO.	Ct	Br	T	L	78	60	14	4	2.4	2.5	1.7	54.9	15.6	68.6	4021	R

TEST MEAN= 6120 TEST C.V.=11.5 LSD .05=1134.8

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1989

HYBRID 1	COMPANY OR BRAND NAME	SEED	GLM	PLT	MATU- RITY	DAYS TO	PLANT	PAN.	PAN.	LEAF	SMUT	TEST WT. 1b/bu	% MOIST	THR. %	GRAIN	STAT.
		CLR. 2	CLR 3	CLR 4	CLASS 5	50% FLOWER	HT. IN.	LTH. IN.	TION IN.	DES. RAT. 6	DIS. RAT. 7				PER PLOT 8	PER ACRE 1b/A

Note: Hybrid name starting or ending with an "X" denote a commercial experimental. Hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Individuals may contact respective seed companies for the availability of planting seed for the upcoming crop year.

1 Taylor-Evans T-E Wahoo and Conlee Towhead were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

2 Grain Color : Br=Brown Bz=Bronze R=Red Rt=Red translucent Wh=White Wt=White translucent Ct=Cream translucent

3 Glume Color : Bl=Black Mg=Mahogany R=Red Br=Brown T=Tan St=Straw

4 Plant Color : P=Purple R=Red T=Tan

5 Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

Note: Dr. Fred Miller, Soil & Crop Sciences Department, Texas A&M University, College Station, Texas, made the following ratings:

6 Desirability rating: 1=very good 2=good 3=average 4=poor 5=very poor

7 Leaf Disease Rating: visual rating of quality of green leaf area remaining at harvest.  
1.0 = all green leaf area free of disease lesions and insecticide marks.  
2.5 = approximately 50% of leaf area marked.  
4.0 = all leaf area marked - peduncle/stem alive.  
5.0 = plant dead.

8 Smut counts were taken from the harvested area on all three replications and averaged for each hybrid.

9 Duncan's multiple range test was used at the .05 level.

Table 6B. Three-year summary, Grain Sorghum Performance Test, College Station, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
ORO G XTRA	ORO Hybrids	1	7851	47	4204	3	7637
Exp. 89-4	HyPerformer Seed Company	2	7451	-	-	-	-
W-917-E	WARNER SEED COMPANY INC.	3	7206	11	5544	-	-
dk 775	DOUGLASS W. KING COMPANY	4	7132	-	-	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	5	7086	81	3154	-	-
dk 760	DOUGLASS W. KING COMPANY	6	7060	-	-	-	-
HSC Cherokee	HyPerformer Seed Company	7	7006	2	6296	9	7134
A1 x Tx430	Tx. Agri. Exp. Stat.	8	6992	20	5116	42	6467
DEKALB X-829(x)	DEKALB-PFIZER GENETICS	9	6921	-	-	-	-
2665	The New Northrup King	10	6914	65	3567	-	-
HSC Wings	HyPerformer Seed Company	11	6853	76	3306	53	6529
A1 x R.8505	Tx. Agri. Exp. Stat.	12	6800	35	4577	-	-
X62830	SeedTec, Division NAPB, Inc.	13	6790	3	6076	-	-
A4R x Tx430	Tx. Agri. Exp. Stat.	14	6787	33	4612	71	5723
S.G. 932	Garrison Seed & Company Inc.	15	6768	51	4078	1	7805
S 9750	The New Northrup King	16	6740	80	3176	34	6550
dk 776	DOUGLASS W. KING COMPANY	17	6637	-	-	-	-
A.Tx631 x 86EO361	Tx. Agri. Exp. Stat.	18	6577	-	-	-	-
T-E Y-77E	Taylor-Evans Seed Company	19	6556	-	-	-	-
S.G. 925	Garrison Seed & Company Inc.	20	6549	-	-	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	21	6534	41	4421	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	22	6532	-	-	-	-
A.8610 x RTx435	Tx. Agri. Exp. Stat.	23	6495	-	-	-	-
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	24	6484	45	4324	-	-
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	25	6447	27	4702	15	6955

Table 6B. College Station, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
X15277	Cargill Hybrid Seeds	26	6436	—	—	—	—
Rustler	Conlee Seed Company, Inc.	27	6424	73	3375	4	7577
A8201-2 x R4317	Tx. Agri. Exp. Stat.	28	6400	13	5507	27	6761
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	29	6392	24	4914	—	—
Toro Maxima	Big Crop Seed, Inc.	30	6378	63	3655	—	—
T-E 76	Taylor-Evans Seed Company	31	6363	—	—	—	—
X6038	ASGROW SEED COMPANY	32	6337	—	—	—	—
847	Cargill Hybrid Seeds	33	6311	—	—	—	—
T-E RANGER	Taylor-Evans Seed Company	34	6305	—	—	—	—
A1 x TAM428	Tx. Agri. Exp. Stat.	35	6290	—	—	—	—
A.Var x 80C2241	Tx. Agri. Exp. Stat.	36	6279	—	—	—	—
ORO BARON	ORO Hybrids	37	6245	10	5615	11	7062
A1 x R6078	Tx. Agri. Exp. Stat.	38	6243	—	—	—	—
Toro Optima	Big Crop Seed, Inc.	39	6242	—	—	—	—
ST-686	SeedTec, Division of NAPB, Inc.	40	6225	5	5975	45	6447
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	41	6207	53	4026	2	7714
W-844-E	WARNER SEED COMPANY INC.	42	6190	7	5956	20	6894
S.G. 922	Garrison Seed & Company Inc.	43	6174	69	3483	44	6454
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	44	6134	86	2619	33	6561
Frontier F-333Y	Frontier Hybrids Inc.	45	6120	—	—	—	—
T-E DINERO	Taylor-Evans Seed Cpmpany	46	6100	—	—	25	6776
X15276	Cargill Hybrid Seeds	47	6059	—	—	—	—
ST-3308	SeedTec, Division of NAPB, Inc.	48	6056	4	6074	72	5589
Wrangler II	Conlee Seed Company, Inc.	49	6051	6	5964	—	—
6670	Cargill Hybrid Seeds	50	6049	72	3407	18	6906



Table 6B. College Station, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
T-E Y-75	Taylor-Evans Seed Company	51	6000	1	6306	52	6280
Exp. 89-3	HyPerformer Seed Company	52	5988	-	-	-	-
5572	Cargill Hybrid Seeds	53	5962	30	4693	58	6202
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	54	5928	75	3324	77	5319
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	55	5890	77	3291	10	7074
A1 x Tx435	Tx. Agri. Exp. Stat.	56	5882	36	4566	40	6477
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	57	5810	46	4206	70	5767
Frontier F-457D	Frontier Hybrids Inc.	58	5795	-	-	-	-
XP 5128(x)	ASGROW SEED COMPANY	59	5779	-	-	-	-
4462	Cargill Hybrid Seeds	60	5673	68	3498	28	6742
A1 x R.8507	Tx. Agri. Exp. Stat.	61	5654	43	4381	-	-
A.Tx2752 x Tx 2859	Tx. Agri. Exp. Stat.	62	5601	-	-	-	-
A1 x GR107-56	Tx. Agri. Exp. Stat.	63	5567	-	-	-	-
CHECK 2	Tx. Agri. Exp. Stat.	64	5551	-	-	-	-
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	65	5438	59	3763	-	-
A.8618 x RTx435	Tx. Agri. Exp. Stat.	66	5416	-	-	-	-
DR 1125	Cargill Hybrid Seeds	67	5270	-	-	46	6436
A1 x Tx2862	Tx. Agri. Exp. Stat.	68	5257	-	-	-	-
A35 x Tx430	Tx. Agri. Exp. Stat.	69	5245	14	5421	56	6218
A.Tx631 x R3338wx	Tx. Agri. Exp. Stat.	70	5131	29	4694	-	-
Towhead	Conlee Seed Company	71	5103	-	-	-	-
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	72	4961	49	4165	55	6218
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	73	4916	44	4332	69	5770
A1 x C3181	Tx. Agri. Exp. Stat.	74	4768	-	-	-	-
Frontier F-200	Frontier Hybrids Inc.	75	4737	-	-	-	-

Table 6B. College Station, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.Tx2801 x Tx2876	Tx. Agri. Exp. Stat.	76	4620	-	-	-	-
RS610	Tx. Agri. Exp. Stat.	77	4367	58	3765	73	5542
W-901-W	WARNER SEED COMPANY INC.	78	4021	-	-	-	-
A1 x Tx433	Tx. Agri. Exp. Stat.	-	-	31	4659	51	6296
A.Tx378 x RTx434	Tx. Agri. Exp. Stat.	-	-	38	4531	38	6494
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	-	-	42	4408	74	5534
A1 x R2241	Tx. Agri. Exp. Stat.	-	-	48	4187	75	5470
GS 712	ASGROW SEED COMPANY	-	-	66	3547	76	5390
SS69	Big Crop Seed, Inc.	-	-	70	3420	8	7232
WAC D701G	SeedTec, Division of NAPB, Inc.	-	-	79	3184	19	6902
Number of Entries:		78		87		78	
Test Mean Yield:			6120		4338		6476

Note: Hybrids with the same yields were ranked by computer.

TABLE 7. AGRONOMIC AND TEST INFORMATION: THRALL

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TEST:	1989 Dryland Grain Sorghum Performance Test
LOCATION:	Stiles Farm Foundation, Thrall, Texas
COOPERATORS:	Dennis Pietsch, Cloyce Coffman, Randy Gaas, Leon Synatschk, and Calvin Rinn
SOIL TYPE:	Burleson clay
ROW WIDTH:	38"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Shredded, re-bed, applied fertilizer, field cultivated and harrowed beds prior to planting
DATE PLANTED:	3-9-89, hand dropped behind a JD7300 Max Emerge 2
DATE THINNED:	4-24 & 25-89; thinned to approximately 4-5 plants/foot
PLOT LENGTH:	30'
FERTILIZER:	300 lb/A of 32-0-0 on 2-25
HERBICIDE:	Broadcast 1.25 qt/A of Milogard 4L (propazine) on 3-9
INSECTICIDE:	None
RAINFALL:	Jan = 3.1"; Feb = 0.9"; March = 2.9"; April = 2.3"; May = 6.4"; June = 5.0"; July = 0.5"; Total = 21.1"
IRRIGATIONS:	None
DATE HARVESTED:	7-20-89 by hand; threshed and moistured on 7-21-89
SIZE HARVESTED PLOT:	1/500 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	97
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	5,407 lb/A; yields corrected to 13% moisture
TEST C. V.:	10.4 percent

**GENERAL INFORMATION:** A total of 97 hybrids were entered at this test site which made this one of the largest grain sorghum performance tests in Texas. Outstanding yields were achieved at this location due to good plant stands and timely rainfall. An optimum planting date was achieved but cold and wet weather delayed early plant growth and development. Timely rainfall in May and June contributed to continuous plant growth and development.

Maize Dwarf Mosaic Virus (MDMV) was observed in the test block. Visual readings were made on June 1, 1989 by Dr. R.W. Toler and C.W. Horne, Department of Plant Pathology and Microbiology, Texas A&M University, College Station, Texas. A scale of 1-5 was used with the rating key located at the end of the table.

The test mean yield was 5,406 lb/A compared to the past 3-year average of 3,789 lb/A. Twenty hybrids in the test produced over 6,000 lb/A. The incidence of bird and midge damage were minimal.

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1989

HYBRID (1)	COMPANY OR BRAND NAME	GRN CLR	MATU- RITY CLASS	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXER- TION, IN.	% STAND	SMUT PER PLOT (4)	% DAM- AGE	MDMV RAT. (5)	TEST WT.	MOIS- TURE %	THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., O.05 (6)
Funk's 6006X	DELTA AND PINE LAND	R	M	83	55	9	100.0	0.0	0.0	1.1	60.6	16.1	74.9	6901	A
8278	Pioneer Hi-Bred	R	ML	82	46	4	100.0	0.0	0.0	2.5	61.1	14.5	76.4	6650	A-B
Funk's RA-787	DELTA AND PINE LAND	R	ML	83	49	5	100.0	8.3	0.0	2.0	60.0	14.4	76.0	6565	A-C
dk 775	DOUGLASS W. KING	R	ML	83	47	1	100.0	1.3	0.0	1.2	62.2	14.3	79.3	6400	A-D
Toro Optima	Big Crop Seed, Inc.	R	ML	82	50	6	100.0	0.3	0.0	1.1	59.3	14.1	75.1	6392	A-E
ST-3308	SeedTec, Div. NAPB	R	M	83	47	5	100.0	0.3	0.0	1.0	61.4	13.9	77.7	6348	A-E
A.Tx378 x RTx430	Tx. Agril. Exp. Sta.	R	M	82	53	5	100.0	1.3	0.0	3.3	60.3	14.0	77.5	6333	A-F
dk 760	DOUGLASS W. KING	R	ML	84	45	3	100.0	2.7	0.0	1.0	61.0	14.5	76.6	6298	A-G
X4039(X)	ASGROW SEED CO.	R	ME	82	46	6	100.0	0.0	0.0	1.0	61.3	14.0	78.6	6298	A-G
ST-D701G	SeedTec, Div. NAPB	R	ML	84	46	3	100.0	1.7	0.0	1.3	61.4	14.0	75.8	6282	A-G
Funk's G-1655	DELTA AND PINE LAND	R	M	83	47	4	100.0	2.0	0.0	1.2	61.9	14.5	78.5	6226	A-H
A4R x Tx430	Tx. Agril. Exp. Sta.	R	ML	83	44	4	96.7	3.0	0.0	2.6	61.5	14.2	77.5	6208	A-H
S9750	New Northrup King	R	L	83	48	4	100.0	0.3	0.0	1.0	61.6	14.3	77.3	6186	A-I
5319	Garst Seed Co.	R	ML	84	45	4	95.0	0.3	0.0	1.2	61.2	14.0	76.1	6185	A-I
8313	Pioneer Hi-Bred	R	ML	83	45	2	100.0	0.3	0.0	1.1	62.2	14.0	77.4	6155	A-J
Rustler	Conlee Seed Co.	R	ML	86	45	1	86.7	0.0	0.0	1.7	61.7	14.2	77.5	6150	A-J
S.G. 932	Garrison Seed & Co.	R	ML	84	47	4	95.0	1.3	0.0	1.3	60.9	14.5	76.7	6094	A-K
ST-686	SeedTec, Div. NAPB	R	M	84	46	5	100.0	0.0	0.0	1.0	61.9	13.5	77.3	6069	A-K
847	Cargill Hybrid	R	ML	82	49	5	100.0	0.0	0.0	1.1	61.5	13.8	77.9	6060	A-K
dk 776	DOUGLASS W. KING	R	ML	83	46	6	100.0	0.0	0.0	1.0	62.1	13.5	78.7	6013	A-K
T-E DINERO	Taylor-Evans Seed	R	M	82	46	5	100.0	1.3	0.0	1.1	59.4	14.1	74.8	5994	A-K
GSC 1313	GroAgril Seed Co.	R	M	84	44	3	100.0	0.0	0.0	1.1	61.7	13.2	78.1	5985	A-K
CHECK 1	Tx. Agril. Exp. Sta.	R	M	84	43	4	100.0	1.0	0.0	1.1	61.5	13.9	76.6	5966	A-L
DEKALB DK-37	DEKALB-PFIZER GEN.	R	E	82	49	7	100.0	2.7	0.0	1.1	60.8	14.8	74.9	5963	A-L
GS712	ASGROW SEED CO.	R	ML	85	44	2	100.0	0.3	0.0	1.2	61.2	14.2	76.0	5963	A-L
A.Tx399 x RTx430	Tx. Agril. Exp. Sta.	R	M	83	45	5	100.0	0.0	0.0	1.0	60.0	13.8	74.7	5955	A-L
W-844-E	WARNER SEED CO.	R	ML	82	49	5	100.0	1.3	0.0	1.0	61.9	13.7	78.0	5864	A-M
Funk's 6012X	DELTA AND PINE LAND	R	M	84	45	4	100.0	0.3	0.0	2.3	61.9	15.3	76.4	5855	A-M
S.G. 922	Garrison Seed & Co.	R	ML	83	44	4	100.0	2.3	0.0	1.1	59.7	14.0	73.2	5849	A-M
CHECK 2	Tx. Agril. Exp. Sta.	R	M	84	46	3	91.7	0.3	0.0	1.6	61.8	13.6	77.5	5844	A-M
A1 x Tx430	Tx. Agril. Exp. Sta.	W	ML	83	48	3	96.7	6.7	0.0	1.4	60.2	14.9	72.8	5828	A-M
6670	Cargill Hybrid	R	ML	85	47	3	100.0	2.3	0.0	1.1	61.3	14.1	76.5	5826	A-M
ORO Amigo (Exp. 89	ORO Hybrids	R	ML	83	46	4	100.0	1.3	0.0	1.1	60.9	13.6	76.3	5822	A-M
DEKALB X-829	DEKALB-PFIZER GEN.	R	ML	85	50	5	100.0	1.3	0.0	1.1	61.9	14.6	75.0	5818	A-M
KS 737	New Northrup King	R	ML	83	44	6	100.0	1.3	0.0	1.1	61.7	14.7	77.1	5807	A-N
ORO BARON	ORO Hybrids	R	ML	85	45	3	93.3	0.3	0.0	1.9	61.7	13.6	77.3	5791	A-O
AOK11 x Tx430	Tx. Agril. Exp. Sta.	W	ML	82	49	6	100.0	3.3	0.0	2.3	60.0	14.3	75.7	5742	A-P
W-917-E	WARNER SEED CO.	R	L	84	50	4	88.3	0.0	0.0	1.7	62.3	13.8	78.9	5735	A-P
8500	Pioneer Hi-Bred	R	M	83	43	7	100.0	1.3	0.0	2.3	62.6	14.4	79.1	5723	A-P
A1 x Tx435	Tx. Agril. Exp. Sta.	W	ML	87	53	6	100.0	2.7	0.0	1.5	58.5	14.5	74.5	5695	B-Q
A1 x R2241	Tx. Agril. Exp. Sta.	W	ML	86	46	2	100.0	0.7	0.0	1.1	61.0	15.5	72.6	5687	B-Q
8452	Pioneer Hi-Bred	R	M	83	46	9	100.0	0.7	0.0	2.0	61.2	15.6	77.6	5672	B-Q

