Texas Agricultural Experiment Station
The Texas A&M University System

Grain Sorghum Performance Tests in Texas, 1994

Department of Soil and Crop Sciences

1995 Departmental Technical Report No. 95-2

Texas Agricultural Experiment Station • Edward A. Hiler, Director
The Texas A&M University System • College Station, Texas

GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS--1994

by

Dennis Pietsch
Research Associate
Texas Agricultural Experiment Station
Texas A&M University

Leon Synatschk
Research Technician I
Texas Agricultural Experiment Station
Texas A&M University

Darrell T. Rosenow
Professor
Texas Agricultural Experiment Station
Lubbock

Fred Miller
Professor
Texas Agricultural Experiment Station
Texas A&M University

Gary C. Peterson
Assistant Professor
Texas Agricultural Experiment Station
Lubbock

THE TEXAS AGRICULTURAL EXPERIMENT STATION
The Texas A&M University System/College Station, Texas

TABLE OF CONTENTS

Keywords: Texas/grain sorghum/ performance tests/yield/ disease/insect resistance.

GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS--1994

D. R. Pietsch, Leon Synatschk, D. T. Rosenow, F. R. Miller, and G. C. Peterson

INTRODUCTION

Grain sorghum is a major commodity in Texas. From year to year, acreage in Texas has fluctuated based on rainfall patterns, climatic conditions, participation in various government supported programs, and price differential between commodities. This year, 2.6 million acres were harvested by Texas farmers compared to 2.75 million acres in 1993. Figure 1 shows acreage and percent of State total acreage harvested in 1994 by Crop Reporting District. According to Figure 1, Districts 1N and 1S accounted for 25.9% of the total grain sorghum harvested in Texas. Although acreage decreased, yield per harvested acre in Texas increased from 3,192 lb/A in 1993 to 3,304 lb/A in 1994. A considerable increase in yield was experienced in Districts 4 and 9 where yields increased 15.0% and 19.1% respectively for this time period.

Although yields fluctuate yearly, grain sorghum breeders continue to strive for better hybrids. Farmers continue to have the opportunity to plant white or cream sorghums in addition to the traditional red or bronze colored sorghums without sacrificing yields. In addition to the white or cream colored seed, sorghums that have straw colored glumes, tan plant color, and superior weathering ability will definitely have a marketing advantage. Farmers may have the opportunity to use different marketing strategies to enhance cash flow. Continued emphasis and efforts will be employed in using sorghum for food and animal feed both domestically and internationally. The white or light cream colored sorghums have dual advantages in animal feeds and human foods. These sorghums produce formulated feeds with significantly lighter color and overall improved appearance, which will benefit the U.S. feeder. In addition, the light colored sorghums will enhance export competitiveness of U.S. sorghum in world markets. The potential for using sorghum for food in the U.S. has never been realized, in part because we have never produced consistently sufficient quantities of high quality sorghum for the industry to use. The advantages of white grain types with tan plant color can be achieved with appropriate hybrids for feed and food quality that have the necessary agronomics, yield potential, and adaptation to Texas environmental conditions.

GRAIN SORGHUM PERFORMANCE TESTING IN TEXAS

This report presents the results of five irrigated and three non-irrigated grain sorghum performance tests. Approximate locations of test sites are shown in Figure 2 and represent the major grain sorghum production areas in Texas.

In addition, results of supplementary grain sorghum tests conducted at 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. Results from this test 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

Seed were packaged and planted at all locations by one of the following methods:

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

After emergence, seedlings at Lubbock were hand thinned to a uniform spacing for a plant population recommended for that area. All other sites were planted to a recommended population and not thinned.

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 harvested with a MF8 combine modified for plot harvesting. Plot weight, bushel weight and moisture were recorded from each plot.

DATA

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

Grain color--designated by a respective seed company for that particular hybrid. R=red, B=brown, Bz=bronze, Rt=red translucent, Wh=white, Wt=white translucent, Ct=cream translucent, Y=yellow.

Plant color--designated by a respective seed company for that particular hybrid.T=tan, R=red, P=purple.

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 exsertion--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.

Test weight--pounds per bushel of grain determined from all replications.

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.

Percent Stand --visual estimate at harvest

Desirability Rating--1=very good, 2=good, 3=average, 4=poor, 5=very poor

Moisture %--calculated from each plot by a moisture blade attached to the weight bucket.