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1989

HYBRID (1)	COMPANY OR BRAND NAME	MATU- GRN RITY CLR CLASS (2) (3)	DAYS TO 50% FLOWER FLOWER	PLANT HT., IN.	HEAD EXSER- TION, IN.	% STAND	SMUT PER PLOT (4)	% MIDGE DAM- AGE	MDMV RAT. (5)	TEST WT.	MOIS- TURE %	THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., O.05 (6)	
5572	Cargill Hybrid	R	ML	84	46	3	100.0	1.3	0.0	1.1	60.5	14.0	74.9	5653	B-R
Wrangler II	Conlee Seed Co.	R	ML	86	48	3	83.3	0.0	0.0	2.0	60.3	14.6	75.3	5614	B-R
T-E Y-75	Taylor-Evans Seed	R	M	83	46	4	100.0	0.0	0.0	1.1	61.8	13.3	77.5	5596	B-R
X6038(X)	ASGROW SEED CO.	R	ML	86	46	3	95.0	0.0	5.0	1.1	62.1	15.1	74.7	5592	B-R
EXP. 3148X	GroAgri Seed Co.	R	M	84	39	1	91.7	0.0	0.0	1.5	57.2	14.0	73.8	5591	B-R
8379	Pioneer Hi-Bred	R	ML	83	43	5	93.3	0.0	0.0	1.0	62.9	14.6	78.0	5582	B-R
A.Tx378 x GR107-2	Tx. Agri. Exp. Sta.	R	ML	84	45	3	91.7	0.0	0.0	1.7	61.8	13.7	78.2	5551	B-R
NC+ 472	NC+ Hybrids	R	M	82	44	5	100.0	3.3	0.0	2.5	59.3	14.1	75.6	5543	B-R
2665	New Northrup King	R	ML	86	44	2	100.0	1.0	0.0	1.2	61.7	14.4	76.7	5528	B-R
A35 x Tx430	Tx. Agri. Exp. Sta.	R	ML	82	49	8	100.0	0.0	0.0	1.5	60.8	15.8	74.3	5505	B-R
A.Tx2755 x Tx2872	Tx. Agri. Exp. Sta.	W	ML	83	43	3	88.3	0.3	0.0	2.8	59.5	13.3	73.4	5436	C-R
4462	Cargill Hybrid	R	M	83	47	5	100.0	0.0	0.0	2.8	61.2	14.6	75.6	5398	C-R
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	87	49	2	100.0	2.0	0.0	1.1	61.2	15.0	75.1	5395	C-R
ST-3258	SeedTec, Div. NAPB	R	M	83	47	4	90.0	0.0	0.0	1.2	61.1	13.7	76.1	5383	C-S
CHECK 3	Tx. Agri. Exp. Sta.	R	M	84	42	2	96.7	0.3	0.0	1.7	62.2	13.8	75.6	5373	D-S
A1 x R.8503	Tx. Agri. Exp. Sta.	R	ML	85	49	1	100.0	2.7	0.0	3.2	61.1	15.3	74.2	5355	D-T
A.Tx629 x R.8503	Tx. Agri. Exp. Sta.	R	M	86	48	2	100.0	0.5	0.0	4.0	59.4	14.8	75.2	5355	D-T
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	89	55	3	100.0	0.0	0.0	1.5	62.3	15.2	76.6	5301	D-U
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	83	52	4	100.0	3.0	0.0	2.4	61.3	13.7	77.3	5298	D-V
8573	Pioneer Hi-Bred	R	ME	81	46	8	100.0	0.7	0.0	1.3	61.7	14.2	76.5	5294	D-V
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	89	46	1	93.3	6.7	0.0	1.7	60.6	14.6	74.7	5256	D-W
DEKALB X-832	DEKALB-PFIZER GEN.	W	ME	82	44	5	100.0	3.7	0.0	1.2	59.4	14.9	70.6	5253	D-W
X15276	Cargill Hybrid	R	M	86	42	3	100.0	1.0	0.0	1.3	62.7	14.6	77.2	5239	D-W
A35 x R2241	Tx. Agri. Exp. Sta.	R	ML	88	48	5	100.0	0.7	0.0	1.7	61.9	15.7	73.4	5201	E-X
T-E 42	Taylor-Evans Seed	R	ME	82	41	7	100.0	0.0	0.0	1.1	60.9	13.8	75.1	5150	F-X
Towhead	Conlee Seed Co.	W	ML	85	47	7	100.0	0.0	0.0	2.7	61.7	14.0	76.5	5145	F-X
ORO G XTRA	ORO Hybrids	R	ML	86	44	2	95.0	1.0	0.0	1.3	61.0	14.3	75.4	5120	G-X
SENECA	ASGROW SEED CO.	R	ME	78	39	7	100.0	0.0	0.0	1.0	61.3	13.6	75.1	5107	G-X
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	90	45	1	100.0	4.0	0.0	1.1	60.7	15.5	76.0	5071	H-X
X5049(X)	ASGROW SEED CO.	W	M	85	43	6	100.0	0.3	0.0	3.2	60.9	14.2	76.8	5012	I-Y
NC+ 371	NC+ Hybrids	W	M	83	44	6	100.0	0.0	0.0	2.1	61.1	15.0	74.1	4991	J-Z
A1 x Tx2794	Tx. Agri. Exp. Sta.	W	ML	82	47	4	91.7	6.7	0.0	1.2	59.7	15.1	71.4	4945	K-Z
A.Tx2752 X RTx430	Tx. Agri. Exp. Sta.	R	M	86	44	1	96.7	0.3	0.0	1.4	60.8	14.2	75.0	4925	K-Z
5521	Garst Seed Co.	R	M	83	43	3	100.0	2.0	0.0	1.3	59.8	13.9	71.6	4912	K-Z
Frontier F-200	Frontier Hybrids	R	E	79	43	7	86.7	1.0	0.0	1.4	58.5	13.0	77.1	4779	L-Z
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	84	46	2	100.0	6.0	0.0	3.8	60.7	13.9	78.3	4716	M-AA
RS610	Tx. Agri. Exp. Sta.	R	M	79	49	7	100.0	4.3	0.0	1.4	59.2	13.2	76.2	4703	M-AA
A1 x C3181	Tx. Agri. Exp. Sta.	W	ML	84	47	2	90.0	2.3	0.0	4.2	62.1	15.5	75.3	4619	N-AA
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	90	46	3	93.3	1.0	3.3	2.0	57.6	14.3	73.2	4608	O-AA
EXP. 3143X	GroAgri Seed Co.	R	ME	81	41	6	91.7	0.0	0.0	3.7	59.4	13.4	77.3	4572	P-AA
A1 x R.8507	Tx. Agri. Exp. Sta.	R	ML	86	46	2	95.0	0.5	0.0	3.0	61.2	14.5	73.0	4518	Q-AA
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	89	47	3	95.0	1.0	2.5	1.0	60.6	15.3	71.7	4485	R-AA

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1989

HYBRID (1)	COMPANY OR BRAND NAME	MATU- GRN RITY CLR CLASS (2) (3)	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION, IN.	% STAND	SMUT PER PLOT (4)	% MIDGE DAM- AGE	MDMV RAT. (5)	TEST WT.	MOIS- TURE % THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., 0.05 (6)	
XP5128	ASGROW SEED CO.	R M	84	42	5	83.3	0.7	0.0	2.9	61.4	14.5	73.7	4470	R-AA
A.Var x RTx435	Tx. Agri. Exp. Sta.	W M	88	51	3	100.0	0.0	0.0	1.6	60.5	13.4	74.5	4217	S-BB
T-E EMPIRE	Taylor-Evans Seed	R ME	86	39	4	95.0	0.7	1.7	1.2	60.2	14.7	74.8	4188	T-BB
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W M	89	53	4	90.0	3.3	5.0	1.4	58.9	14.6	71.9	4181	T-BB
EXP. 3147X	GroAgri Seed Co.	R ME	87	40	5	95.0	0.7	5.0	1.3	60.4	15.4	73.0	4141	U-BB
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R ML	89	40	2	83.3	0.0	3.3	1.6	58.3	14.7	70.4	4126	V-BB
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W M	88	49	2	90.0	4.7	3.3	1.3	58.2	14.2	73.9	4092	W-BB
T-E 35	Taylor-Evans Seed	R ME	82	38	6	93.3	0.3	0.0	2.7	59.9	13.3	75.5	4067	X-BB
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W M	91	69	1	80.0	0.5	12.5	2.3	60.4	14.4	68.4	3902	Y-BB
A.Tx2801 x Tx2876	Tx. Agri. Exp. Sta.	W ML	87	46	3	77.5	1.0	0.0	2.5	60.6	14.2	75.0	3839	Z-BB
A1 x GR107-PR687	Tx. Agri. Exp. Sta.	W ML	90	48	4	91.7	1.3	13.3	1.4	61.0	14.7	68.9	3590	AA-CC
W-902-W	WARNER SEED CO.	W L	90	52	2	80.0	6.3	10.0	2.5	58.2	14.5	68.0	3216	BB-CC
Frontier F-333Y	Frontier Hybrids	Y M	90	42	3	91.7	0.0	6.7	2.2	56.0	15.7	61.9	2765	CC

TEST MEAN= 5406  
 TEST C.V.=10.4  
 LSD .05= 906.9

Note: Hybrid name starting or ending with an "X" denotes a commercial experimental hybrid. Those hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Please contact respective seed companies for the availability of planting seed for the upcoming crop year.

1 HyPerformer HSC Wings, HSC Cherokee and Pioneer 8260 were entered as commercial check hybrids at our discretion. They are intended to be used for comparison purposes only.

2 Grain color designated by respective seed companies: R=Red W=White Y=Yellow M=Mixed

3 Maturity classification for hybrids designated by the respective seed companies.  
 E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

4 Smut counts were taken from the harvested area on all three replications and averaged for each hybrid.

5 Maize Dwarf Mosaic Virus (MDMV) rating were taken by Drs. R.W. Toler and C.W. Horne, Department of Plant Pathology and Microbiology Texas A&M University, College Station, Texas on June 1, 1989. Severity rating scale is as follows: 1=no symptoms; 2=mild mosaic; 3=severe chlorosis and stunting; 4=severe chlorosis, red leaf, and stunting; 5=dead plant

6 Duncan's multiple range test was used at the .05 level.

Table 7B. Three-year summary, Grain Sorghum Performance Test, Thrall, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
Funk's 6006X	DELTA AND PINE LAND COMPANY	1	6901	-	-	-	-
8278	Pioneer Hi-Bred International, Inc.	2	6650	-	-	-	-
Funk's RA-787	DELTA AND PINE LAND COMPANY	3	6565	-	-	-	-
dk 775	DOUGLASS W. KING COMPANY	4	6400	23	4350	-	-
Toro Optima	Big Crop Seed, Inc.	5	6392	-	-	-	-
ST-3308	SeedTec, Division of NAPB, Inc.	6	6348	54	3970	63	2995
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	7	6333	8	4589	25	2762
dk 760	DOUGLASS W. KING COMPANY	8	6298	39	4153	-	-
X4039(X)	ASGROW SEED COMPANY	9	6298	-	-	-	-
ST-D701G	SeedTec, Division of NAPB, Inc.	10	6282	7	4681	70	2911
Funk's G-1655	DELTA AND PINE LAND COMPANY	11	6226	-	-	-	-
A4R x Tx430	Tx. Agri. Exp. Stat.	12	6208	1	5166	45	3363
S9750	The New Northrup King	13	6186	15	4557	43	3363
5319	Garst Seed Company	14	6185	-	-	23	3791
8313	Pioneer Hi-Bred International, Inc.	15	6155	-	-	-	-
Rustler	Conlee Seed Company, Inc.	16	6150	4	4900	14	3970
S.G. 932	Garrison Seed & Company, Inc.	17	6094	12	4574	8	4276
ST-686	SeedTec, Division of NAPB, Inc.	18	6069	40	4133	3	4651
847	Cargill Hybrid Seeds	19	6060	-	-	-	-
dk 776	DOUGLASS W. KING COMPANY	20	6013	48	4074	-	-
T-E DINERO	Taylor-Evans Seed Company	21	5994	72	3551	53	3174
GSC 1313	GroAgri Seed Company	22	5985	-	-	7	4312
HSC Wings	HyPerformer Seed Company	23	5966	13	4573	21	3833
DEKALB DK-37	DEKALB-PFIZER GENETICS	24	5963	-	-	-	-
GS 712	ASGROW SEED COMPANY	25	5963	3	5010	22	3801
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	26	5955	32	4210	73	2829
W-844-E	WARNER SEED COMPANY, INC.	27	5864	6	4995	51	3258



Table 7B. Thrall, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
Funk's 6012x	DELTA AND PINE LAND COMPANY	28	5855	—	—	—	—
S.G. 922	Garrison Seed & Company, Inc.	29	5849	50	4045	29	3657
HSC Cherokee	HyPerformer Seed Company	30	5844	14	4568	9	4269
A1 x Tx430	Tx. Agri. Exp. Stat.	31	5828	30	4232	82	2146
6670	Cargill Hybrid Seeds	32	5826	31	4215	12	4120
ORO Amigo (Exp. 8906X)	ORO Hybrids	33	5822	—	—	—	—
DEKALB X-829	DEKALB-PFIZER GENETICS	34	5818	—	—	—	—
KS 737	The New Northrup King	35	5807	43	4127	—	—
ORO BARON	ORO Hybrids	36	5791	35	4195	6	4335
AOK11 x Tx430	Tx. Agri. Exp. Stat.	37	5742	—	—	—	—
W-917-E	WARNER SEED COMPANY, INC.	38	5735	22	4406	—	—
8500	Pioneer Hi-Bred International, Inc.	39	5723	—	—	—	—
A1x Tx435	Tx. Agri. Exp. Stat.	40	5695	2	5104	41	3374
A1 x R2241	Tx. Agri. Exp. Stat.	41	5687	17	4535	—	—
8452	Pioneer Hi-Bred International, Inc.	42	5672	64	3681	—	—
5572	Cargill Hybrid Seeds	43	5653	11	4581	19	3910
Wrangler II	Conlee Seed Company, Inc.	44	5614	59	3777	—	—
T-E Y-75	Taylor-Evans Seed Company	45	5596	25	4290	1	4983
X6038 (Y)	ASGROW SEED COMPANY	46	5592	—	—	—	—
EXP. 3148X	GroAgri Seed Company	47	5591	—	—	—	—
8379	Pioneer Hi-Bred International, Inc.	48	5582	—	—	—	—
A.Tx378 x GR107-2	Tx. Agri. Exp. Stat.	49	5551	—	—	—	—
NC+ 472	NC+ Hybrids	50	5543	—	—	—	—
2665	The New Northrup King	51	5528	21	4434	—	—
A35 x Tx430	Tx. Agri. Exp. Stat.	52	5505	75	3509	74	2808
A.Tx2755 x Tx2872	Tx. Agri. Exp. Stat.	53	5436	—	—	—	—
4462	Cargill Hybrid Seeds	54	5398	34	4199	37	3456

Table 7B. Thrall, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	55	5395	53	3980	42	3369
ST-3258	SeedTec, Division of NAPB, Inc.	56	5383	47	4076	-	-
8260	Pioneer Hi-Bred International, Inc.	57	5373	20	4480	-	-
A1 x R.8503	Tx. Agri. Exp. Stat.	58	5355	-	-	-	-
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	59	5355	52	4028	-	-
A.Var x 80C2241	Tx. Agri. Exp. Stat.	60	5301	-	-	-	-
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	61	5298	65	3678	68	2939
8573	Pioneer Hi-Bred International, Inc.	62	5294	-	-	-	-
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	63	5256	-	-	-	-
DEKALB X-832	DEKALB-PFIZER GENETICS	64	5253	-	-	-	-
X 15276	Cargill Hybrid Seeds	65	5239	-	-	-	-
A35 x R2241	Tx. Agri. Exp. Stat.	66	5201	-	-	-	-
T-E 42	Taylor-Evans Seed Company	67	5150	49	4053	-	-
Towhead	Conlee Seed Company, Inc.	68	5145	42	4131	-	-
ORO G XTRA	ORO Hybrids	69	5120	5	4888	48	3310
SENECA	ASGROW SEED COMPANY	70	5107	-	-	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	71	5071	58	3886	-	-
X5049(X)	ASGROW SEED COMPANY	72	5012	-	-	-	-
NC+ 371	NC+ Hybrids	73	4991	-	-	-	-
A1 x Tx2794	Tx. Agri. Exp. Stat.	74	4945	-	-	-	-
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	75	4925	28	4249	2	4970
5521	Garst Seed Company	76	4912	-	-	17	3923
FRONTIER F-200	Frontier Hybrids Inc.	77	4779	-	-	-	-
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	78	4716	36	4178	54	3149
RS610	Tx. Agri. Exp. Stat.	79	4703	83	3010	83	1819
A1 x C3181	Tx. Agri. Exp. Stat.	80	4619	-	-	-	-

Table 7B. Thrall, Texas. (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.8618 x RTx435	Tx. Agri. Exp. Stat.	81	4608	-	-	-	-
EXP. 3143X	GroAgri Seed Company	82	4572	-	-	-	-
A1 x R.8507	Tx. Agri. Exp. Stat.	83	4518	67	3623	-	-
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	84	4485	61	3713	-	-
XP 5128	ASGROW SEED COMPANY	85	4470	-	-	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	86	4217	-	-	-	-
T-E EMPIRE	Taylor-Evans Seed Company	87	4188	-	-	-	-
A.8610 x RTx435	Tx. Agri. Exp. Stat.	88	4181	-	-	-	-
EXP. 3147X	GroAgri Seed Company	89	4141	-	-	-	-
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	90	4126	68	3615	20	3851
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	91	4092	82	3026	49	3298
T-E 35	Taylor-Evans Seed Company	92	4067	-	-	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	93	3902	-	-	-	-
A.Tx2801 x Tx2876	Tx. Agri. Exp. Stat.	94	3839	-	-	-	-
A1 x GR107-PR687	Tx. Agri. Exp. Stat.	95	3590	-	-	-	-
W-902-W	WARNER SEED COMPANY, INC.	96	3216	-	-	-	-
FRONTIER F-333Y	Frontier Hybrids Inc.	97	2765	-	-	-	-
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	-	-	55	3957	75	2751
Number Entries:		97		83		90	
Test Mean Yield:			5407		4091		3432

Note: Hybrids with the same yield were ranked by computer.

TABLE 8. AGRONOMIC AND TEST INFORMATION: McKINNEY

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TEST:	1989 Dryland Grain Sorghum Performance Test
LOCATION:	Jerry Standerfer Farm
COOPERATORS:	Jerry Standerfer, Ken White, Dennis Pietsch, Randy Gaas, Leon Synatschk and Cloyce Coffman
SOIL TYPE:	Houston black clay
ROW WIDTH:	30"
PREVIOUS CROP:	Wheat
LAND PREPARATION:	Chiseled, disked (2), field cultivated
DATE PLANTED:	4-10-89, by hand
PLOT LENGTH:	30'
FERTILIZER:	50 lb/A Anhydrous Ammonia early Spring, 135 lb/A of 10-34-0 at planting, 100 lb/A of 32-0-0 sidedress
HERBICIDE:	1/2 lb/A AAtrex (Atrazine) + .8 lb/A Bladex (cyanazine) Broadcast pre-emerge
INSECTICIDE:	7 lb/A of Counter (turbufos) at planting
RAINFALL:	April = 1.57"; May = 9.64"; June = 12.11"; July = 7.78"; August = 2.05"; Total = 33.15"
IRRIGATIONS:	None
DATE HARVESTED:	8-17&18-89, by hand
SIZE HARVESTED PLOT:	1/500 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	92
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
MEAN PLANT POP.:	Plants were thinned to approximately 4 plants/foot
TEST MEAN:	4,690 lb/A; yields corrected to 13% moisture
TEST C.V.:	8.6 percent

**GENERAL INFORMATION:** This was the second year a grain sorghum performance test was conducted in this area which is representative of conditions in the Northern Blacklands of Texas. Above normal rainfall was recorded in the area, but distribution was not ideal for maximum grain sorghum production.

An optimum planting date was achieved and excellent plant stands were secured after thinning. Plant growth and development was good despite large amounts of rainfall.

The test mean yield was 4,691 lb/A compared to 5,465 lb/A in 1988. The incidence of lodging was very low. Insects were not a problem in the test.

Table 8A. GRAIN SORGHUM PERFORMANCE TEST;McKINNEY, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU-RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT. IN.	HEAD EXS. IN.	LODGE %	MIDGE DAM-AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS-TURE %	THRESH-ING %	YIELD lb/A	STAT. SIG., O.05 ****
A4R x Tx430	Tx. Agril. Exp. Sta.	R	ML	77	46	7	0	0.0	0.0	56.4	17.6	75.8	5759	A
A1 x R2241	Tx. Agril. Exp. Sta.	W	ML	79	51	7	0	0.0	0.0	56.9	19.0	74.4	5663	A-B
A1 x Tx430	Tx. Agril. Exp. Sta.	W	ML	79	50	4	0	0.0	0.0	55.2	18.3	72.4	5643	A-C
HSC Exp. 89-4	HyPerformer Seed	R	ML	78	50	5	0	0.0	0.0	60.2	17.9	78.3	5610	A-C
Funk's 6006X	DELTA AND PINE LAND	R	M	75	52	8	0	1.0	0.0	56.9	18.9	71.8	5543	A-D
Funk's RA-787	DELTA AND PINE LAND	R	ML	77	48	5	0	0.0	0.0	54.9	17.4	73.4	5536	A-D
ST-D701G	SeedTec, Div. NAPB	R	ML	77	48	6	0	0.0	0.0	56.9	17.8	74.1	5511	A-D
HSC Wings	HyPerformer Seed	R	ML	78	49	6	0	0.0	0.0	56.7	18.0	74.4	5467	A-E
ORO G XTRA	ORO Hybrids	R	ML	76	47	7	0	0.0	0.0	56.2	17.6	74.6	5453	A-E
GS712	ASGROW SEED CO.	R	ML	78	49	6	0	0.0	0.0	56.8	18.0	74.5	5447	A-F
ST-3258	SeedTec, Div. NAPB	R	M	77	46	5	0	0.0	0.0	58.1	17.2	77.1	5376	A-G
W-917-E	WARNER SEED CO.	R	L	75	52	7	0	0.0	0.0	59.5	17.6	76.2	5353	A-H
A1 x Tx435	Tx. Agril. Exp. Sta.	W	ML	81	50	8	0	0.0	0.0	53.8	17.7	73.0	5299	A-I
T-E Y-75	Taylor-Evans Seed	R	M	76	48	8	0	0.0	0.0	57.8	17.7	75.7	5292	A-J
847	Cargill Hybrid	R	ML	76	47	5	0	0.0	0.0	56.9	17.3	74.9	5291	A-J
A1 x Tx433	Tx. Agril. Exp. Sta.	R	ML	79	51	7	0	2.5	0.0	55.7	18.5	73.5	5291	A-J
HSC Exp. 89-3	HyPerformer Seed	R	M	75	47	6	0	0.0	0.0	56.9	17.4	75.5	5287	A-J
2665	New Northrup King	R	ML	76	43	4	0	0.0	0.0	57.0	17.8	73.9	5269	A-K
8278	Pioneer Hi-Bred	R	ML	74	46	5	0	0.0	0.0	56.3	17.4	72.8	5240	A-L
ORO Amigo (Exp. 8906X)	ORO Hybrids	R	ML	76	48	6	1	0.0	0.0	56.2	17.6	74.6	5217	A-M
A.Tx378 x RTx430	Tx. Agril. Exp. Sta.	R	M	76	55	7	0	0.0	0.0	56.0	17.4	75.5	5207	A-M
A1 x Tx2737	Tx. Agril. Exp. Sta.	W	ML	75	52	8	0	0.0	0.0	56.0	18.6	70.1	5206	A-M
ST-686	SeedTec, Div. NAPB	R	M	76	47	6	0	0.0	0.0	58.4	17.5	74.8	5175	A-N
Rustler	Conlee Seed Co.	R	ML	76	47	7	0	0.0	0.0	55.8	17.6	74.0	5175	A-N
A35 x R2241	Tx. Agril. Exp. Sta.	R	ML	80	55	13	0	0.0	0.0	58.6	19.6	72.5	5145	A-N
CHECK 3	Tx. Agril. Exp. Sta.			74	53	8	1	0.5	0.0	55.4	17.2	73.7	5136	A-N
W-844-E	WARNER SEED CO.	R	ML	76	48	7	0	0.0	0.0	58.3	17.5	75.1	5122	A-O
A.Tx399 x Tx2536	Tx. Agril. Exp. Sta.	R	M	75	43	6	0	0.0	0.0	52.8	16.9	73.5	5117	A-O
ORO BARON	ORO Hybrids	R	ML	76	47	6	0	0.0	0.0	57.5	17.5	74.7	5096	A-P
A.Tx399 x RTx430	Tx. Agril. Exp. Sta.	R	M	75	48	6	0	0.0	0.0	54.3	17.3	72.1	5091	A-Q
5572	Cargill Hybrid	R	ML	76	49	6	0	0.5	0.0	55.6	17.7	74.0	5084	A-Q
A.Tx631 x R.8511	Tx. Agril. Exp. Sta.	W	M	83	55	8	0	0.0	0.0	56.8	19.0	73.1	5027	A-R
X15276	Cargill Hybrid	R	M	82	46	6	0	0.0	0.0	59.3	18.3	75.1	5021	A-S
HSC Cherokee	HyPerformer Seed	R	M	76	48	7	0	0.0	0.0	57.7	17.5	76.3	5017	A-S
CHECK 1	Tx. Agril. Exp. Sta.			75	46	6	0	0.0	0.0	57.5	17.6	75.0	5009	A-S
DEKALB X-829(X)	DEKALB-PFIZER GEN.	R	ML	80	50	9	0	0.0	0.0	58.8	18.2	74.2	4999	A-T
Toro Mocho	Big Crop Seed, Inc.	B	ME	74	45	7	0	0.0	0.0	54.2	17.7	69.2	4976	A-T
CHECK 2	Tx. Agril. Exp. Sta.			76	45	8	0	1.0	0.0	54.7	17.7	72.8	4974	A-T
KS737	New Northrup King	R	ML	74	48	8	0	0.0	0.0	56.5	17.7	70.5	4971	A-T
8313	Pioneer Hi-Bred	R	ML	77	42	3	0	0.0	0.0	57.7	17.9	73.6	4965	A-U
A35 x Tx430	Tx. Agril. Exp. Sta.	R	ML	76	51	9	0	0.0	0.0	57.2	18.9	70.8	4954	A-U

Table 8A. GRAIN SORGHUM PERFORMANCE TEST;McKINNEY, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU-RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM-AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS-TURE %	THRESH-ING %	YIELD lb/A	STAT. SIG., O.05 ****
X6038(X)	ASGROW SEED CO.	R	ML	80	50	7	0	0.0	0.0	58.1	18.3	71.9	4921	B-U
A.Tx629 x R.8503	Tx. Agrl. Exp. Sta.	R	M	78	50	4	1	0.0	0.0	54.0	17.9	74.3	4869	B-V
Wrangler II	Conlee Seed Co.	R	ML	78	50	7	1	0.0	0.0	54.0	17.8	73.8	4832	B-W
A.Tx626 x R.8503	Tx. Agrl. Exp. Sta.	R	M	78	49	5	0	0.0	0.0	54.7	18.3	74.7	4830	B-W
DEKALB X-832(X)	DEKALB-PFIZER GEN.	W	ME	75	47	8	0	0.0	0.0	55.2	17.8	70.8	4821	C-W
DEKALB DK-37	DEKALB-PFIZER GEN.	R	E	72	48	9	0	0.0	0.0	55.1	17.5	71.5	4762	D-X
S.G. 822	Garrison Seed & Co.	Y	M	74	48	10	0	0.0	0.0	55.4	17.2	74.1	4751	D-X
DN 31	DyNA Seed Co.	R	M	76	44	6	0	0.0	0.0	55.5	17.5	72.7	4674	E-X
X4039(X)	ASGROW SEED CO.	R	ME	78	47	6	0	0.0	0.0	57.3	17.8	74.8	4661	E-X
Funk's G-1655	DELTA AND PINE LAND	R	M	76	45	4	0	0.0	0.0	59.3	18.1	73.4	4657	E-X
8573	Pioneer Hi-Bred	R	ME	74	46	8	0	0.0	0.0	58.0	17.4	73.4	4649	E-X
4462	Cargill Hybrid	R	M	75	48	7	0	0.0	0.0	56.2	17.5	73.5	4618	F-Y
W-632-W	WARNER SEED CO.	W	M	74	47	8	0	0.0	0.0	56.2	17.2	72.7	4595	G-Y
T-E 150X	Taylor-Evans Seed	R	E	74	41	6	0	0.0	0.0	55.6	17.2	71.2	4533	H-Z
HSC Honcho	HyPerformer Seed	R	ME	74	45	7	0	0.0	0.0	55.4	17.3	71.6	4533	H-Z
Towhead	Conlee Seed Co.	W	ML	76	48	8	1	0.0	0.0	55.5	17.4	74.1	4526	H-Z
A.Tx630 x R3338wx	Tx. Agrl. Exp. Sta.	W	ML	79	54	7	0	0.0	0.0	53.4	17.7	72.2	4516	I-Z
Funk's G-1492	DELTA AND PINE LAND	R	E	75	41	5	0	0.0	0.0	53.2	17.0	72.4	4495	I-Z
X5049	ASGROW SEED CO.	W	M	73	45	7	0	0.0	0.0	55.4	17.6	71.5	4490	I-Z
ST-3308	SeedTec, Div. NAPB	R	M	80	49	6	0	0.0	0.0	57.8	17.8	73.2	4456	J-AA
8379	Pioneer Hi-Bred	R	ML	73	45	6	0	0.0	0.0	57.5	17.5	73.7	4450	K-AA
S.G. 688	Garrison Seed & Co.	R	ME	72	50	10	0	0.0	0.0	55.4	17.8	70.7	4445	K-AA
8642X	New Northrup King	W	ML	74	43	6	0	1.0	0.0	56.0	17.3	72.9	4418	L-BB
T-E 35	Taylor-Evans Seed	R	ME	68	44	11	0	0.0	0.0	50.5	16.1	73.6	4402	M-BB
SENECA	ASGROW SEED CO.	R	ME	71	43	10	0	0.0	0.0	56.3	16.7	70.4	4346	N-BB
A1 x GR107-78	Tx. Agrl. Exp. Sta.	W	ML	82	51	6	0	2.0	0.0	56.6	18.9	69.4	4295	O-BB
A.Tx2752 x RTx430	Tx. Agrl. Exp. Sta.	R	M	81	45	6	1	7.5	0.0	56.5	18.2	72.2	4264	P-CC
T-E 42	Taylor-Evans Seed	R	ME	72	44	7	1	0.0	0.0	51.5	16.5	69.1	4261	Q-CC
A.Tx631 x R.8505	Tx. Agrl. Exp. Sta.	W	M	81	55	8	0	7.5	0.0	57.3	18.5	71.4	4240	R-CC
2244	New Northrup King	R	M	71	46	8	0	0.0	0.0	54.0	16.6	75.5	4223	R-CC
A.Var x RTx435	Tx. Agrl. Exp. Sta.	W	M	84	57	8	0	2.5	0.0	57.2	17.9	73.7	4198	R-CC
ORO Exp. 8903	ORO Hybrids	R	M	71	43	7	0	0.0	0.0	53.6	17.4	68.9	4190	S-CC
A1 x GR107-56	Tx. Agrl. Exp. Sta.	W	ML	79	45	5	0	5.0	0.0	56.2	18.2	69.0	4173	T-CC
8500	Pioneer Hi-Bred	R	M	71	45	9	0	0.0	0.0	58.6	17.4	71.7	4137	U-CC
XP5128	ASGROW SEED CO.	R	M	73	44	6	1	1.0	0.0	57.9	18.2	68.0	4084	V-CC
8452	Pioneer Hi-Bred	R	M	76	43	7	0	0.0	0.0	55.1	18.7	69.8	4074	V-CC
A.Tx2755 x Tx2873	Tx. Agrl. Exp. Sta.	R	ML	77	41	6	0	2.5	0.0	55.4	16.7	71.9	4064	V-CC
Frontier F-200	Frontier Hybrids	R	E	67	45	8	6	1.0	0.0	55.0	16.9	72.7	4052	V-CC
T-E EMPIRE	Taylor-Evans Seed	R	ME	72	44	7	0	0.0	0.0	53.4	17.4	69.4	4010	W-CC
A.Tx631 x 80C2241	Tx. Agrl. Exp. Sta.	W	M	83	55	7	0	10.0	0.0	56.2	18.9	68.9	4005	W-CC
A.8610 x RTx435	Tx. Agrl. Exp. Sta.	W	M	83	57	7	1	8.5	0.0	53.0	18.3	68.6	3986	X-CC

Table 8A. GRAIN SORGHUM PERFORMANCE TEST;McKINNEY, TEXAS 1989

HYBRID *	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLT. HT., IN.	HEAD EXS., IN.	LODGE %	MIDGE DAM- AGE %	BIRD DAMAGE %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	YIELD lb/A	STAT. SIG., 0.05 ****
RS610	Tx. Agri. Exp. Sta.	R	M	72	48	8	0	0.0	0.0	52.0	16.6	70.8	3945	X-CC
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	83	53	6	0	10.0	0.0	56.2	18.7	63.6	3819	Y-CC
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	87	80	7	13	12.5	0.0	58.4	18.2	69.0	3818	Y-CC
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	85	61	10	3	5.0	0.0	58.7	18.8	72.7	3765	Z-DD
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	82	49	7	1	2.5	0.0	54.7	17.8	66.2	3643	AA-DD
Frontier F-333Y	Frontier Hybrids	Y	E	79	46	6	0	1.0	0.0	53.1	17.9	68.9	3605	BB-DD
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	84	57	7	1	15.0	0.0	53.9	18.1	67.1	3456	CC-DD
X62830	SeedTec, Div. NAPB	R	L	84	57	6	0	12.5	0.0	57.1	18.3	67.0	3455	CC-DD
A.Tx626 x Tx2864	Tx. Agri. Exp. Sta.	R	ML	80	50	8	2	12.5	0.0	57.0	18.1	68.8	3045	DD-EE
W-902-W	WARNER SEED CO.	W	L	83	57	7	1	30.0	0.0	54.7	18.3	60.7	2499	EE

TEST MEAN= 4691 TEST C.V.= 8.6 LSD .05=568.3

Note: Hybrid name starting or ending with an "X" denote a commercial experimental. Hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Individuals may contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* East Texas 505, Asgrow OSAGE and East Texas 602 were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

\*\* Grain color designated by respective seed companies: R=Red W=White B=Brown M=Mixed.

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Duncan's multiple range test was used at the .05 level.



Table 8B. Two-year summary, Grain Sorghum Performance Test, McKinney, Texas.

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
A4R x Tx430	Tx. Agri Exp. Stat.	1	5759	25	5837
A1 x R2241	Tx. Agri Exp. Stat.	2	5663	21	5989
A1 x Tx430	Tx. Agri Exp. Stat.	3	5643	2	6300
HSC Exp. 89-4	HyPerformer Seed Company	4	5610	-	-
Funk's 6006X	DELTA AND PINE LAND COMPANY	5	5543	-	-
Funk's RA-787	DELTA AND PINE LAND COMPANY	6	5536	-	-
ST-D701G	SeedTec, Division of NAPB, Inc.	7	5511	17	6037
HSC Wings	HyPerformer Seed Company	8	5467	-	-
ORO G XTRA	ORO Hybrids	9	5453	-	-
GS712	ASGROW SEED COMPANY	10	5447	30	5757
ST-3258	SeedTec, Division of NAPB, Inc.	11	5376	-	-
W-917-E	WARNER SEED COMPANY	12	5353	-	-
A1 x Tx435	Tx. Agri Exp. Stat.	13	5299	1	6527
T-E Y-75	Taylor-Evans Seed Company	14	5292	-	-
847	Cargill Hybrid Seeds	15	5291	-	-
A1 x Tx433	Tx. Agri Exp. Stat.	16	5291	-	-
HSC Exp. 89-3	HyPerformer Seed Company	17	5287	-	-
2665	The New Northrup King	18	5269	3	6278
8278	Pioneer Hi-Bred International, Inc.	19	5240	-	-
ORO Amigo (Exp. 8906X)	ORO Hybrids	20	5217	-	-
A.Tx378 x RTx430	Tx. Agri Exp. Stat.	21	5207	19	6035
A1 x Tx2737	Tx. Agri Exp. Stat.	22	5206	-	-
ST-686	SeedTec, Division of NAPB, Inc.	23	5175	8	6144
Rustler	Conlee Seed Company, Inc.	24	5175	11	6092
A35 x R2241	Tx. Agri Exp. Stat.	25	5145	-	-

Table 8B. McKinney, Texas.

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
East Texas 505	East Texas Seed Company	26	5136	40	5534
W-844-E	WARNER SEED COMPANY, INC.	27	5122	6	6212
A.Tx399 x Tx2536	Tx. Agri Exp. Stat.	28	5117	46	5377
ORO BARON	ORO Hybrids	29	5096	29	5785
A.Tx399 x RTx430	Tx. Agri Exp. Stat.	30	5091	82	4463
5572	Cargill Hybrid Seeds	31	5084	31	5727
A.Tx 631 x R.8511	Tx. Agri Exp. Stat.	32	5027	-	-
X 15276	Cargill Hybrid Seeds	33	5021	-	-
HSC Cherokee	HyPerformer Seed Company	34	5017	-	-
OSAGE	ASGROW SEED COMPANY	35	5009	18	6036
DEKALB-X-829(X)	DEKALB-PFIZER GENETICS	36	4999	-	-
Toro Mocho	Big Crop Seed, Inc.	37	4976	-	-
East Texas 602	East Texas Seed Company	38	4974	33	5689
KS 737	The New Northrup King	39	4971	42	5481
8313	Pioneer Hi-Bred International, Inc.	40	4965	-	-
A35 x Tx430	Tx. Agri Exp. Stat.	41	4954	4	6267
X6038(x)	ASGROW SEED COMPANY	42	4921	-	-
A.Tx629 x R.8503	Tx. Agri Exp. Stat.	43	4869	56	5213
Wrangler II	Conlee Seed Company, Inc.	44	4832	53	5285
A.Tx626 x R.8503	Tx. Agri Exp. Stat.	45	4830	83	4379
DEKALB X-832 (x)	DEKALB-PFIZER GENETICS	46	4821	41	5498
DEKALB DK-37	DEKALB-PFIZER GENETICS	47	4762	73	4840
S.G. 822	Garrison Seed & Company, Inc.	48	4751	-	-
DN 31	DyNA Seeds, LTD	49	4674	55	5237
X4039(X)	ASGROW SEED COMPANY	50	6441	-	-

Table 8B. McKinney, Texas.