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 weight 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.

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

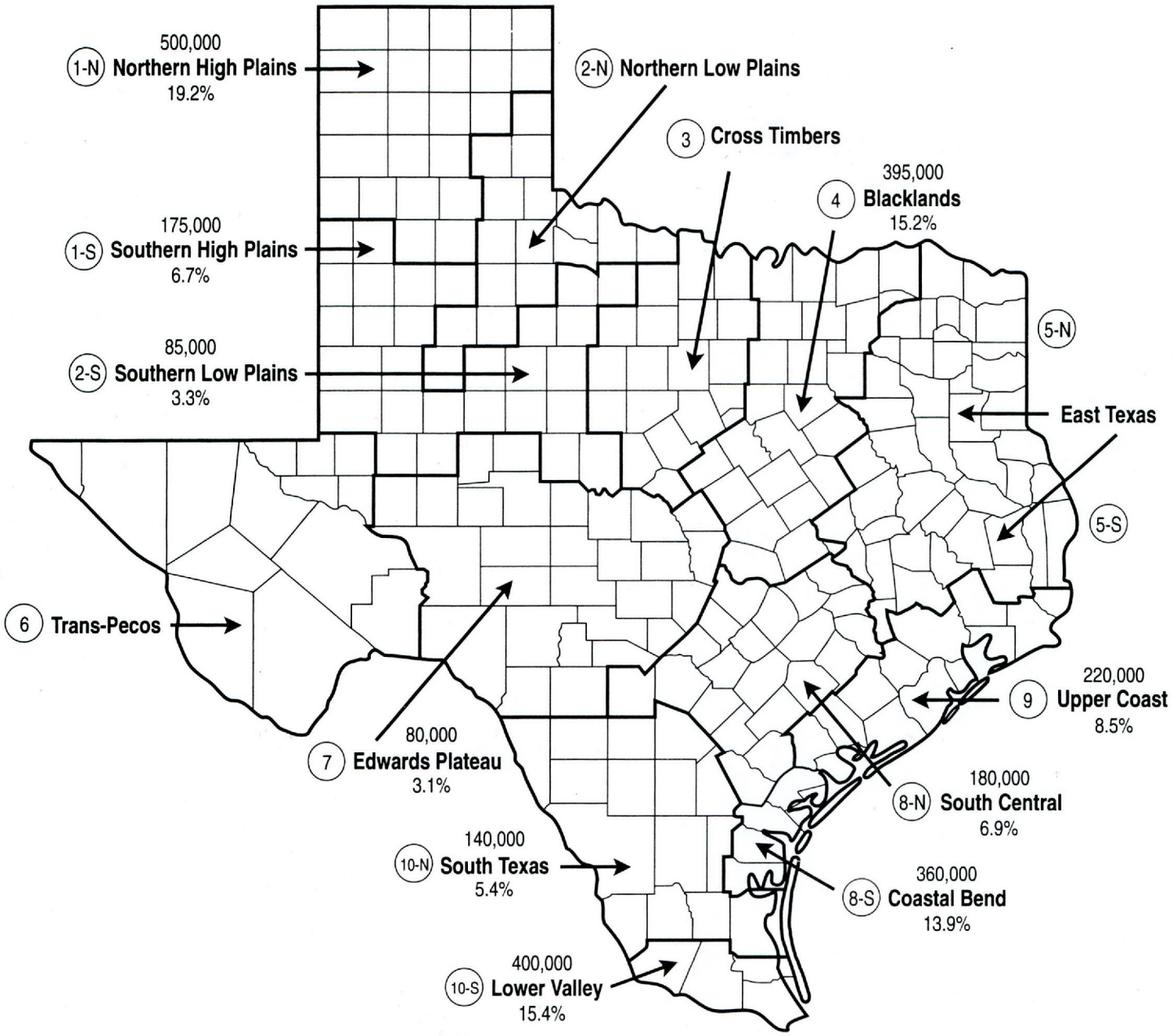
In 1994, ten grain sorghum sites were planted but only eight were harvested due to unfavorable growing conditions. At the Thrall site, hot and dry conditions prior to harvest resulted in stalk degradation and decay thus causing plants to lodge. More information regarding this site is presented in Table 7. An extended period of hot and dry conditions resulted in no data being obtained from the Lubbock Dryland Test. Emergence was erratic between plots and reps thus resulting in no flowering data and no yield data.