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
Funk's G-1655	DELTA AND PINE LAND COMPANY	51	4657	-	-
8573	Pioneer Hi-Bred International, Inc.	52	4649	-	-
4462	Cargill Hybrid Seeds, Inc.	53	4618	36	5630
W-632-W	WARNER SEED COMPANY, INC.	54	4595	22	5947
T-E 150X	Taylor-Evans Seed Company	55	4533	-	-
HSC Honcho	HyPerformer Seed Company	56	4533	-	-
Towhead	Conlee Seed Company, Inc.	57	4526	10	6093
A.Tx630 x R3338wx	Tx. Agri Exp. Stat.	58	4516	66	5027
Funk's G-1492	DELTA AND PINE LAND COMPANY	59	4495	-	-
X 5049	ASGROW SEED COMPANY	60	4490	-	-
ST-3308	SeedTec, Division of NAPB, Inc.	61	4456	45	5378
8379	Pioneer Hi-Bred International, Inc.	62	4450	-	-
S.G. 688	Garrison Seed & Company, Inc.	63	4445	-	-
8642X	The New Northrup King	64	4418	-	-
T-E 35	Taylor-Evans Seed Company	65	4402	77	4652
SENECA	ASGROW SEED COMPANY	66	4346	-	-
A1 x GR107-78	Tx. Agri Exp. Stat.	67	4295	-	-
A.Tx2752 x RTx430	Tx. Agri Exp. Stat.	68	4264	44	5467
T-E 42	Taylor-Evans Seed Company	69	4261	78	4595
A.Tx631 x R.8505	Tx. Agri Exp. Stat.	70	4240	12	6087
2244	The New Northrup King	71	4223	70	4920
A.Var x RTx435	Tx. Agri Exp. Stat.	72	4198	-	-
ORO Exp. 8903	ORO Hybrids	73	4190	-	-
A1 x GR107-56	Tx. Agri Exp. Stat.	74	4173	-	-
8500	Pioneer Hi-Bred International, Inc.	75	4137	-	-

Table 8B. McKinney, Texas.

HYBRID	COMPANY	1989		1988	
		RANK	YIELD	RANK	YIELD
XP 5128	ASGROW SEED COMPANY	76	4084	-	-
8452	Pioneer Hi-Bred International, Inc.	77	4074	14	6072
A.Tx2755 x Tx2873	Tx. Agri Exp. Stat.	78	4064	-	-
Frontier F-200	Frontier Hybrids Inc.	79	4052	-	-
T-E EMPIRE	Taylor-Evans Seed Company	80	4010	-	-
A.Tx631 x 80C2241	Tx. Agri Exp. Stat.	81	4005	32	5726
A.8610 x RTx435	Tx. Agri Exp. Stat.	82	3986	-	-
RS610	Tx. Agri Exp. Stat.	83	3945	68	4961
A.Tx631 x R.8504	Tx. Agri Exp. Stat.	84	3819	38	5601
A.Tx631 x Dorado	Tx. Agri Exp. Stat.	85	3818	-	-
A.Var x 80C2241	Tx. Agri Exp. Stat.	86	3765	-	-
A.8618 x RTx435	Tx. Agri Exp. Stat.	87	3643	-	-
Frontier F-333Y	Frontier Hybrids Inc.	88	3605	-	-
A.Tx631 x RTx435	Tx. Agri Exp. Stat.	89	3456	21	5866
X62830	SeedTec, Division of NAPB, Inc.	90	3455	7	6199
A.Tx626 x Tx2864	Tx. Agri Exp. Stat.	91	3045	-	-
W-902-W	WARNER SEED COMPANY, INC.	92	2499	-	-
Number Entries:		92		84	
Test Mean Yield:			4691		5466

Note: Hybrids with the same yields were ranked by computer.

**TABLE 9. AGRONOMIC AND TEST INFORMATION: LUBBOCK-IRRIGATED**

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<b>TEST:</b>	1989 Irrigated Grain Sorghum Performance Test
<b>LOCATION:</b>	Texas A&M University Agricultural Research and Extension Center, Lubbock, Texas
<b>COOPERATORS:</b>	Gary Peterson and Jerry Jones
<b>SOIL TYPE:</b>	Olton loam
<b>ROW WIDTH:</b>	40"
<b>PREVIOUS CROP:</b>	Cotton
<b>LAND PREPARATION:</b>	disked, chiseled, and bedded
<b>DATE PLANTED:</b>	5-15-89; cone planter
<b>DATE THINNED:</b>	6-7-89, to 3" spacing = 52,000 plants/A
<b>PLOT LENGTH:</b>	16'
<b>FERTILIZER:</b>	160-40-0
<b>HERBICIDE:</b>	1.5 lb/A A.I.Milogard (propazine) pre-emerge
<b>INSECTICIDE:</b>	Applied 7 lb/A of Counter 15G (terbufos) at planting for greenbug control
<b>RAINFALL:</b>	April = 0.02"; May = 0.40"; June = 4.91", July = 0.31"; August = 3.37"; September = 3.51"; Total = 12.52"
<b>IRRIGATIONS:</b>	5-1-89 (preplant); 6-24-89 = 4"; 7-23-89 = 5"
<b>DATE HARVESTED:</b>	10-10-89
<b>SIZE HARVESTED PLOT:</b>	Harvested 1/1000 acre from middle row of each plot
<b>TEST DESIGN:</b>	Randomized block
<b>NUMBER ENTRIES:</b>	91
<b>NUMBER REPLICATIONS:</b>	3
<b>NUMBER ROWS/PLOT:</b>	3
<b>TEST MEAN:</b>	5,202 lb/A; corrected to 13% moisture
<b>TEST C. V.:</b>	19.9 percent

**GENERAL INFORMATION:** Potential yields were probably reduced at this test site due to significant bird damage especially to those hybrids planted on the north and west side of the test block. The test mean yield was 5,202 lb/A which is 786 lb/A less than the past five-year average of 5,988 lb/A. Test weights were not obtained. The incidence of midge damage and lodging was very low. The 19.9% coefficient of variation indicates the high variability in the test.

Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	BIRD DAM- AGE %	LODG- ING %	MOIS- TURE %	GRAIN PER ACRE lb/A	STAT. SIG., 0.05 ****
dk 775	DOUGLASS W. KING	R	ML	75	46	2	20.0	0.0	9.2	6617	A
dk 760	DOUGLASS W. KING	R	ML	73	43	3	6.7	1.7	9.8	6611	A
2665	New Northrup King	R	ML	76	38	2	2.3	0.0	9.1	6448	A-B
ST-686	SeedTec, Div. NAPB	R	M	75	44	4	4.0	0.0	9.4	6375	A-B
GS712	ASGROW SEED CO.	R	ML	76	43	3	5.0	0.0	9.8	6347	A-B
ST-D701G	SeedTec, Div. NAPB	R	ML	74	40	3	1.7	0.0	8.9	6256	A-C
T-E DINERO	Taylor-Evans Seed	R	M	75	38	3	5.0	0.0	9.2	6245	A-C
A1 x R8505	Tx. Agri. Exp. Sta.	W	ML	75	42	3	0.0	0.0	9.4	6227	A-C
S.G. 942	Garrison Seed & Co.	R	ML	75	44	1	5.7	0.0	9.4	6106	A-D
Rustler	Conlee Seed Co.	R	ML	73	40	2	5.7	0.0	9.3	6076	A-E
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	77	50	4	3.3	1.7	9.9	5965	A-E
ORD BARON	ORD Hybrids	R	ML	76	41	3	5.0	0.0	9.6	5960	A-E
S.G. 925	Garrison Seed & Co.	R	M	73	38	1	10.0	0.0	9.1	5884	A-E
S9750	New Northrup King	R	L	72	40	2	9.0	0.0	8.8	5856	A-F
CHECK 2	Tx. Agri. Exp. Sta.	W	ML	76	42	4	0.7	0.0	9.6	5834	A-F
T-E Y-75	Taylor-Evans Seed	R	M	75	41	3	5.7	0.0	8.9	5833	A-F
A1 x Tx2817	Tx. Agri. Exp. Sta.	W	ML	73	47	4	2.3	0.0	10.0	5825	A-F
S.G. 932	Garrison Seed & Co.	R	ML	73	39	3	3.0	0.0	9.9	5821	A-F
T-E 76	Taylor-Evans Seed	R	ML	73	36	1	0.0	0.0	9.2	5770	A-F
Towhead	Conlee Seed Co.	W	ML	71	42	4	5.7	0.0	9.6	5734	A-F
GSC 1313	GroAgri Seed Co.	R	M	74	40	4	3.3	0.0	9.3	5714	A-F
A.Tx399 x Tx2737	Tx. Agri. Exp. Sta.	R	ML	76	37	2	2.3	0.0	9.4	5674	A-G
A.Var x RTx435	Tx. Agri. Exp. Sta.	W	M	76	46	4	0.7	1.7	9.4	5663	A-H
KS 737	New Northrup King	R	ML	76	38	3	13.3	0.0	9.0	5621	A-H
8379	Pioneer Hi-Bred	R	ML	73	35	2	1.7	0.0	9.6	5615	A-H
8313	Pioneer Hi-Bred	R	ML	75	44	2	18.3	0.0	9.2	5608	A-H
TOPAZ	ASGROW SEED CO.	R	M	75	37	3	6.7	0.0	9.5	5603	A-H
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	76	43	4	1.7	0.0	9.3	5600	A-H
5319	Garst Seed Co.	R	ML	73	41	3	6.7	0.0	10.0	5593	A-H
S.G. 944	Garrison Seed & Co.	R	ML	74	40	2	4.0	0.0	9.1	5577	A-H
DR 1125	Cargill Hybrid	R	ML	73	38	3	2.3	0.0	9.4	5569	A-H
WAC 715DR	SeedTec, Div. NAPB	R	ML	74	43	4	7.3	5.0	9.4	5540	A-H
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	77	45	5	13.3	0.0	9.5	5532	A-H
4462	Cargill Hybrid	R	M	73	40	3	13.3	0.0	9.7	5519	A-H
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	75	48	4	4.0	0.0	8.9	5508	A-H
8260	Pioneer Hi-Bred	R	ML	77	45	2	10.0	0.0	9.8	5506	A-H
8278	Pioneer Hi-Bred	R	ML	73	42	3	14.0	0.0	9.6	5488	A-H
A.Tx2752 x Tx2864	Tx. Agri. Exp. Sta.	R	ML	75	39	2	6.7	0.0	9.8	5476	A-H
A1 x (Tx430 x R9188)	Tx. Agri. Exp. Sta.	W	ML	73	42	3	0.0	0.0	9.5	5476	A-H

Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	BIRD DAM- AGE %	LODG- ING %	MOIS- TURE %	GRAIN PER ACRE 1b/A	STAT. SIG., 0.05 ****
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	73	37	3	6.7	0.0	9.7	5443	A-H
A1 x GR107B-78	Tx. Agri. Exp. Sta.	R	ML	72	45	4	8.3	0.0	10.0	5438	A-H
A4R x Tx430	Tx. Agri. Exp. Sta.	R	ML	68	40	4	28.3	0.0	10.0	5416	A-H
X6038(X)	ASGROW SEED CO.	R	ML	77	42	2	2.3	0.0	9.7	5399	A-H
XP5128(X)	ASGROW SEED CO.	R	M	76	38	3	3.3	0.0	9.0	5356	A-H
T-E Y-77	Taylor-Evans Seed	R	ML	73	39	2	18.3	0.0	9.6	5311	A-H
Frontier F-333Y	Frontier Hybrids	Y	M	74	40	3	4.0	0.0	9.7	5308	A-H
ORD G XTRA	ORD Hybrids	R	ML	75	39	2	1.3	0.0	8.8	5290	A-H
Frontier F-524	Frontier Hybrids	R	ML	75	41	3	19.0	0.0	9.4	5263	A-H
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	77	45	4	5.7	0.0	9.5	5263	A-H
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	73	38	2	5.0	0.0	10.1	5259	A-H
A.Tx629 x R8503	Tx. Agri. Exp. Sta.	R	M	69	45	3	13.3	0.0	9.4	5244	A-H
T-E Y-101-G	Taylor-Evans Seed	R	ML	75	36	3	4.0	0.0	10.0	5220	A-H
A.Tx378 x RTx430	Tx. Agri. Exp. Sta.	R	M	75	45	4	18.0	0.0	9.3	5216	A-H
8452	Pioneer Hi-Bred	R	M	68	35	2	28.3	0.0	9.1	5201	A-H
6670	Cargill Hybrid	R	ML	75	41	2	5.7	13.3	9.3	5174	A-H
A.Tx631 x 87BH8459	Tx. Agri. Exp. Sta.	W	ML	74	44	3	8.3	0.0	9.3	5154	A-H
X15277	Cargill Hybrid	R	ML	73	41	3	15.0	0.0	9.8	5152	A-H
A1 x Tx2737	Tx. Agri. Exp. Sta.	W	ML	68	40	1	11.7	0.0	9.8	5147	A-H
Exp. 3148x	GroAgri Seed Co.	R	ML	71	34	1	13.3	0.0	9.5	5137	A-H
W-844-E	WARNER SEED CO.	R	ML	76	38	3	0.0	0.0	9.6	5132	A-H
dk 776	DOUGLASS W. KING	R	ML	75	40	3	0.7	0.0	9.5	5107	A-H
A1 x TAM428	Tx. Agri. Exp. Sta.	W	ML	71	42	3	26.7	0.0	9.2	5071	A-H
T-E RANGER	Taylor-Evans Seed	R	ML	76	42	4	8.3	0.0	9.7	5065	A-H
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	72	41	3	0.7	1.7	9.5	5049	A-I
A1 x Tx2794	Tx. Agri. Exp. Sta.	W	ML	69	41	1	23.3	0.0	9.5	5030	A-I
847 (X77039)	Cargill Hybrid	R	ML	74	40	2	12.3	0.0	9.3	5002	A-I
A.0K11 x Tx430	Tx. Agri. Exp. Sta.	W	ML	69	40	2	20.7	0.0	9.6	4933	A-I
X5049(X)	ASGROW SEED CO.	W	M	76	41	4	6.7	0.0	10.1	4776	A-I
A.Var x 87BH8459	Tx. Agri. Exp. Sta.	W	ML	75	48	2	11.7	0.0	9.7	4746	A-I
X15276	Cargill Hybrid	R	M	75	37	3	9.0	0.0	9.5	4737	A-I
Toro Optima	Big Crop Seed, Inc.	R	ML	74	34	2	2.3	0.0	9.5	4734	A-I
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	75	37	2	8.3	0.0	9.4	4704	A-I
CHECK 1	Tx. Agri. Exp. Sta.	W	M	69	36	3	34.0	0.0	9.2	4647	A-I
A35 x Tx430	Tx. Agri. Exp. Sta.	R	ML	68	41	5	23.3	0.0	9.1	4623	A-I
A8201-2 x R6078	Tx. Agri. Exp. Sta.	R	ML	72	41	3	5.0	0.0	9.3	4598	A-I
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	69	47	5	18.3	0.0	9.1	4554	A-I
W-917-E	WARNER SEED CO.	R	L	74	42	2	30.0	0.0	9.5	4528	A-I



Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	BIRD DAM- AGE %	LODGE- ING %	MOIS- TURE %	GRAIN PER ACRE lb/A	STAT. SIG., 0.05 ****
A1 x R3224	Tx. Agri. Exp. Sta.	R	ML	73	40	3	40.0	0.0	9.9	4513	A-I
A1 x 86E0328	Tx. Agri. Exp. Sta.	R	ML	71	44	4	18.3	0.0	9.9	4412	B-I
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	75	43	4	0.0	0.0	8.9	4318	B-I
A1 x Tx2862	Tx. Agri. Exp. Sta.	R	ML	73	44	4	35.0	0.0	9.6	4302	B-I
W-902-W	WARNER SEED CO.	W	L	75	48	5	25.0	0.0	9.6	4182	C-I
A1 x Tx430	Tx. Agri. Exp. Sta.	W	ML	73	41	2	32.3	0.0	9.5	4048	D-I
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	70	40	3	30.0	6.7	9.6	4015	D-I
OSAGE	ASGROW SEED CO.	R	M	76	38	3	13.3	0.0	9.4	3993	D-I
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	76	46	4	25.0	1.7	9.3	3957	E-I
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	76	55	3	31.7	0.0	9.6	3726	F-I
A1 x Tx435	Tx. Agri. Exp. Sta.	W	ML	75	43	3	18.3	0.0	9.4	3540	G-J
A.Tx399 x Tx2863	Tx. Agri. Exp. Sta.	R	ML	73	36	2	5.0	0.0	9.7	3525	H-J
A.Tx626 x Tx2868	Tx. Agri. Exp. Sta.	R	ML	75	42	4	30.0	0.0	9.7	2957	I-J
RS610	Tx. Agri. Exp. Sta.	R	M	62	38	4	66.7	0.0	9.5	1827	J

TEST MEAN= 5202  
 TEST C.V.=19.9  
 LSD .05=1670.0

Note: Hybrid name starting or ending with an "X" denotes a commercial experimental hybrid. Those hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Please contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* NC+ Hybrids NC+ 271 and DeKalb DK-46 were entered as check hybrids at our discretion. They are intended to be used for comparison purposes only.

\*\* Grain color designated by respective seed companies: R=Red W=White B=Brown

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
 E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Duncan's multiple range test was used at the .05 level

Table 9B. Three-year summary, Irrigated Grain Sorghum Performance Test, Lubbock, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
dk 775	DOUGLASS W. KING COMPANY	1	6617	-	-	-	-
dk 760	DOUGLASS W. KING COMPANY	2	6611	-	-	-	-
2665	The New Northrup King	3	6448	14	7333	-	-
ST-686	SeedTec, Division of NAPB, Inc.	4	6375	-	-	64	5035
GS 712	ASGROW SEED COMPANY	5	6347	26	7097	76	4836
ST-D701G	SeedTec, Division of NAPB, Inc.	6	6256	84	6022	41	5460
T-E DINERO	Taylor-Evans Seed Company	7	6245	-	-	-	-
A1 x R.8505	Tx. Agri. Exp. Stat.	8	6227	6	7920	38	5491
S.G. 942	Garrison Seed & Company, Inc.	9	6106	-	-	-	-
Rustler	Conlee Seed Company, Inc.	10	6076	39	6714	21	5678
A.Var x 80C2241	Tx. Agri. Exp. Stat.	11	5965	-	-	-	-
ORO BARON	ORO Hybrids	12	5960	25	7099	70	4957
S.G. 925	Garrison Seed & Company, Inc.	13	5884	-	-	-	-
S 9750	The New Northrup King	14	5856	4	7996	-	-
NC+ 271	NC+ Hybrids	15	5834	31	6937	-	-
T-E Y-75	Taylor-Evans Seed Company	16	5833	22	7150	58	5226
A1 x Tx2817	Tx. Agri. Exp. Stat.	17	5825	-	-	-	-
S.G. 932	Garrison Seed & Company, Inc.	18	5821	9	7807	17	5762
T-E 76	Taylor-Evans Seed Company	19	5770	-	-	-	-
Towhead	Conlee Seed Company, Inc.	20	5734	69	6243	-	-
GSC 1313	GroAgri Seed Company	21	5714	-	-	52	5333
A.Tx399 x Tx2737	Tx. Agri. Exp. Stat.	22	5674	15	7312	37	5505
A.Var x RTx435	Tx. Agri. Exp. Stat.	23	5663	20	7214	-	-
KS 737	The New Northrup King	24	5621	38	6733	-	-
8379	Pioneer Hi-Bred International, Inc.	25	5615	-	-	-	-
8313	Pioneer Hi-Bred International, Inc.	26	5608	-	-	-	-
TOPAZ	ASGROW SEED COMPANY	27	5603	-	-	2	6386

Table 9B. Lubbock-Irrigated (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	28	5600	58	6457	-	-
5319	Garst Seed Company	29	5593	-	-	-	-
S.G. 944	Garrison Seed & Company, Inc.	30	5577	-	-	-	-
DR 1125	Cargill Hybrid Seeds	31	5569	27	7046	29	5603
WAC 715DR	SeedTec, Division of NAPB, Inc.	32	5540	3	8056	-	-
A.8618 x RTx435	Tx. Agri. Exp. Stat.	33	5532	-	-	-	-
4462	Cargill Hybrid Seeds	34	5519	-	-	-	-
A.Tx631 x RTX435	Tx. Agri. Exp. Stat.	35	5508	21	7211	50	5354
8260	Pioneer Hi-Bred International, Inc.	36	5506	83	6035	-	-
8278	Pioneer Hi-Bred International, Inc.	37	5488	-	-	-	-
A. Tx2752 x Tx2864	Tx. Agri. Exp. Stat.	38	5476	90	5807	-	-
A1 x (Tx430 x R9188)	Tx. Agri. Exp. Stat.	39	5476	-	-	-	-
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	40	5443	16	7308	36	5536
A1 GR107B-78	Tx. Agri. Exp. Stat.	41	5438	-	-	-	-
A4R x Tx430	Tx. Agri. Exp. Stat.	42	5416	8	7914	8	5970
X6038(x)	ASGROW SEED COMPANY	43	5399	-	-	-	-
XP5128(x)	ASGROW SEED COMPANY	44	5356	-	-	-	-
T-E Y-77	Taylor-Evans Seed Company	45	5311	-	-	-	-
Frontier F-333Y	Frontier Hybrids, Inc.	46	5308	-	-	-	-
ORO G XTRA	ORO Hybrids	47	5290	19	7251	22	5657
Frontier F-524	Frontier Hybrids, Inc.	48	5263	-	-	42	5459
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	49	5263	47	6622	-	-
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	50	5259	12	7441	15	5795
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	51	5244	13	7436	-	-
T-E Y-101-G	Taylor-Evans Seed Company	52	5220	81	6076	-	-
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	53	5216	1	8329	1	6437
8452	Pioneer Hi-Bred International, Inc.	54	5201	49	6608	-	-

Table 9B. Lubbock-Irrigated (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
6670	Cargill Hybrid Seeds	55	5174	46	6634	48	5360
A.Tx631 x 87BH8459	Tx. Agri. Exp. Stat.	56	5154	-	-	-	-
X15277	Cargill Hybrid Seeds	57	5152	-	-	-	-
A1 x Tx2737	Tx. Agri. Exp. Stat.	58	5147	-	-	-	-
EXP. 3148x	GroAgri Seed Company	59	5137	-	-	-	-
W-844-E	WARNER SEED COMPANY, INC.	60	5132	77	6151	81	4063
dk 776	DOUGLASS W. KING COMPANY	61	5107	-	-	-	-
A1 x TAM428	Tx. Agri. Exp. Stat.	62	5071	85	6020	32	5568
T-E RANGER	Taylor-Evans Seed Company	63	5065	-	-	-	-
A.Tx6312 x R.8504	Tx. Agri. Exp. Stat.	64	5049	18	7271	-	-
A1 x Tx2794	Tx. Agri. Exp. Stat.	65	5030	-	-	-	-
847 (X77039)	Cargill Hybrid Seeds	66	5002	-	-	-	-
A.OK11 x Tx430	Tx. Agri. Exp. Stat.	67	4933	-	-	-	-
X5049(x)	ASGROW SEED COMPANY	68	4776	-	-	-	-
A.Var x 87BH8459	Tx. Agri. Exp. Stat.	69	4746	-	-	-	-
X15276	Cargill Hybrid Seeds	70	4737	-	-	-	-
Toro Optima	Big Crop Seed, Inc.	71	4734	-	-	-	-
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	72	4704	28	7000	31	5583
DEKALB DK-46	DEKALB-PFIZER GENETICS	73	4647	23	7130	5	6073
A35 x Tx430	Tx. Agri. Exp. Stat.	74	4623	63	6357	54	5323
A8201-2 x R6078	Tx. Agri. Exp. Stat.	75	4598	53	6538	-	-
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	76	4554	93	5656	56	5243
W-917-E	WARNER SEED COMPANY, INC	77	4528	62	6366	-	-
A1 x R3224	Tx. Agri. Exp. Stat.	78	4513	73	6187	39	5489
A1 x 86EO328	Tx. Agri. Exp. Stat.	79	4412	-	-	-	-
A.8610 x RTx435	Tx. Agri. Exp. Stat.	80	4318	-	-	-	-

Table 9B. Lubbock-Irrigated (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A1 x Tx2862	Tx. Agri. Exp. Stat.	81	4302	—	—	—	—
W-902-W	WARNER SEED COMPANY, INC	82	4182	—	—	—	—
A1 x Tx430	Tx. Agri. Exp. Stat.	83	4048	55	6510	10	5914
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	84	4015	56	6484	75	4872
OSAGE	ASGROW SEED COMPANY	85	3993	32	6853	49	5357
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	86	3957	10	7740	59	5188
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	87	3726	—	—	—	—
A1 x Tx435	Tx. Agri. Exp. Stat.	88	3540	30	6956	7	6008
A.Tx399 x Tx2863	Tx. Agri. Exp. Stat.	89	3525	66	6322	—	—
A.Tx626 x Tx2868	Tx. Agri. Exp. Stat.	90	2957	—	—	—	—
RS610	Tx. Agri. Exp. Stat.	91	1827	86	5959	82	4020
S.G. 922	Garrison Seed & Company, Inc.	—	—	5	7986	20	5706
1022	Cargill Hybrid Seeds	—	—	11	7674	61	5106
A.Tx378 x RTx434	Tx. Agri. Exp. Stat.	—	—	33	6838	13	5836
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	—	—	34	6773	12	5850
A8201-2 x R3338wx	Tx. Agri. Exp. Stat.	—	—	35	6749	19	5727
A1 x R4317	Tx. Agri. Exp. Stat.	—	—	52	6546	3	6199
A1 x Tx433	Tx. Agri. Exp. Stat.	—	—	54	6534	34	5558
ST-3308	SeedTec, Division of NAPB, Inc.	—	—	60	5435	55	5303
A1 x R.8507	Tx. Agri. Exp. Stat.	—	—	67	6269	26	5637
Number of Entries:		91		96		82	
Test Mean Yield:			5202		6671		5401

Note: Hybrids with the same yield were ranked by computer.

TABLE 10. AGRONOMIC AND TEST INFORMATION: LUBBOCK-DRYLAND

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TEST:	1989 Dryland Grain Sorghum Performance Test
LOCATION:	Texas A&M University Agricultural Research and Extension Center, Lubbock, Texas
COOPERATOR:	Dr. Darrell T. Rosenow and Charles A. Woodfin
SOIL TYPE:	Amarillo fine sandy loam
ROW WIDTH:	40"
PREVIOUS CROP:	Dryland Grain Sorghum
LAND PREPARATION:	Shredded sorghum stalks from previous year and disc bedded twice on top of old beds. This was the 7th year that the same beds have been used with furrowed dikes maintained in every row essentially year round. Following planting, furrow dikes were re-established in every row.
DATE PLANTED:	6-23-89
DATE THINNED:	26,000 plants/acre: hand thinned to 6" plant spacing on July 10
PLOT LENGTH:	16'
FERTILIZER:	40-40-0 applied before planting
HERBICIDE:	1.6 lb/A Milogard (propazine)
INSECTICIDE:	7.0 lb/A Counter 15G (terbufos), 1/2 pint/A Lorsban for midge 8-30 and 9-6
RAINFALL:	May = .40"; June - 4.91"; July = .31"; August = 3.37"; September = 3.5"; October = 0: Total = 12.5"
IRRIGATIONS:	None - continuous dryland sorghum for the past 14 years
DATE HARVESTED:	11-3-89, harvested by hand and threshed with plot combine
SIZE HARVESTED PLOT:	1/1,000 acre, harvested middle of both plots
TEST DESIGN:	Restricted block
NUMBER ENTRIES:	86
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	2,401 lb/A; corrected to 13% moisture
TEST C. V.:	26.4 percent

**GENERAL INFORMATION:** An excellent dryland test with good plant stands, and no insect, disease or bird damage. Yields were excellent considering that there was no top or subsoil moisture until the 4.89 inches of rain in early-June. The crop yield potential was made on that moisture with mid-August and mid-September rainfall aiding in heading and grain development. August temperatures were rather mild. Pre-flowering drought stress was evident in some hybrids with ratings taken as indicated on the following table. Post-flowering stress was very mild except for maybe 1 or 2 hybrids.

Ten hybrids in the test produced over 3,000 lb/A The test mean yield was 2,401 lb.A compared to 2,530 lb/A in 1988.

Table 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (* )	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	DROUGHT STRESS RATING ****	LODGE %	TEST WT. lb/bu	MOIS- TURE %	GRAIN PER ACRE lb/A	STAT. SIG., 0.05 *****
ST-D701G	SeedTec, Div. NAPB	R	ML	61	36	0	1.8	1.3	58.8	12.1	3801	A
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	60	32	0	1.5	3.0	57.6	11.9	3794	A
5511	Garst Seed Co.	R	M	62	33	1	2.0	0.7	59.0	11.6	3444	A-B
T-E Y-60	Taylor-Evans Seed	W	ME	58	35	0	1.9	1.3	58.3	12.0	3261	A-C
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	62	36	1	2.2	2.3	57.7	11.6	3244	A-D
A.Tx631 x R.8505	Tx. Agri. Exp. Sta.	W	M	63	39	1	2.0	5.0	58.3	12.0	3228	A-D
8452	Pioneer Hi-Bred	R	M	58	33	1	1.6	2.3	59.5	12.5	3055	A-E
8500	Pioneer Hi-Bred	R	M	56	37	3	1.8	1.7	59.3	11.4	3049	A-E
A.Tx378 x RTx430	Tx. Agri. Exp. Sta.	R	M	62	39	1	2.4	7.0	57.6	11.7	3038	A-E
AOK11 x Tx430	Tx. Agri. Exp. Sta.	W	ML	63	38	1	1.8	2.3	58.0	11.8	3024	A-F
CHECK 1	Tx. Agri. Exp. Sta.	W	M	59	36	1	1.6	1.0	59.2	12.1	2988	A-G
X15277	Cargill Hybrid	R	ML	60	35	1	1.9	1.7	59.2	11.6	2988	A-G
A35 x Tx430	Tx. Agri. Exp. Sta.	R	ML	60	36	2	1.9	0.0	60.2	12.3	2952	A-H
847(X77039)	Cargill Hybrid	R	ML	63	33	0	2.2	1.0	59.3	11.7	2869	A-I
A1 x R8507	Tx. Agri. Exp. Sta.	R	ML	63	37	1	1.8	3.0	58.5	11.7	2866	A-I
A35 x Tx2862	Tx. Agri. Exp. Sta.	R	ML	64	34	2	2.0	1.0	59.7	12.6	2848	A-I
8573	Pioneer Hi-Bred	R	ME	56	35	2	1.5	3.3	59.8	11.8	2838	A-J
A1 x Tx2794	Tx. Agri. Exp. Sta.	W	ML	61	37	0	1.9	1.3	57.3	11.5	2785	A-K
A.Tx631 x R.8511	Tx. Agri. Exp. Sta.	W	M	63	38	1	2.4	6.0	58.6	12.1	2749	A-K
Rio Bravo	Western Heritage	R	ML	63	39	1	2.6	4.0	56.8	11.7	2733	A-L
A.Tx2755 x Tx2872	Tx. Agri. Exp. Sta.	R	ML	58	39	0	1.9	13.0	57.9	10.1	2727	A-L
A.Tx631 x Dorado	Tx. Agri. Exp. Sta.	W	M	66	49	0	2.4	4.3	56.4	10.8	2725	A-L
CHECK 2	Tx. Agri. Exp. Sta.	R	M	58	36	0	1.5	0.7	58.5	11.7	2723	A-L
A.Tx2801 x Tx2876	Tx. Agri. Exp. Sta.	W	ML	57	39	1	2.0	1.7	58.0	11.3	2697	A-L
A.Tx629 x R.8503	Tx. Agri. Exp. Sta.	R	M	61	36	1	2.1	1.7	58.0	11.8	2695	A-L
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	61	33	0	2.1	0.7	57.8	11.0	2686	A-L
DEKALB X-832 (X)	DEKALB-PFIZER GEN.	W	ME	58	36	0	1.7	0.7	58.5	11.4	2673	A-L
A.Tx399 x Tx2737	Tx. Agri. Exp. Sta.	R	ML	63	31	1	2.1	1.3	58.4	12.0	2668	A-L
dk 776	DOUGLASS W. KING	R	ML	62	34	0	2.3	3.0	59.3	11.6	2646	A-L
Frontier F-270	Frontier Hybrids	R	ME	56	34	0	2.0	9.7	57.7	10.9	2602	A-L
W-844-E	WARNER SEED CO.	R	ML	62	33	0	2.1	7.0	60.1	11.5	2598	A-L
ST-3308	SeedTec, Div. NAPB	R	M	64	36	1	1.9	2.0	59.3	11.8	2576	A-M
A1 x Tx430	Tx. Agri. Exp. Sta.	W	ML	61	39	1	1.9	1.0	58.1	11.7	2542	A-M
S.G. 822	Garrison Seed & Co.	Y	M	64	36	1	2.0	0.0	57.5	11.4	2531	A-M
2030	New Northrup King	R	E	55	32	2	1.9	0.7	58.0	10.5	2527	A-M
T-E 35	Taylor-Evans Seed	R	ME	60	29	1	2.2	2.3	57.2	11.1	2494	B-M
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	R	M	59	36	0	2.3	8.0	58.9	11.5	2494	B-M
DR1125	Cargill Hybrid	R	ML	61	30	0	2.4	1.7	57.4	11.0	2492	B-M
A.Tx631 x R.8504	Tx. Agri. Exp. Sta.	W	M	60	39	1	1.7	23.3	58.9	11.7	2492	B-M



Table 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (* )	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	DROUGHT STRESS RATING ****	LODGE %	TEST WT. lb/bu	MOIS- TURE %	GRAIN PER ACRE lb/A	STAT. SIG., 0.05 *****
ST-686	SeedTec, Div. NAPB	R	M	63	35	1	2.7	3.7	58.7	11.6	2481	B-M
A.Var x 80C2241	Tx. Agri. Exp. Sta.	W	M	68	38	0	2.4	0.7	58.7	12.1	2438	B-M
A1 x (Tx430 x R9188)	Tx. Agri. Exp. Sta.	W	ML	63	37	1	2.4	2.3	56.9	11.1	2427	B-M
A1 x Tx2737	Tx. Agri. Exp. Sta.	W	ML	59	37	0	2.2	1.3	57.1	11.3	2400	B-M
A1 x R3224	Tx. Agri. Exp. Sta.	R	ML	63	34	0	2.6	0.0	58.2	11.6	2400	B-M
W-632-W	WARNER SEED CO.	W	M	64	34	1	2.8	0.7	56.8	11.2	2378	B-M
XG2830	SeedTec, Div. NAPB	R	L	66	37	0	2.7	2.3	57.7	11.5	2359	B-M
T-E 42	Taylor-Evans Seed	R	ME	56	31	0	2.2	6.7	56.4	10.3	2333	B-M
A.Tx631 x 80C2241	Tx. Agri. Exp. Sta.	W	M	64	38	1	2.7	18.7	57.8	12.2	2327	B-M
ORO BARON	ORO Hybrids	R	ML	63	36	1	2.4	2.3	59.5	11.8	2294	B-M
SENECA	ASGROW SEED CO.	R	ME	57	32	1	2.0	2.0	60.1	11.8	2266	B-M
A1 x R.8503	Tx. Agri. Exp. Sta.	R	ML	60	35	1	2.3	2.7	58.4	11.3	2260	B-M
A.Tx3042 x Tx2737	Tx. Agri. Exp. Sta.	R	ME	56	35	2	1.9	2.0	57.8	10.9	2244	B-M
2656	New Northrup King	R	ML	60	34	0	1.9	0.7	59.3	11.5	2214	B-M
A1 x Tx7078	Tx. Agri. Exp. Sta.	R	M	56	31	1	2.0	2.3	57.5	10.8	2186	B-M
5517	Garst Seed Co.	R	ME	57	32	1	2.2	0.7	56.7	10.8	2181	B-M
RS610	Tx. Agri. Exp. Sta.	R	M	53	33	4	1.9	2.7	57.0	10.4	2179	B-M
X5049(X)	ASGROW SEED CO.	R	M	66	36	1	2.3	0.3	57.2	11.0	2167	B-M
X4039(X)	ASGROW SEED CO.	R	ME	61	33	1	2.4	1.0	59.2	11.3	2161	B-M
S.G. 688	Garrison Seed & Co.	R	ME	56	33	1	2.4	2.0	57.2	10.3	2145	B-M
A.Tx2755 x Tx2871	Tx. Agri. Exp. Sta.	R	ML	59	35	0	2.2	5.0	59.3	10.9	2140	B-M
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	64	40	2	2.4	2.0	56.6	10.9	2120	C-M
X31010C	Cargill Hybrid	R	ME	56	32	0	2.0	4.0	56.4	10.7	2112	C-M
A1 x Tx435	Tx. Agri. Exp. Sta.	W	ML	65	37	1	2.9	1.7	56.2	10.4	2101	C-M
Frontier F-333Y	Frontier Hybrids	Y	M	64	34	1	2.6	0.7	53.8	9.9	2096	C-M
A.Tx2755 x Tx2873	Tx. Agri. Exp. Sta.	R	ML	57	35	0	2.2	1.7	56.4	10.2	2077	C-M
Toro Mocho	Big Crop Seed, Inc.	R	ME	57	33	0	2.1	1.3	55.0	10.1	2058	C-M
Rio Grande	Western Heritage	R	ME	62	30	0	3.1	0.7	56.0	10.6	2004	C-M
A.Tx2801 x Tx2873	Tx. Agri. Exp. Sta.	W	ML	62	35	0	2.4	1.7	57.8	10.8	2000	C-M
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	64	41	1	2.5	0.7	57.6	10.9	1993	C-M
dk 775	DOUGLASS W. KING	R	ML	63	34	0	3.0	2.0	59.4	12.3	1975	C-M
T-E 150X	Taylor-Evans Seed	R	E	56	30	0	1.9	1.0	56.8	10.7	1961	C-M
Sprint	Richardson Seeds	R	E	52	36	2	1.6	9.7	55.1	10.1	1956	C-M
A35 x Tx2864	Tx. Agri. Exp. Sta.	R	ML	63	34	1	2.6	0.0	58.2	11.1	1945	D-M
EXP 3147	GroAgri Seed Co.	R	ME	58	29	0	2.3	0.7	57.9	10.8	1943	D-M
A35 x Tx435	Tx. Agri. Exp. Sta.	R	ML	66	36	2	3.1	0.0	56.9	11.1	1815	E-M
ORO G XTRA	ORO Hybrids	R	ML	63	32	1	3.2	0.7	57.6	11.1	1720	F-M
MADERA	ASGROW SEED CO.	R	E	55	27	1	2.0	0.3	56.1	10.4	1689	G-M