This year we had the opportunity to obtain data from a ratoon crop. After the Castroville site was harvested, stalks were shredded, test block was fertilized and irrigated. Excellent yields were obtained and presented in Table 4A-1.

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

1. Tables 2-10 summarize agronomic and test data information.
2. Tables 2A-10A 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. Table 5A-1 gives disease ratings for hybrids entered at the Danevang Test.
3. Tables 2B-10B 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 designated (--). Hybrids with same yields were ranked by computer.
4. Tables S1-S4 gives results of supplementary grain sorghum variety tests conducted at Halfway, Texas, in cooperation with the High Plains Research Foundation.

Figure 1. Acres and Percentage of Grain Sorghum Acreage Harvested by Texas Crop Reporting Districts, 1994 (1).



NOTES:
A. The figure below each crop reporting district is that district's percentage of the total harvested 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 sorghum production areas. Grouped together, these districts account for 65,000 acres, or 2.5 percent of state acreage (1).

Figure 2. 1994 Grain Sorghum Performance Test Locations in Texas.

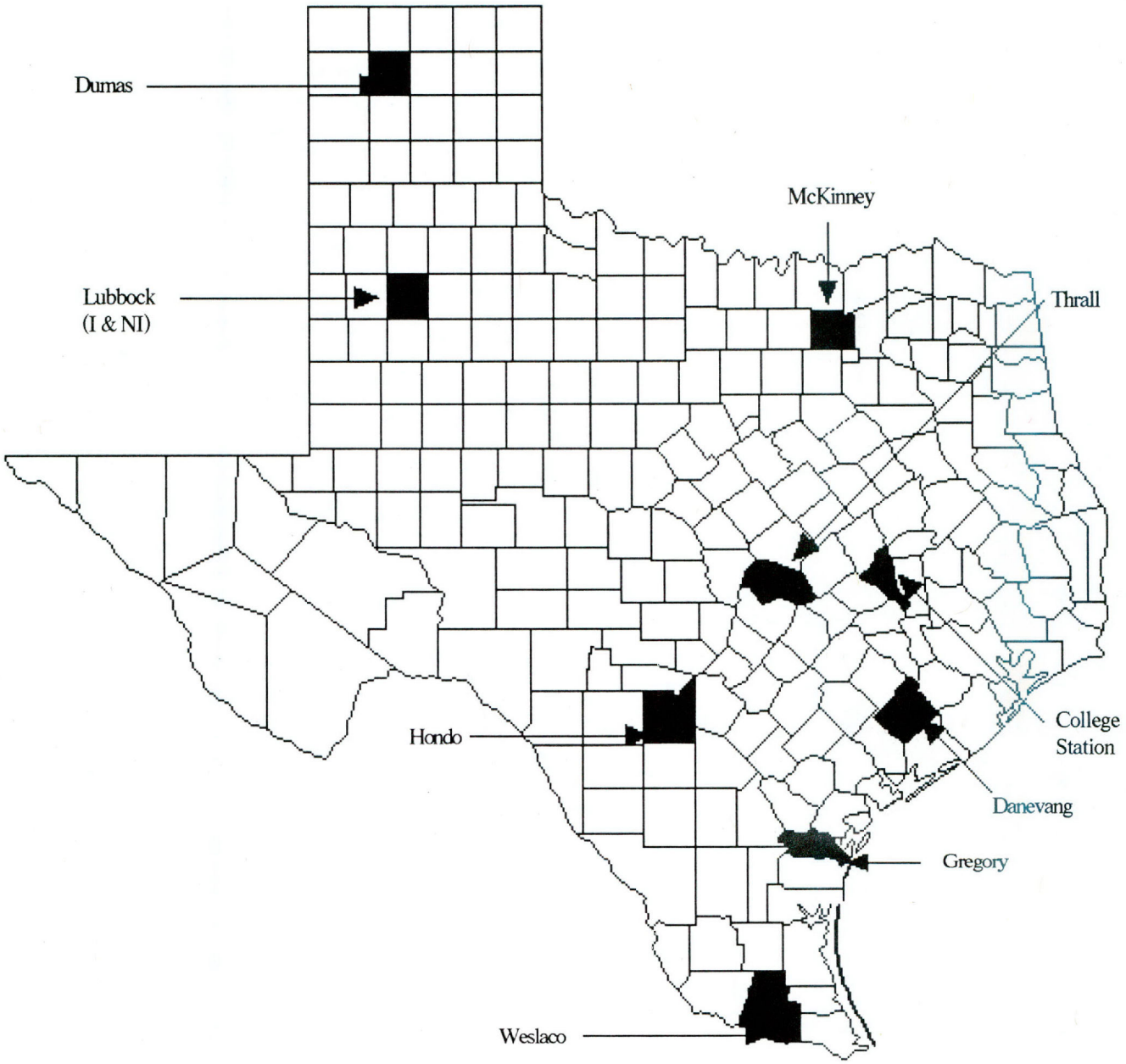