Table 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXSER- TION INCHES	DROUGHT STRESS RATING ****	LODGE %	TEST WT. lb/bu	MOIS- TURE %	GRAIN PER ACRE lb/A	STAT. SIG., 0.05 *****
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	64	39	1	3.0	1.7	54.1	10.5	1675	H-M
A35 x Tx2863	Tx. Agri. Exp. Sta.	R	ML	62	36	2	3.0	1.0	59.0	11.0	1639	I-M
TOPAZ	ASGROW SEED CO.	R	M	63	30	1	3.6	0.3	58.8	11.3	1606	I-M
40	Cargill Hybrid	R	ME	58	29	1	2.5	1.0	57.5	10.7	1575	I-M
A.8618 x RTx435	Tx. Agri. Exp. Sta.	W	M	68	34	0	3.4	0.7	54.4	11.2	1571	I-M
Frontier F-200	Frontier Hybrids	R	E	53	33	2	2.7	5.0	54.6	9.9	1533	J-M
XP5128(X)	ASGROW SEED CO.	R	M	66	31	0	3.3	0.0	58.5	11.3	1505	K-M
dk 760	DOUGLASS W. KING	R	ML	64	35	0	2.9	0.7	55.6	10.6	1437	L-M
A.Var x RTx435	Tx. Agri. Exp. Sta.	W	M	68	36	0	3.8	0.7	53.1	9.8	1278	M

TEST MEAN= 2401  
 TEST C.V.=26.4  
 LSD .05=1021

Note: Hybrid name starting or ending with an "X" denotes a commercial experimental hybrid. Those hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Please contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* DeKalb DK-41y and DeKalb DK-46 were entered as check hybrids at our discretion. They are intended to be used for comparison purposes only.

\*\* Grain color designated by respective seed companies: R=Red W=White B=Brown

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
 E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Pre-flowering drought stress ratings were taken from all three replications on a 1-5 scale by Dr. D. T. Rosenow and C. A. Woodfin. Rating key is: 1 = very good 5 = poor.

\*\*\*\*\* Duncan's multiple range test was used at the .05 level

Table 10B. Three-year summary, Dryland Grain Sorghum Performance Test, Lubbock, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
ST-D701G	SeedTec, Division of NAPB, Inc.	1	3801	51	2492	-	-
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	2	3794	58	2385	14	4296
5511	Garst Seed Company	3	3444	9	2908	-	-
T-E Y-60	Taylor-Evans Seed Company	4	3261	5	2931	3	4634
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	5	3244	31	2675	-	-
A.Tx631 x R. 8505	Tx. Agri. Exp. Stat.	6	3228	79	2114	36	3998
8452	Pioneer Hi-Bred International, Inc.	7	3055	1	3129	-	-
8500	Pioneer Hi-Bred International, Inc.	8	3049	-	-	-	-
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	9	3038	-	-	8	4381
A.OK11 x Tx430	Tx. Agri. Exp. Stat.	10	3024	-	-	-	-
DEKALB DK-41y	DEKALB-PFIZER GENETICS	11	2988	7	2918	-	-
X15277	Cargill Hybrid Seeds	12	2988	-	-	-	-
A35 x Tx430	Tx. Agri. Exp. Stat.	13	2952	-	-	-	-
847 (X77039)	Cargill Hybrid Seeds	14	2869	-	-	-	-
A1 x R.8507	Tx. Agri. Exp. Stat.	15	2866	83	2019	72	3533
A35 x Tx2862	Tx. Agri. Exp. Stat.	16	2848	-	-	-	-
8573	Pioneer Hi-Bred International, Inc.	17	2838	-	-	-	-
A1 x Tx2794	Tx. Agri. Exp. Stat.	18	2785	-	-	-	-
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	19	2749	-	-	-	-
Rio Bravo	Western Heritage Seed Company	20	2733	-	-	-	-
A.Tx2755 x Tx2872	Tx. Agri. Exp. Stat.	21	2727	-	-	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	22	2725	-	-	-	-
DEKALB DK-46	DEKALB-PFIZER GENETICS	23	2723	60	2369	70	3633
A.Tx2801 x Tx2876	Tx. Agri. Exp. Stat.	24	2697	-	-	-	-
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	25	2695	69	2275	-	-
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	26	2686	-	-	-	-

Table 10B. Lubbock-Dryland (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
DEKALB X-832(x)	DEKALB-PFIZER GENETICS	27	2673	—	—	—	—
A.Tx399 x Tx2737	Tx. Agri. Exp. Stat.	28	2668	12	2881	20	4172
dk 776	DOUGLASS W. KING COMPANY	29	2646	—	—	—	—
Frontier F-270	Frontier Hybrids Inc.	30	2602	—	—	12	4314
W-844-E	WARNER SEED COMPANY, INC.	31	2598	33	2664	—	—
ST-3308	SeedTec, Division of NAPB, Inc.	32	2576	3	3014	62	3769
A1 x Tx430	Tx. Agri. Exp. Stat.	33	2542	2	3085	10	4335
S.G. 822	Garrison Seed & Company, Inc.	34	2531	—	—	—	—
2030	The New Northrup King	35	2527	70	2250	—	—
T-E 35	Taylor-Evans Seed Company	36	2494	22	2768	—	—
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	37	2494	48	2517	57	3835
DR 1125	Cargill Hybrid Seeds	38	2492	14	2865	27	4097
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	39	2492	—	—	—	—
ST-686	SeedTec, Division of NAPB, Inc.	40	2481	20	2785	16	4284
A.Var x 80C2241	Tx. Agri. Exp. Stat.	41	2438	—	—	—	—
A1 x (Tx430 x R9188)	Tx. Agri. Exp. Stat.	42	2427	—	—	—	—
A1 x Tx2737	Tx. Agri. Exp. Stat.	43	2400	—	—	—	—
A1 x R3224	Tx. Agri. Exp. Stat.	44	2400	42	2581	60	3774
W-632-W	WARNER SEED COMPANY, INC.	45	2378	8	2912	—	—
X62380	SeedTec, Division of NAPB, Inc.	46	2359	13	2867	—	—
T-E 42	Taylor-Evans Seed Company	47	2333	63	2346	—	—
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	48	2327	27	2695	—	—
ORO BARON	ORO Hybrids	49	2294	34	2651	69	3637
SENECA	ASGROW SEED COMPANY	50	2266	—	—	—	—
A1 x R.8503	Tx. Agri. Exp. Stat.	51	2260	—	—	—	—
A.Tx3042 x Tx2737	Tx. Agri. Exp. Stat.	52	2244	61	2354	49	3882

Table 10B. Lubbock-Dryland (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
2656	The New Northrup King	53	2214	15	2831	-	-
A1 x Tx7078	Tx. Agri. Exp. Stat.	54	2186	44	2572	6	4463
5517	Garst Seed Company	55	2181	81	2086	25	4144
RS610	Tx. Agri. Exp. Stat.	56	2179	-	-	34	4044
X5049(x)	ASGROW SEED COMPANY	57	2167	-	-	-	-
X4039(x)	ASGROW SEED COMPANY	58	2161	-	-	-	-
S.G. 688	Garrison Seed & Company, Inc.	59	2145	56	2401	24	4145
A.Tx2755 x Tx2871	Tx. Agri. Exp. Stat.	60	2140	-	-	-	-
A.8610 x RTx435	Tx. Agri. Exp. Stat.	61	2120	-	-	-	-
X31010C	Cargill Hybrid Seeds	62	2112	-	-	-	-
A1 x Tx435	Tx. Agri. Exp. Stat.	63	2101	26	2698	21	4171
Frontier F-333Y	Frontier Hybrids, Inc.	64	2096	-	-	-	-
A.Tx2755 x Tx2873	Tx. Agri. Exp. Stat.	65	2077	28	2695	-	-
Toro Mocho	Big Crop Seed, Inc.	66	2058	-	-	-	-
Rio Grande	Western Heritage Seed Company	67	2004	-	-	-	-
A.Tx2801 x Tx2873	Tx. Agri. Exp. Stat.	68	2000	85	1791	9	4339
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	69	1993	59	2374	33	4049
dk 775	DOUGLASS W. KING COMPANY	70	1975	-	-	-	-
T-E 150X	Taylor-Evans Seed Company	71	1961	-	-	-	-
Sprint	RICHARDSON SEEDS, INC.	72	1956	-	-	-	-
A35 x Tx2864	Tx. Agri. Exp. Stat.	73	1945	-	-	-	-
EXP 3147	GroAgri Seed Company	74	1943	-	-	-	-
A35 x Tx435	Tx. Agri. Exp. Stat.	75	1815	65	2332	73	3532
ORO G XTRA	ORO Hybrids	76	1720	19	2792	23	4148
MADERA	ASGROW SEED COMPANY	77	1689	-	-	-	-
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	78	1675	16	2824	59	3793

Table 10B. Lubbock-Dryland (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A35 x Tx2863	Tx. Agri. Exp. Stat.	79	1639	-	-	-	-
TOPAZ	ASGROW SEED COMPANY	80	1606	-	-	-	-
40	Cargill Hybrid Seeds	81	1575	35	2642	15	4286
A.8618 x RTx435	Tx. Agri. Exp. Stat.	82	1571	-	-	-	-
Frontier F-200	Frontier Hybrids, Inc.	83	1533	-	-	-	-
XP5128(x)	ASGROW SEED COMPANY	84	1505	-	-	-	-
dk 760	DOUGLASS W. KING COMPANY	85	1437	-	-	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	86	1278	-	-	-	-
OSAGE	ASGROW SEED COMPANY	-	-	11	2888	31	4070
S.G. 922	Garrison Seed & Company, Inc.	-	-	18	2793	39	3963
A35 x Tx430	Tx. Agri. Exp. Stat.	-	-	21	2771	48	3885
W-695-E	WARNER SEED COMPANY, INC.	-	-	40	2584	56	3839
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	-	-	47	2523	74	3510
A.Tx3042 x Tx430	Tx. Agri. Exp. Stat.	-	-	49	2513	22	4168
Rawhide	Conlee Seed Company, Inc.	-	-	55	2413	75	3489
T45	Big Crop Seed, Inc.	-	-	68	2277	11	4334
T-E TUFF	Taylor-Evans Seed Company	-	-	73	2202	77	3371
1022	Cargill Hybrid Seeds	-	-	77	2130	5	4495
Number of Entries:		86		86		79	
Test Mean Yield:		2401		2530		3981	

Note: Hybrids with the same yields were ranked by computer.

TABLE 11. AGRONOMIC AND TEST INFORMATION: DUMAS

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TEST:	1989 Irrigated Grain Sorghum Performance Test
LOCATION:	Tri-C Farms
COOPERATORS:	Joe Cox, Kenneth Holloway, Dennis Pietsch, Randy Gaas, and Leon Synatschk
SOIL TYPE:	Sherman silty clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Wheat
LAND PREPARATION:	disked, sweep, chiseled, and bedded
DATE PLANTED:	5-25-89, by hand
DATE THINNED:	6-20-89; thinned to approximately 90,000 plants/acre
PLOT LENGTH:	30'
FERTILIZER:	Applied 250 lb/A anhydrous ammonia
HERBICIDE:	Applied 2.5 lb/A of AAtrex 90 (atrazine)
INSECTICIDE:	None
RAINFALL:	Estimated to be between 8-9" during growing season
IRRIGATIONS:	3 irrigations of approximately 4"/irrigation
DATE HARVESTED:	10-18-89, by hand
SIZE HARVESTED PLOT:	1/1,000 acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	88
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	3
TEST MEAN:	7,346 lb/A; yields corrected to 13% moisture
TEST C. V.:	7.3 percent

**GENERAL INFORMATION:** Proper management, good growing conditions, and a timely irrigation schedule were contributing factors that resulted in excellent yields at this test site. An optimum planting date was secured and a desirable plant population of approximately 90,000 plants per acre was attained at thinning. Rapid plant growth and development resulted from beneficial rainfall and a timely irrigation schedule.

The test mean yield was 7,346 lb/A with six hybrids producing over 8,000 lb/A. It is interesting to note that four of the top five producers in the test were white (W) sorghums. Bird and midge damage was not a problem in the test. The incidence of lodging was low with the exception of one hybrid in which 86.7% of the plants were lodged. This was a very uniform test as indicated by the low coefficient of variation of 7.3%.



Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXS., IN.	LODG- ING %	STAND %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., O.05 ****
A.Var x 80C2241	Tx. Agril. Exp. Sta.	W	M	83	64	9	0.0	100.0	58.7	20.1	74.9	8650	A
A.Tx631 x Dorado	Tx. Agril. Exp. Sta.	W	M	75	74	3	86.7	95.0	60.6	13.5	77.2	8259	A-B
S.G. 942	Garrison Seed & Co.	R	ML	76	53	2	0.0	96.7	60.3	15.1	76.4	8222	A-C
A.Tx631 x R.8511	Tx. Agril. Exp. Sta.	W	M	77	56	6	0.0	100.0	58.2	17.7	72.5	8220	A-C
A.Tx631 x R.8505	Tx. Agril. Exp. Sta.	W	M	76	53	9	0.0	96.7	58.3	17.1	70.9	8148	A-D
9344	Richardson Seeds	R	L	77	53	5	1.7	100.0	60.4	14.8	77.2	8103	A-E
8379	Pioneer Hi-Bred	R	ML	73	42	5	0.0	100.0	61.0	13.7	74.2	7987	A-F
dk 775	DOUGLASS W. KING	R	ML	75	50	2	0.0	100.0	60.5	15.1	76.6	7945	A-G
A.Tx631 x 80C2241	Tx. Agril. Exp. Sta.	W	M	78	55	8	0.0	95.0	57.7	17.9	71.0	7916	A-G
CHECK 1	Tx. Agril. Exp. Sta.	W	M	75	50	4	0.0	100.0	59.3	15.7	72.5	7899	A-G
A.8618 x RTx435	Tx. Agril. Exp. Sta.	W	M	75	49	7	0.0	100.0	58.0	13.5	74.2	7890	A-G
A.Tx378 x RTx430	Tx. Agril. Exp. Sta.	R	M	74	57	6	0.0	100.0	59.1	12.9	73.1	7876	A-H
A1 x R2241	Tx. Agril. Exp. Sta.	W	ML	75	52	7	0.0	100.0	57.9	16.3	67.5	7861	A-H
W-917-E	WARNER SEED CO.	R	L	74	53	5	7.3	100.0	60.0	12.7	77.5	7822	A-I
X6038(X)	ASGROW SEED CO.	R	ML	83	52	5	0.0	100.0	58.6	17.8	71.0	7770	A-J
ST-686	SeedTec, Div. NAPB	R	M	75	48	6	0.0	100.0	59.2	12.8	75.6	7730	A-J
A.Tx629 x R.8503	Tx. Agril. Exp. Sta.	W	M	74	51	5	0.0	96.7	59.2	12.8	74.8	7726	A-J
A.Var x RTx435	Tx. Agril. Exp. Sta.	W	M	76	56	9	0.0	100.0	58.8	15.1	74.5	7668	A-J
8313	Pioneer Hi-Bred	R	ML	74	48	3	0.0	100.0	60.4	15.2	73.5	7658	A-J
TOPAZ	ASGROW SEED CO.	R	M	73	46	6	0.0	100.0	59.9	13.6	71.1	7638	A-J
Toro Maxima	Big Crop Seed, Inc.	R	ML	75	49	5	0.0	100.0	57.8	13.7	68.5	7607	A-J
A.Tx2752 x Tx2866	Tx. Agril. Exp. Sta.	R	ML	78	48	6	0.0	100.0	55.6	17.8	67.3	7581	A-J
8278	Pioneer Hi-Bred	R	ML	76	47	3	0.0	100.0	59.5	13.5	75.7	7568	A-K
GS712	ASGROW SEED CO.	R	ML	76	49	4	0.0	100.0	58.7	13.5	69.9	7551	B-K
CHECK 3	Tx. Agril. Exp. Sta.	W	M	74	44	5	0.0	100.0	58.7	15.2	69.3	7539	B-K
ST-3308	SeedTec, Div. NAPB	R	M	74	48	4	0.0	100.0	60.1	12.7	74.4	7522	B-K
ST-D701G	SeedTec, Div. NAPB	R	M	75	49	4	0.0	100.0	58.9	13.4	70.4	7512	B-K
W-902-W	WARNER SEED CO.	W	L	74	54	7	0.0	100.0	58.0	13.8	72.7	7500	B-K
S9750	New Northrup King	R	L	76	49	4	0.0	100.0	58.1	15.0	70.9	7497	B-K
9300	Richardson Seeds	R	ML	74	48	5	0.0	100.0	59.7	12.3	74.9	7496	B-K
A1 x Tx430	Tx. Agril. Exp. Sta.	W	ML	73	52	5	0.0	100.0	57.5	12.9	65.8	7488	B-K
Towhead	Conlee Seed Co.	W	ML	74	47	7	0.0	100.0	59.4	15.3	71.5	7453	B-L
847 (X77039)	Cargill Hybrid	R	ML	75	49	4	0.0	100.0	59.7	12.3	75.2	7429	B-M
T-E Y-77E	Taylor-Evans Seed	R	ML	75	49	4	0.0	100.0	59.2	14.0	71.5	7412	B-M
A.Tx631 x R.8504	Tx. Agril. Exp. Sta.	W	M	73	52	7	0.0	100.0	59.9	13.4	69.5	7397	B-M
6670	Cargill Hybrid	R	ML	76	50	4	0.0	100.0	58.2	13.9	68.7	7370	B-M
W-844-E	WARNER SEED CO.	R	ML	76	48	5	0.0	100.0	59.6	13.2	75.1	7365	B-M
S.G. 944	Garrison Seed & Co.	R	ML	74	50	4	0.0	96.7	59.5	14.6	73.0	7355	B-M
447W	Jacques Seed Co.	W	ML	74	47	7	0.0	100.0	59.8	14.8	71.7	7355	B-M

Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXS., IN.	LODG- ING %	STAND %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., O.05 ****
XP5128(X)	ASGROW SEED CO.	R	M	76	46	6	0.0	100.0	60.9	13.1	73.5	7351	B-M
OSAGE	ASGROW SEED CO.	R	M	75	47	5	0.0	100.0	60.0	12.3	76.8	7339	B-M
AgriPro AP985G	AgriPro Seeds	R	ML	76	49	5	0.0	100.0	58.8	13.7	71.1	7329	B-M
8260	Pioneer Hi-Bred	R	ML	77	46	5	0.0	100.0	60.0	15.2	72.2	7312	B-M
A.Tx2752 x RTx430	Tx. Agri. Exp. Sta.	R	M	75	51	5	0.0	100.0	58.5	14.2	69.5	7301	B-M
GSC 1313	GroAgri Seed Co.	R	ML	75	48	5	0.0	100.0	59.2	12.2	74.4	7297	B-M
EXP 3150X	GroAgri Seed Co.	R	ML	75	48	5	0.0	100.0	57.8	14.0	71.1	7288	B-M
A.8610 x RTx435	Tx. Agri. Exp. Sta.	W	M	74	56	9	0.7	100.0	58.1	13.1	72.3	7282	B-M
dk 760	DOUGLASS W. KING	R	ML	75	49	6	0.0	100.0	58.4	13.7	69.6	7278	B-M
A.Tx2752 x Tx2859	Tx. Agri. Exp. Sta.	R	ML	76	50	6	0.0	100.0	60.0	13.3	72.6	7266	B-M
X5049(X)	ASGROW SEED CO.	W	M	75	46	7	0.0	100.0	60.0	14.0	72.4	7253	B-M
A.Tx631 x RTx435	Tx. Agri. Exp. Sta.	W	M	74	56	8	0.0	100.0	58.4	12.7	73.7	7242	B-M
T-E Y-75	Taylor-Evans Seed	R	M	75	46	5	0.0	100.0	59.9	12.1	75.3	7235	B-M
T-E Y-101-G	Taylor-Evans Seed	R	ML	74	43	5	0.7	100.0	58.3	13.6	70.3	7221	B-M
AgriPro AP984G	AgriPro Seeds	C	ML	75	47	5	0.0	100.0	59.3	14.9	70.5	7219	B-M
Frontier F-524	Frontier Hybrids	R	ML	76	48	5	0.0	95.0	57.0	16.3	66.8	7215	B-M
DN31	DyNA Seeds	R	M	74	45	5	0.0	96.7	57.1	13.5	68.2	7209	B-M
Toro Optima	Big Crop Seed, Inc.	R	ML	74	48	5	0.0	100.0	57.5	12.4	68.8	7202	B-M
dk 776	DOUGLASS W. KING	R	ML	74	47	5	0.0	100.0	59.4	12.0	75.7	7202	B-M
S.G. 932	Garrison Seed & Co.	R	ML	75	49	5	0.0	100.0	59.0	13.2	70.8	7202	B-M
ORO BARON	ORO Hybrids	R	ML	76	49	5	0.0	100.0	58.5	12.9	73.7	7194	B-M
KS 737	New Northrup King	R	ML	73	46	5	0.0	100.0	59.7	13.2	70.2	7194	B-M
ORO G XTRA	ORO Hybrids	R	ML	76	50	6	0.0	100.0	58.6	13.4	68.6	7172	B-M
A.Tx2752 x Tx2864	Tx. Agri. Exp. Sta.	R	ML	74	46	5	0.0	100.0	58.2	14.1	67.8	7129	C-M
2665	New Northrup King	R	ML	76	44	3	0.0	100.0	58.8	14.5	70.0	7113	C-M
DEKALB DK-66	DEKALB-PFIZER GEN.	R	L	83	55	5	5.7	100.0	58.9	15.2	76.2	7112	C-M
A.Tx626 x R.8503	Tx. Agri. Exp. Sta.	W	M	73	50	6	0.0	95.0	59.9	12.6	77.1	7103	D-M
377W	Jacques Seed Co.	W	M	70	47	6	3.3	100.0	58.8	13.5	65.6	7080	D-M
630	Cargill Hybrid	R	ME	70	45	5	0.7	100.0	59.6	13.3	67.3	7073	D-M
W-632-W	WARNER SEED CO.	W	M	74	46	6	0.0	100.0	59.7	14.3	70.5	7037	D-M
Frontier F-333Y	Frontier Hybrids	Y	M	74	47	5	0.0	100.0	56.6	13.3	67.3	7020	E-M
T-E DINERO	Taylor-Evans Seed	R	M	76	46	5	0.0	100.0	56.5	13.5	66.2	7005	E-M
AgriPro AP979G	AgriPro Seeds	R	ML	75	47	3	0.0	100.0	59.2	12.5	74.1	6993	E-M
CHECK 2	Tx. Agri. Exp. Sta.	R	ML	76	49	4	0.0	100.0	57.9	13.8	67.1	6950	F-M
AgriPro AP965G	AgriPro Seeds	R	ML	76	48	6	0.0	100.0	56.5	13.1	67.0	6941	F-M
A1 x Tx2737	Tx. Agri. Exp. Sta.	W	ML	74	44	5	0.0	100.0	58.8	13.2	69.4	6934	F-M
A.Tx399 x Tx2536	Tx. Agri. Exp. Sta.	R	ML	74	42	6	0.0	100.0	53.2	14.6	64.1	6912	F-M
606E	Jacques Seed Co.	R	L	75	48	6	0.0	100.0	58.6	13.8	69.8	6883	F-M

Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1989

HYBRID (*)	COMPANY OR BRAND NAME	GRN CLR **	MATU- RITY CLASS ***	DAYS TO 50% FLOWER	PLANT HT., IN.	HEAD EXS., IN.	LODG- ING %	STAND %	TEST WT. lb/bu	MOIS- TURE %	THRESH- ING %	GRAIN PER ACRE, LBS.	STAT. SIG., 0.05 ****
Rustler	Conlee Seed Co.	R	ML	75	50	7	0.0	100.0	58.2	13.7	69.4	6865	G-M
EXP 3148X	GroAgri Seed Co.	R	ML	75	45	3	0.0	100.0	55.9	12.7	68.4	6864	G-M
CHECK 4	Tx. Agri. Exp. Sta.			74	45	5	0.0	100.0	58.2	13.1	69.3	6842	G-M
A.Tx399 x RTx430	Tx. Agri. Exp. Sta.	R	M	74	47	6	0.0	100.0	57.0	12.7	68.3	6829	G-M
A.Tx630 x R3338wx	Tx. Agri. Exp. Sta.	W	ML	72	55	5	1.7	100.0	60.2	12.7	72.9	6772	H-M
T-E 76	Taylor-Evans Seed	R	ML	74	44	2	0.0	100.0	56.6	12.3	68.9	6726	I-M
X31010C	Cargill Hybrid	R	ME	70	41	5	0.0	100.0	58.3	13.1	67.1	6690	J-M
A.Tx399 x Tx2737	Tx. Agri. Exp. Sta.	R	ML	72	48	6	5.7	100.0	58.9	13.3	63.4	6663	J-M
CHECK 5	Tx. Agri. Exp. Sta.			71	46	3	0.7	100.0	59.6	12.9	67.5	6460	K-M
40	Cargill Hybrid	R	ME	71	40	5	0.0	96.7	59.4	12.4	67.6	6358	L-M
RS610	Tx. Agri. Exp. Sta.	R	M	68	48	8	15.0	96.7	56.4	12.0	67.7	6336	M

TEST MEAN= 7346 TEST C.V.= 7.3 LSD .05= 868.7

Note: Hybrid name starting or ending with an "X" denotes a commercial experimental hybrid. Those hybrids entered by the Texas Agricultural Experiment Station are either in the experimental stage or being tested as experimental check hybrids. Please contact respective seed companies for the availability of planting seed for the upcoming crop year.

\* Golden Harvest Ex 3355, H-5200, Delta and Pine Land Funk's G-1711, Northrup King 2778 and Funks G-550 were entered as check hybrids at our discretion. They are intended to be used for comparison purposes only.

\*\* Grain color designated by respective seed companies: R=Red W=White M=Mixed

\*\*\* Maturity classification for hybrids designated by the respective seed companies.  
E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

\*\*\*\* Duncan's multiple range test was used at the .05 level.

Table 11B. Three-year summary, Grain Sorghum Performance Test, Dumas, Texas.

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A.Var x 80C2241	Tx. Agri. Exp. Stat.	1	8650	-	-	-	-
A.Tx631 x Dorado	Tx. Agri. Exp. Stat.	2	8259	-	-	-	-
S.G. 942	Garrison Seed & Company Inc.	3	8222	-	-	-	-
A.Tx631 x R.8511	Tx. Agri. Exp. Stat.	4	8220	6	8171	-	-
A.Tx631 x R.8505	Tx. Agri. Exp. Stat.	5	8148	1	8524	1	7480
9344	Richardson Seeds, Inc.	6	8103	-	-	-	-
8379	Pioneer Hi-Bred International, Inc.	7	7987	-	-	-	-
dk 775	DOUGLASS W. KING COMPANY	8	7945	-	-	-	-
A.Tx631 x 80C2241	Tx. Agri. Exp. Stat.	9	7916	29	7729	-	-
CHECK 1	Tx. Agri. Exp. Stat.	10	7899	-	-	-	-
A.8618 x RTx435	Tx. Agri. Exp. Stat.	11	7890	-	-	-	-
A.Tx378 x RTx430	Tx. Agri. Exp. Stat.	12	7876	58	7281	11	6989
A1 x R2241	Tx. Agri. Exp. Stat.	13	7861	65	7042	17	6813
W-917-E	WARNER SEED COMPANY INC.	14	7822	8	8122	-	-
X6038(x)	ASGROW SEED COMPANY	15	7770	-	-	-	-
ST-686	SeedTec, Div. of NAPB, Inc.	16	7730	10	8095	26	6714
A.Tx629 x R.8503	Tx. Agri. Exp. Stat.	17	7726	62	7164	-	-
A.Var x RTx435	Tx. Agri. Exp. Stat.	18	7668	-	-	-	-
8313	Pioneer Hi-Bred International, Inc.	19	7658	-	-	-	-
TOPAZ	ASGROW SEED COMPANY	20	7638	19	7871	-	-
Toro Maxima	Big Crop Seed, Inc.	21	7607	60	7244	-	-
A.Tx2752 x Tx2866	Tx. Agri. Exp. Stat.	22	7581	-	-	-	-
8278	Pioneer Hi-Bred International, Inc.	23	7568	-	-	-	-
GS 712	ASGROW SEED COMPANY	24	7551	39	7559	-	-
CHECK 2	Tx. Agri. Exp. Stat.	25	7539	-	-	-	-
ST-3308	SeedTec, Div. of NAPB, Inc.	26	7522	57	7294	57	6327

Table 11B. Dumas, Texas (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
ST-D701G	SeedTec, Div. of NAPB, Inc.	27	7512	15	7895	15	6880
W-902-W	WARNER SEED COMPANY INC.	28	7500	—	—	—	—
S 9750	The New Northrup King	29	7497	41	7544	4	7319
9300	Richardson Seeds Inc.	30	7496	—	—	—	—
A1 x Tx430	Tx. Agri. Exp. Stat.	31	7488	75	6185	45	6438
Towhead	Conlee Seed Company, Inc.	32	7453	28	7732	—	—
847 (X77039)	Cargill Hybrid Seeds	33	7429	—	—	—	—
T-E Y-77E	Taylor-Evans Seed Company	34	7412	—	—	—	—
A.Tx631 x R.8504	Tx. Agri. Exp. Stat.	35	7397	49	7462	—	—
6670	Cargill Hybrid Seeds	36	7370	25	7770	25	6714
W-844-E	WARNER SEED COMPANY INC.	37	7365	2	8348	41	6500
S.G. 944	Garrison Seed & Company Inc.	38	7355	—	—	—	—
447W	Jacques Seed Company	39	7355	—	—	—	—
XP5128(x)	ASGROW SEED COMPANY	40	7351	—	—	—	—
OSAGE	ASGROW SEED COMPANY	41	7339	7	8125	53	6372
AgriPro AP985G	AgriPro Seeds	42	7329	63	7086	—	—
8260	Pioneer Hi-Bred International, Inc.	43	7312	9	8117	—	—
A.Tx2752 x RTx430	Tx. Agri. Exp. Stat.	44	7301	53	7340	10	7021
GSC 1313	GroAgri Seed Company	45	7297	—	—	35	6593
EXP 3150x	GroAgri Seed Company	46	7288	—	—	—	—
A.8610 x RTx435	Tx. Agri. Exp. Stat.	47	7282	—	—	—	—
dk 760	DOUGLASS W. KING COMPANY	48	7278	—	—	—	—
A.Tx2752 x Tx2859	Tx. Agri. Exp. Stat.	49	7266	—	—	—	—
X5049(x)	ASGROW SEED COMPANY	50	7253	—	—	—	—
A.Tx631 x RTx435	Tx. Agri. Exp. Stat.	51	7242	74	6253	32	6624
T-E Y-75	Taylor-Evans Seed Company	52	7235	26	7747	44	6450

Table 11B. Dumas, Texas (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
T-E Y-101-G	Taylor-Evans Seed Company	53	7221	55	7315	52	6385
AgriPro AP984G	AgriPro Seeds	54	7219	-	-	-	-
Frontier F-524	Frontier Hybrids Inc.	55	7215	-	-	-	-
DN 31	DyNA Seeds, LTD	56	7209	43	7524	-	-
Toro Optima	Big Crop Seed, Inc.	57	7202	-	-	-	-
dk 776	DOUGLASS W. KING COMPANY	58	7202	-	-	-	-
S.G. 932	Garrison Seed & Company Inc.	59	7202	48	7489	22	6728
ORO BARON	ORO Hybrids	60	7194	12	8004	37	6557
KS 737	The New Northrup King	61	7194	32	7706	-	-
ORO G XTRA	ORO Hybrids	62	7172	45	7500	12	6938
A.Tx2752 x Tx2864	Tx. Agri. Exp. Stat.	63	7129	27	7741	-	-
2665	The New Northrup King	64	7113	35	7631	14	6888
DEKALB DK-66	DEKALB-PFIZER GENETICS	65	7112	3	8281	-	-
A.Tx626 x R.8503	Tx. Agri. Exp. Stat.	66	7103	76	6174	21	6728
377W	Jacques Seed Company	67	7080	-	-	-	-
630	Cargill Hybrid Seeds	68	7073	56	7300	-	-
W-632-W	WARNER SEED COMPANY INC.	69	7037	-	-	-	-
Frontier F-333Y	Frontier Hybrids Inc.	70	7020	-	-	-	-
T-E DINERO	Taylor-Evans Seed Company	71	7005	66	6871	30	6657
AgriPro AP979G	AgriPro Seeds	72	6993	-	-	-	-
Funk's G-1711	DELTA AND PINE LAND COMPANY	73	6950	18	7880	-	-
AgriPro AP965G	AgriPro Seeds	74	6941	40	7547	-	-
A1 x Tx2737	Tx. Agri. Exp. Stat.	75	6934	-	-	-	-
A.Tx399 x Tx2536	Tx. Agri. Exp. Stat.	76	6912	64	7048	66	6178
606E	Jacques Seed Company	77	6883	-	-	-	-
Rustler	Conlee Seed Company, Inc.	78	6865	23	7811	20	6732

Table 11B. Dumas, Texas (Continued)

HYBRID	COMPANY	1989		1988		1987	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
EXP 3148x 2778	GroAgri Seed Company	79	6864	—	—	—	—
	The New Northrup King	80	6842	—	—	—	—
A.Tx399 x RTx430	Tx. Agri. Exp. Stat.	81	6829	44	7522	27	6712
A.Tx630 x R3338wx	Tx. Agri. Exp. Stat.	82	6772	69	6767	65	6205
T-E 76	Taylor-Evans Seed Company	83	6726	—	—	—	—
X31010C	Cargill Hybrid Seeds	84	6690	—	—	—	—
A.Tx399 x Tx2737	Tx. Agri. Exp. Stat.	85	6663	—	—	63	6239
Funk's G-550 40	DELTA AND PINE LAND COMPANY	86	6460	—	—	—	—
	Cargill Hybrid Seeds	87	6358	38	7613	78	5562
RS610	Tx. Agri. Exp. Stat.	88	6336	80	3535	83	4993
SS 69	Big Crop Seed, Inc.	—	—	11	8041	16	6856
A.Tx378 x RTx434	Tx. Agri. Exp. Stat.	—	—	16	7889	48	6410
688	Hoegemeyer Hybrids, Inc.	—	—	36	7618	7	7221
S.G. 922	Garrison Seed & Company Inc.	—	—	37	7616	42	6470
662	Hoegemeyer Hybrids, Inc.	—	—	42	7532	31	6642
70	Cargill Hybrid Seeds	—	—	51	7395	55	6350
671	Hoegemeyer Hybrids, Inc.	—	—	52	7363	54	6359
DR 1125	Cargill Hybrid Seeds	—	—	54	7317	82	5047
1022	Cargill Hybrid Seeds	—	—	70	6751	72	6042
A.Tx626 x RTx433	Tx. Agri. Exp. Stat.	—	—	78	5599	79	5500
Number Entries:		88		80		83	
Test Mean Yield:			7346		7395		6469

Note: Hybrids with the same yields were ranked by computer.

**SUPPLEMENT**

**This section contains results from supplementary grain sorghum tests conducted at Beaumont, Eagle Lake, and Halfway, Texas. Although tests are not official performance test sites evaluated under Project 1418, results may be used as necessary to determine the adaptability of hybrids in these areas.**



Table S1. Grain sorghum agronomic and test information, 1989.