Table 1. Name, address and hybrid designation for participants in the 1994 Texas Grain Sorghum Performance Test

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
AgriPro Seeds	AP 9210	-	-	-	-	-	-	X	-	X	-
RR#2 Hwy. 30 East	AP 9850	-	-	-	-	-	-	-	X	-	X
Ames, IA 50010											
AgriPro Biosciences Inc.	WAC 685	X	-	-	-	-	-	-	-	-	-
P.O. Box 2212	WAC 660	X	-	-	-	-	-	-	-	-	-
Hereford, TX 79045	WAC 686	X	-	-	-	-	-	-	-	-	-
	WAC 690	X	-	-	-	-	-	-	-	-	-
	WAC 681	X	-	-	-	-	-	-	-	-	-
Asgrow Seed Company	A570	X	X	X	X	-	-	-	-	-	X
P.O. Box 1945	XP5312	X	X	X	X	-	-	-	-	-	X
Plainview, TX 79073											
Asgrow Mexicana, S.A. DE C.V.	A5702	X	-	-	-	-	-	-	-	-	-
P.O. Box 111	A7712	X	-	-	-	-	-	-	-	-	-
Brownsville, TX 78522	A7743	X	-	-	-	-	-	-	-	-	-
Cargill Hybrid Seeds	837	X	X	X	X	X	X	X	X	-	X
P.O. Box 5645	857	-	X	X	X	-	X	-	-	X	-
Minneapolis, MN 55440	737	-	X	X	X	-	X	-	-	X	-
	727	-	-	-	-	-	-	X	-	X	-
	797	-	-	-	-	-	-	-	X	-	X
	607E	-	-	-	-	-	-	-	-	X	-
Crosbyton Seed Co.	GW 5931	-	-	-	-	-	-	X	-	X	-
P.O. Box 429	GW 5970	-	-	-	-	-	-	X	-	X	-
Crosbyton, TX 79322	GW 5770	-	-	-	-	-	-	X	-	X	-
	GW 5273	-	-	-	-	-	-	-	-	X	-
DEKALB Genetics Corporation	DEKALB DK-54 (X-176)	X	X	X	X	X	X	-	X	-	X
Rt. 2, P.O. Box 56	DEKALB DK-55 (X-274)	X	X	X	X	X	X	X	X	-	X
Lubbock, TX 79415	DEKALB DK-56	X	X	X	X	X	X	X	X	-	X
	DEKALB DK-37	-	X	-	-	-	X	X	-	-	-
	DEKALB DK-58	-	X	-	-	-	-	-	X	-	X