LOCATION:	Beaumont, Texas	Eagle Lake, Texas
COOPERATOR:	John W. Sij	John W. Sij and Jack Vawter
SOIL TYPE:	Bernard-Morey silt loam	Nada fine sandy loam
PREVIOUS CROP:	Fallow	Fallow
TEST DESIGN:	Randomized complete block	Randomized complete block
LAND PREPARATION:	Disked and bedded	Disked and bedded
DATE PLANTED:	April 5	April 6
ROW WIDTH:	32 inches	32 inches
PLOT LENGTH:	20 feet	20 feet
NUMBER ROWS/PLOT:	2	2
NUMBER REPLICATIONS:	3	3
FERTILIZER:	150-40-25 preplant on April 4	21-63-63 on March 9 20-0-0 on April 4 120-0-0 on May 24
HERBICIDE:	2.0 pt/A Dual 8E and 3.0 pt/A AAtrex 4L on April 7	2.0 pt/A Dual 8E and 2.0 pt/A AAtrex 4L on April 7
INSECTICIDE:	7 lb/A Furadan 15G on April 5 2.0 lb A.I./A Sevin XLR on June 22 for webworm	7 lb/A Furadan 15G on April 6 2.0 pt/A Lorsban on June 9 and June 14
RAINFALL (inches):	Feb. = 0.68, Mar. = 4.82 Apr. = 1.83, May = 7.74 June = 17.44, July = 6.86	Feb. = 0.81, Mar. = 0.89 Apr. = 2.01, May = 3.22 June = 4.79, July = 0.81
DATE HARVESTED:	August 7	July 31
SIZE HARVESTED PLOT:	0.0025 acres	0.0025 acres
MEAN PLANT POP./A:	70000	70000
TEST MEAN (lb/A):	3580	2130
STD. ERROR OF MEAN:	450 lb/A	220 lb/A
TEST CV:	21.8%	17.6%
LSD(0.1):	1100 lb/A	510 lb/A

Table S2. Grain sorghum performance test, Beaumont, 1989.

Entry	Company or brand name	Days to 50% flower	Plant height (in.)	Panicle exs. (in.)	Panicle length (in.)	Bird damage (%)	Desir. rating (1-5) *	Test weight (lb/bu)	Yield (lb/A)
Topaz	Asgrow Seed	69	55	5	10	0	1.5	54.9	5090
Pioneer hybrid 8300	Pioneer Hi-Bred	69	57	3	11	5	1.7	54.0	4890
Osage	Asgrow Seed	69	57	4	9	3	1.3	55.6	4740
GS 712	Asgrow Seed	70	58	3	10	7	2.0	53.8	4560
SG-932	Garrison Seed	71	57	2	10	7	2.0	54.8	4480
ORO G Xtra	ORO Hybrids	71	58	5	10	7	3.0	54.4	4420
Pioneer hybrid 8260	Pioneer Hi-Bred	68	55	3	13	3	1.0	53.3	4330
T-E Y-75	Taylor-Evans	68	56	3	10	3	1.7	55.2	4280
Cherokee	HyPerformer Seed	69	56	6	9	5	1.7	53.8	4030
ATx399 x RTx430	TAES	70	54	5	10	8	3.0	51.6	3940
TS488	Texas Seed	69	57	6	9	7	2.3	53.5	3920
ATx378 x RTx434	TAES	71	65	8	10	15	3.7	54.3	3890
3308	SeedTec Int.	71	57	3	10	3	1.3	56.3	3880
Pioneer hybrid 8313	Pioneer Hi-Bred	68	55	4	11	3	2.0	53.6	3880
ATx2752 x RTx430	TAES	70	57	3	11	7	2.7	51.6	3770
A28602 x SC103-12E	TAES	67	64	7	11	5	2.0	54.5	3760
Rustler	Conlee Seed	71	57	5	9	10	2.7	52.9	3740
ATx378 x IA28	TAES	71	61	5	10	5	2.0	55.4	3710
A8711 x RTx430	TAES	75	56	4	12	5	1.5	50.8	3680
G-1711	Delta & Pine Land	71	57	2	11	13	2.7	52.3	3640
A28603 x SC103-12E	TAES	67	54	10	9	2	1.7	52.8	3590
1225DR	HyPerformer Seed	69	54	6	10	10	3.0	51.5	3590
A4R x RTx430	TAES	70	51	5	13	2	2.7	54.8	3580
ATx378 x SC103-12E	TAES	67	64	9	10	5	3.0	53.3	3530
A35 x R8503	TAES	73	56	6	10	3	1.5	55.8	3510

Table S2. Continued.

Entry	Company or brand name	Days to 50% flower	Plant height (in.)	Panicle exs. (in.)	Panicle length (in.)	Bird damage (%)	Desir. rating (1-5) *	Test weight (lb/bu)	Yield (lb/A)
A28602 x SC599-11E	TAES	69	55	4	12	3	1.7	56.2	3500
WAC D701G	SeedTec Int.	71	58	4	10	10	2.3	51.8	3490
WAC 686	SeedTec Int.	70	56	6	9	12	2.3	53.0	3380
ATx2752 x SC103-12E	TAES	68	61	7	12	8	1.3	53.6	3270
A8618 x SC103-12E	TAES	70	53	6	12	0	2.3	55.1	3220
A35 x RTx430	TAES	70	58	8	12	2	2.3	53.6	3220
ATx626 x RTx433	TAES	74	62	4	11	10	2.7	53.0	3160
A28602 x RTx432	TAES	70	57	5	10	5	3.3	56.7	3020
ATx629 x RTx434	TAES	74	63	6	11	18	2.7	54.8	2840
ATx378 x R8610	TAES	70	60	5	10	13	3.0	52.5	2650
ATx631 x R8505	TAES	75	62	7	13	12	2.3	56.7	2500
ATx631 x RTx435	TAES	73	64	3	13	35	2.5	55.0	2140
ATx631 x Dorado	TAES	73	79	3	14	20	4.5	53.5	2050
Madera	Asgrow Seed	63	49	7	9	15	4.0	51.3	1880
A8106 x RTx434	TAES	77	60	5	13	12	3.0	51.1	1520
TEST MEAN = 3580 lb/A		CV = 21.8%	LSD(0.1) = 1100 lb/A						

\* Desirability (1 = excellent, 5 = very poor).

Table S3. Grain sorghum performance test, Eagle Lake, 1989.

Entry	Company or brand name	Plant height (in.)	Panicle exs. (in.)	Panicle length (in.)	Test weight (lb/bu)	Yield (lb/A)
Pioneer hybrid 8260	Pioneer Hi-Bred	37	0	9	54.8	2690
ATx378 x IA28	TAES	40	1	7	49.3	2680
ATx378 x RTx434	TAES	41	2	9	51.4	2600
T-E Y-75	Taylor-Evans	40	1	8	52.3	2560
ATx378 x SC103-12E	TAES	47	1	8	47.5	2530
Pioneer hybrid 8313	Pioneer Hi-Bred	38	0	9	53.4	2520
A8711 x RTx430	TAES	41	1	9	48.3	2480
Cherokee	HyPerformer Seed	40	3	7	51.9	2460
GS 712	Asgrow Seed	36	0	8	51.8	2450
ATx2752 x SC103-12E	TAES	41	0	8	50.1	2420
Topaz	Asgrow Seed	36	1	7	53.6	2410
A28602 x SC103-12E	TAES	42	1	8	48.7	2390
ORO G Xtra	ORO Hybrids	37	1	7	50.0	2380
A28602 x SC599-11E	TAES	36	1	8	51.6	2340
SG-932	Garrison Seed	34	0	6	52.2	2320
3308	SeedTec Int.	41	1	9	51.8	2320
ATx626 x RTx433	TAES	40	2	7	47.8	2310
ATx378 x R8610	TAES	36	0	7	51.6	2310
WAC D701G	SeedTec Int.	35	0	7	53.0	2190
Osage	Asgrow Seed	36	1	7	51.3	2180
TS488	Texas Seed	39	2	8	51.8	2180
WAC 686	SeedTec Int.	39	2	8	51.3	2170
Pioneer hybrid 8300	Pioneer Hi-Bred	39	1	9	52.1	2150
A28603 x SC103-12E	TAES	37	2	9	50.8	2090
A28602 x RTx432	TAES	37	0	8	51.4	2080
G-1711	Delta & Pine Land	40	2	8	48.9	2070
Rustler	Conlee Seed	38	0	8	49.2	2070
ATx631 x Dorado	TAES	58	1	11	48.1	2060
ATx2752 x RTx430	TAES	38	0	8	50.4	2050
ATx631 x RTx435	TAES	47	2	11	43.2	1940
ATx631 x R8505	TAES	40	2	10	48.5	1930
ATx399 x RTx430	TAES	35	0	8	52.4	1920
ATx629 x RTx434	TAES	47	7	8	48.0	1840
A8618 x SC103-12E	TAES	39	3	9	47.5	1720
A4R x RTx430	TAES	30	0	7	53.3	1680
1225DR	HyPerformer Seed	36	1	8	50.1	1620
A8106 x RTx434	TAES	50	5	11	48.1	1580
A35 x RTx430	TAES	36	2	8	51.9	1310
Madera	Asgrow Seed	33	0	8	55.9	1000
A35 x R8503	TAES	40	7	8	51.4	950
TEST MEAN = 2130 lb/A      CV = 17.6%      LSD(0.1) = 510 lb/A						

TABLE S4

**AGRONOMIC AND TEST INFORMATION: HALFWAY, TEXAS**  
**Supplementary Grain Sorghum Test**

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<b>TITLE:</b>	Single row irrigated Grain Sorghum performance test at the Texas Agricultural Experiment Station, Halfway, Texas, 1989	
<b>AUTHORS:</b>	N.E. Wuthrich, C.A. Woodfin, J.W. Jones, D.T. Rosenow, G.C. Peterson, respectively Research Associates, Professor, Assistant Professor	
<b>METHODS &amp; MATERIALS:</b>	Experimental Design:	Triple lattice
	Plot Size:	10 ft (3 beds) x 22 ft net
	Plot Spacing:	Single row on 40-inch spaced beds
	Soil Type:	Pullman clay loam
	Previous Crop:	Sorghum
	Fertilizer:	150 lb/A 11-52-0, 154 lbs N/A as anhydrous ammonia
	Herbicide:	1 lb ai/A Propazine, 1 pt ai/A Prowl layby,
	Insecticide:	.93 lbs ai/A Counter 15G preplant, 1/2 pt/A Lorsban Aug 8, 23; 1 pt/A Dimetholate Aug 26
	Irrigations:	Preplant plus 4.0, 3.1, 3.2, 2.8, 2.5 and 3.5 acre in /A applications July 7, 13, 24, Aug 2, 9, 31
	Planting Date:	May 24
	Plant Population:	70,338 avg plts/A
	Harvest Date:	October 25

**RESULTS & DISCUSSION:**

A few yields exceeded 9,000 pounds per acre. The test mean yield of 8,286 lb/A was slightly lower than the two previous years.

Average plant stands may have contributed to reduced yields. Cool weather, extended wet soil conditions, and small hail in late May and early June reduced plant stands. No irrigation was used in June due to beneficial rainfall.

The systemic insecticide, Counter, was applied preplant for greenbug control. Midge, greenbugs and headworms were controlled with aerial applications of Lorsban and Dimetholate in August.

Proven bird repelling vinyl hanging balloons were used to reduce bird damage. Nearly all bird damage noted was on early maturing hybrids before balloons were situated in the field.

Two representative rows from each 3-row plot were combine harvested. Grain yields were adjusted to 13% moisture and converted to pounds per acre.

Table S5. Grain yield and other agronomic data for forty-nine hybrids evaluated under irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1989

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN) 4	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	BIRD DAMAGE % 7	MOIS- TURE % 8	MATU- RITY 9
Garrison Seed Co.	SG942	9520	A	78	57	1	3.7	2.7	0.0	16.0	ML
Big Crop Seed, Inc.	TORO MAXIMA	9179	A-B	76	56	3	3.0	3.0	0.0	16.0	L
Tx. Agri. Exp. Sta.	AVG1 x R8505	9154	A-C	77	71	7	5.0	2.3	0.0	15.0	ML
Tx. Agri. Exp. Sta.	ATx631 x R8505	9048	A-D	75	59	6	3.0	2.7	0.0	14.2	ML
Tx. Agri. Exp. Sta.	ATx2752 x Tx430	9040	A-D	77	55	2	3.3	2.7	0.0	14.1	ML
New Northrup King	S9750	9024	A-D	77	55	3	3.0	2.3	0.0	14.2	L
Taylor-Evans Seed	T-E Y-77E	8956	A-E	75	55	3	3.3	3.0	0.0	14.2	ML
Tx. Agri. Exp. Sta.	ATx2752 x GR105-7	8912	A-F	79	54	3	3.0	2.3	0.0	15.7	ML
Tx. Agri. Exp. Sta.	A1 x R8505	8798	A-G	76	61	6	3.0	4.0	0.0	15.6	ML
Big Crop Seed, Inc.	TORO OPTIMA	8795	A-H	76	58	4	3.0	3.0	0.0	14.4	ML
Conlee Seed Co.	RUSTLER	8773	A-H	78	54	2	3.0	2.7	0.0	17.0	ML
Triumph Seed Co.	Two 80-D	8760	A-H	76	55	3	3.0	2.0	0.0	14.3	ML
GroAgri Seed Co.	EXP 3150	8717	A-I	76	57	2	3.3	2.7	0.0	15.1	M
New Northrup King	KS737	8693	A-J	76	55	6	3.3	3.0	0.0	14.6	L
Tx. Agri. Exp. Sta.	ATx378 x GR104-7	8686	A-K	75	58	6	3.3	3.0	0.0	13.6	ML
WARNER SEED CO.	W-844-E	8611	A-K	77	54	3	3.0	3.0	0.0	13.8	ML
Garrison Seed Co.	SG922	8571	A-K	76	54	3	2.7	2.7	0.0	14.3	ML
Garrison Seed Co.	SG932	8566	A-K	75	55	3	3.0	2.3	0.3	14.2	ML
SeedTec, Div. NAPB	ST-D701G	8564	A-K	78	56	3	3.7	2.7	0.0	16.4	ML
Cargill Hybrid Seed	6670	8523	B-K	78	54	3	3.3	2.3	0.0	14.9	ML
Taylor-Evans Seed	T-E Y-75	8510	B-K	75	54	2	3.0	3.0	0.0	13.4	M
Tx. Agri. Exp. Sta.	A1 x Tx430	8496	B-K	74	56	3	3.0	4.0	0.0	14.3	ML
Tx. Agri. Exp. Sta.	ATx2752 x GR101A-4	8451	B-K	76	54	2	3.0	2.7	0.0	14.4	ML
WARNER SEED CO.	W-917-E	8448	B-K	77	58	3	4.3	3.0	0.0	15.2	L
Frontier Hybrids	F-524	8363	B-L	76	54	2	3.3	2.7	0.0	14.1	L
Tx. Agri. Exp. Sta.	ATx378 x GR104-2	8355	B-L	76	59	6	3.0	3.0	0.3	13.7	ML
New Northrup King	NK2665	8338	B-L	78	51	1	2.3	2.3	0.0	14.7	L
Tx. Agri. Exp. Sta.	ATx399 x Tx430	8299	B-M	75	53	4	2.7	3.0	0.3	13.3	ML
Triumph Seed Co.	TR74CR	8263	B-N	73	56	6	2.7	2.0	0.0	13.0	M
Cargill Hybrid Seed	847	8253	B-N	78	54	2	2.7	2.7	0.0	14.6	ML
ASGROW SEED CO.	OSAGE	8184	C-N	76	54	5	2.0	2.0	0.0	13.2	M
New Northrup King	KS714Y	8147	D-O	75	51	6	2.0	3.3	0.0	15.3	M
New Northrup King	KS710	8141	D-P	76	51	5	1.7	2.7	0.0	14.5	M
ASGROW SEED CO.	GS712	8129	D-P	76	54	2	3.0	2.7	0.0	14.6	M
Tx. Agri. Exp. Sta.	A4R x Tx430	8093	D-P	73	53	6	2.3	2.7	1.7	13.2	ML
Triumph Seed Co.	Two 70-D	7985	E-P	75	51	4	2.3	2.7	0.0	13.4	M
Frontier Hybrids	F-333Y	7931	F-P	75	53	4	2.7	2.0	0.0	12.9	M
WARNER SEED CO.	W-632-W	7918	G-P	77	55	5	3.3	3.3	0.0	15.1	ML
Big Crop Seed, Inc.	TORO OLE'	7874	G-P	77	53	3	3.3	3.0	0.0	14.5	M
Conlee Seed Co.	TOWHEAD	7811	H-P	75	56	6	3.7	3.3	0.0	14.0	ML

Table S5. Grain yield and other agronomic data for forty-nine hybrids evaluated under irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1989

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN) 4	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	BIRD DAMAGE %	MOIS- TURE %	MATU- RITY 7
Tx. Agrl. Exp. Sta.	ATx2752 x GR105-8	7743	I-P	77	55	3	4.0	3.0	0.0	14.4	ML
Tx. Agrl. Exp. Sta.	ATx630 x R3338wx	7730	J-P	74	61	6	3.7	2.0	1.0	13.0	ML
GroAgrl Seed Co.	GSC 1313	7705	K-P	79	55	3	3.0	3.0	0.0	14.3	M
GroAgrl Seed Co.	EXP 3148	7470	L-P	75	49	0	2.7	2.7	0.0	15.1	M
ASGROW SEED CO.	XP 5128	7360	M-P	77	53	5	2.0	3.0	0.0	14.7	M
Triumph Seed Co.	TR65-G	7325	N-P	74	54	6	2.7	2.0	1.0	13.4	M
Tx. Agrl. Exp. Sta.	ATx2792 x GR104-8	7194	O-P	76	53	3	2.7	3.3	0.0	15.1	ML
WARNER SEED CO.	W-902-W	7188	P	77	59	5	5.0	2.3	0.0	14.0	L
Tx. Agrl. Exp. Sta.	RS610	5436	Q	67	53	8	3.0	2.7	33.3	12.0	M

TEST MEAN= 8286 TEST C.V.= 5.8 LSD .05=781.9

1 All yields adjusted to 13% moisture

2 Any two hybrids having a common letter are not significantly different at the 0.05 probability level.

3 Number of days from planting until date when majority of heads are in half-bloom.

4 Head exertion is average number of inches from the flag leaf to the base of the head.

5 Height uniformity rating 1-5 : 1 =uniform 5= irregular.

6 Head type rating 1-5: 1= tight, compact head 5= loose, open head.

7 Seed company maturity designation: ME= medium early, M= medium, ML= medium late, L= late.

### LITERATURE CITED

1. Texas Agricultural Facts. October 20, 1989

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