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
DEKALB Genetics Corporation (Continued)	DEKALB X-329	-	X	-	-	-	X	X	-	-	-
	DEKALB DK-51	-	-	-	-	-	X	X	X	-	-
	DEKALB DK-40y	-	-	-	-	-	-	X	-	X	-
	DEKALB DK-66	-	-	-	-	-	-	-	X	-	X
	DEKALB DK-38y	-	-	-	-	-	-	-	-	X	-
	DEKALB DK-39	-	-	-	-	-	-	-	-	X	-
Delta and Pine Land Co.	1552	X	X	X	X	X	X	X	-	-	-
P.O. Box 157	1558	X	X	X	X	-	-	-	-	-	-
Scott, MS 38772	1710	X	X	-	X	X	-	-	-	-	-
	1506	-	-	X	-	X	X	X	X	X	X
	1505Y	-	-	-	-	-	X	-	-	-	-
	1482	-	-	-	-	-	-	X	-	X	-
Douglass W. King Co.	dk 795	-	-	-	-	-	-	-	X	-	X
P.O. Box 200320	dk 790	-	-	-	-	-	-	-	X	-	X
San Antonio, TX 78220	dk 785	-	-	-	-	-	-	-	-	X	-
	dk 715E	-	-	-	-	-	-	-	-	X	-
Frontier Hybrids, Inc.	F-524	X	X	X	X	X	X	X	X	-	X
P.O. Box 177	F-270G	-	-	-	-	-	-	-	-	X	-
Abernathy, TX 79311	457-D(SP)	-	X	-	-	-	-	-	-	-	-
Garrison & Townsend, Inc.	SG-942	X	-	-	X	-	-	-	-	-	-
P.O. Drawer 2420	SG-932	X	-	-	-	-	-	-	-	-	-
Hereford, TX 79045	SG-833	X	-	-	X	-	-	X	-	-	-
	SGX-94043	X	-	-	-	-	-	-	-	-	-
	SG-919	-	-	-	X	-	-	X	-	-	-
	SG-925	-	-	-	-	-	-	X	-	-	-
	SGX-94120	-	-	-	-	-	-	X	-	-	-
	SGX-94012	-	-	-	-	-	-	X	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
Genetics Resources Inc.	GRI 06943	X	-	-	-	-	-	-	-	-	X
P.O. Box 229	GRI 06908	X	-	-	-	-	-	-	-	-	-
Philo, IL 61864	GRI 01943	X	-	-	-	X	-	-	-	-	X
	GRI 22908	-	-	-	-	X	-	-	-	-	-
	GRI 16908	-	-	-	-	X	-	-	-	-	X
George Warner Seed Co., Inc.	W-625Y	-	-	-	-	-	-	-	-	X	-
P.O. Box 1877	W-965E	-	-	-	-	-	-	-	-	X	-
Hereford, TX 79045	W-818E	-	-	-	-	-	-	-	-	-	X
	W-917E	-	-	-	-	-	-	-	-	-	X
Harvest Master	HM 2250	-	-	X	-	-	-	-	-	-	-
	HM "X"	-	-	X	-	-	-	-	-	-	-
Kelly Green Seeds Inc.	6922	X	-	-	-	-	-	-	-	-	-
P.O. Box 916	6714	X	-	-	-	-	-	-	-	-	-
Farwell, TX 79325	6844	X	-	-	-	-	-	-	-	-	-
HyPerformer Seed Comapny	HSC Cherokee	X	X	X	X	X	X	X	X	-	X
One Hy Crop Row	HSC 893	X	-	-	X	X	X	-	X	-	X
Memphis, TN 38120	HY1320	X	X	X	X	X	X	X	X	-	X
	HSC Wings	X	X	X	X	-	-	X	-	-	-
	HB 94-55	X	X	X	X	X	X	X	-	-	-
	HB 94-50	-	-	X	-	X	X	X	X	-	X
ICI Seeds	5323	X	-	-	X	-	-	-	-	-	-
2505 Candlewood Dr.	5319	X	-	-	X	-	X	-	-	-	-
Manhattan, KS 66502	5616	-	-	-	-	-	X	X	-	X	-
	5643	-	-	-	-	-	-	-	-	X	-
	5536	-	-	-	-	-	-	-	X	-	-
Mycogen Plant Sciences	Mycogen ORO Amigo	X	-	-	-	-	-	-	-	-	X
624 27th Street	Mycogen 9403X	X	-	-	-	-	-	-	-	-	X
Lubbock, TX 79404	Mycogen 9404X	X	X	-	X	-	X	-	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
Mycogen Plant Sciences (Continued)	Mycogen 9405X	X	X	-	-	-	-	-	-	-	-
	Mycogen 444E	-	X	-	X	X	X	X	X	-	-
	Mycogen T-E Sonora	-	-	X	-	-	-	-	-	-	-
	Mycogen 9406X	-	-	-	-	-	-	-	-	-	-
	Mycogen T-E Y-75	-	-	-	-	X	-	-	X	-	-
	Mycogen T-E Prosper	-	-	-	-	-	-	X	-	-	-
	Mycogen T-E Hardy	-	-	-	-	-	-	-	-	X	-
	Mycogen ORO Quest	-	-	-	-	-	-	-	-	X	-
	Mycogen 611E	-	-	X	-	-	X	-	X	-	X
NC+ Hybrids	NC+ 7B90	X	-	X	-	-	X	X	-	-	-
P.O. Box 4408	NC+ 472	X	X	X	X	-	X	X	-	-	-
Lincoln, NE 68504	NC+ 8B10	X	-	-	-	-	-	-	-	-	-
	NC+7R37E	X	X	-	X	-	-	-	-	-	-
Northrup King Co.	KS 955	X	-	-	-	-	-	-	-	-	-
6139 37th Street	2665	X	X	X	X	X	X	-	-	-	-
Lubbock, TX 79407	KS 936	X	-	-	-	-	-	-	-	-	-
	KS 735	X	X	X	X	X	X	-	X	-	X
	KS 714Y	-	-	-	-	X	-	-	-	-	-
	KS 560Y	-	-	-	-	-	X	-	-	X	-
	KS 737	-	-	-	-	-	X	-	-	-	-
	KS 383Y	-	-	-	-	-	-	X	-	X	-
	KS 524	-	-	-	-	-	-	X	-	X	-
Pioneer Hi-Bred Int., Inc.	8118	X	-	-	-	-	-	-	-	-	X
1616 S. Kentucky, Suite C-150	8310	X	X	X	X	X	X	X	-	-	X
Amarillo, TX 79102	8313	X	X	X	X	X	-	-	-	-	-
	8305	-	X	X	X	X	-	-	-	-	-
	8601	-	-	-	-	-	X	X	-	-	-
	8699	-	-	-	-	-	X	X	-	-	-

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
Pioneer Hi-Bred Int., Inc. (Continued)	8606	-	-	-	-	-	X	X	-	-	-
	8522Y	-	-	-	-	-	-	-	-	X	-
	8446	-	-	-	-	-	-	-	-	X	-
	8212Y	-	-	-	-	-	-	-	-	-	X
Production Plus P.O. Box 1106 Plainview, TX 79072	PP 599W	-	-	-	-	-	-	-	X	X	X
	PP 644	-	-	-	-	-	-	-	X	-	X
	PP 777	-	-	-	-	-	-	-	X	-	X
	PP 333	-	-	-	-	-	-	-	-	X	-
G.E. Pogue Seed Co., Inc. P.O. Drawer 389 Kenedy, TX 78119	AG 233	X	X	-	-	-	-	-	-	-	-
Richardson Seed, Inc. P.O. Box 60 Vega, TX 79092	RS 290E	X	-	-	-	-	-	-	-	-	X
Texas Seed Co. P.O. Drawer 599 Kenedy, TX 78119	TS-466	X	-	-	X	X	X	-	-	-	-
	TS-477A	-	X	-	-	-	-	-	-	-	-
	TS-488	-	-	X	-	-	-	-	-	-	-
Texas Agricultural Experiment Station (FM) College Station, TX 77843	ATxARG-1 x RTx436	X	X	X	X	X	X	X	X	X	-
	ATx631 x 80C2241	X	X	X	X	X	X	X	X	X	X
	ATx638 x RTx2783	X	X	X	X	X	X	X	X	X	X
	ATx638 x RQL36	X	X	X	X	X	X	X	X	X	X
	ATx638 x RTx430	X	X	X	X	X	X	X	X	X	X
	ATx638 x (Tx430 x 77cs1)	X	X	X	X	X	X	X	X	X	X
	ATx638 x R8503	X	X	X	X	X	X	X	X	X	X
	ATx626 x R8503	X	X	X	X	X	X	X	X	X	X
	ATxARG-1 x R8922	X	X	X	X	X	X	X	X	X	X
	ATxARG-1 x R8925	X	X	X	X	X	X	X	X	X	X

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
Texas Agricultural Experiment Station (GP) College Station, TX 77843	A35 x GR108-90M23	-	-	-	-	-	-	-	-	X	-
	A35 x Tx2783	-	-	-	-	-	-	-	-	X	-
	A35 x Tx2864	-	-	-	-	-	-	-	-	X	-
	ATx2752 x Tx2783	X	X	X	X	X	X	X	X	X	X
	ATx2752 x Tx2864	X	X	X	X	X	X	X	X	X	X
	A92NF3 X TX2880	X	X	-	X	-	-	-	-	X	-
	ATx2752 x GR108-90M23	X	X	-	X	X	-	X	X	-	-
	ATx2752 x GR108-90M24	-	X	-	X	-	-	-	X	-	X
	ATx2752 x GR108-90M30	-	-	-	X	X	-	X	X	-	-
	ATx2752 x GR134B-90M50	-	-	X	X	X	-	-	X	-	-
	A1 x GR134B-90M50	-	-	-	-	X	-	-	-	-	-
	A1 x GR108-90M23	-	-	X	-	X	X	-	-	-	-
	A35 x Tx2862	-	-	-	-	-	-	-	-	X	-
	ATx631 x GR137-90M37	-	-	-	-	-	-	-	X	-	-
	ATx631 x GR137-90M39	-	-	-	-	-	-	-	X	-	-
	ATx2752 x Tx2882	-	-	-	-	-	-	-	-	X	-
	A92NF8 x Tx2880	-	-	-	-	-	-	-	-	X	-
	A1 x Tx2864	-	-	-	-	-	-	-	-	X	-
Texas Agricultural Experiment Station (DR) College Station, TX 77845	A807 x 8BE2668	X	X	X	X	X	X	X	X	X	X
	A1 x 8BE2668	X	-	X	X	X	X	X	X	-	-
	AQL41 x 8BE2668	-	X	-	-	X	-	-	X	-	-
	A807 x R8503	X	X	-	-	X	-	-	-	X	-
	A1 x R8503	-	-	-	-	-	-	-	-	X	-
	A1 x Tx430	-	-	-	-	-	-	-	-	X	-
	A35 x Tx430	-	-	-	-	-	-	-	-	X	-
	A807 x Tx2783	X	X	-	X	-	-	-	X	-	-
	AQL41 x Tx2783	-	-	-	-	-	-	-	X	-	-
	ATx635 x 86EO361	-	-	-	X	X	-	-	X	-	-
	AQL41 x 86EO361	-	-	-	-	-	-	-	X	-	X

Table 1. (Continued)

Company & Address	Hybrid	Weslaco	Gregory	Castroville	Danevang	College Station	Thrall	McKinney	Lub"I"	Lub"D"	Dumas
Texas Agricultural Experiment Station (DR) (Continued)	A.BON34 x 86EO361	-	-	-	-	-	-	-	X	-	-
	A.BON34x90L50 (435x338)	-	-	-	-	-	-	-	X	-	-
	AQL41 x R6078	-	-	-	-	-	-	-	X	-	-
	A1 x R90562	-	-	-	-	-	-	-	X	X	-
	A35 x R90562	-	-	-	-	-	-	-	-	X	-
	A1 x RQL36	-	-	-	-	-	-	-	X	X	-
	A35 x RQL36	-	-	-	-	-	-	-	-	X	-
	A35x88V1080(Tx430xR9188)	-	-	-	-	-	-	-	-	X	-
	A1 x P37-3	-	-	-	-	-	-	-	-	X	-
	A35 x 89CC443	-	-	-	-	-	-	-	X	X	-
	A35 x (430 x 9188)	-	X	-	-	-	X	-	-	-	-
	A807 x 86EO361	X	-	-	X	-	-	-	-	-	-
	A806 x 8BE2668	-	X	-	-	X	-	-	-	-	-
	A1 x Tx2783	-	-	X	-	X	-	X	-	-	-
	A807 x R3224(t)	-	-	-	-	X	X	-	-	-	-
	A807 x Tx436	-	-	-	-	X	-	-	-	-	-
	A35 x 8BE2668	-	-	-	-	-	X	-	-	-	-
	A803 x 8BE2668	-	-	-	-	X	-	X	-	-	-
	A2-2(B) x 8BE2668	-	-	-	-	-	-	-	-	-	X

TABLE 2. AGRONOMIC AND TEST INFORMATION: WESLACO

TEST:	1994 Irrigated Grain Sorghum Performance Test
LOCATION:	Texas A&M University Research and Extension Center, Weslaco, Texas
COOPERATORS:	Ralph Morgan, John Drawe, & Dennis Pietsch
SOIL TYPE:	Raymondville clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Disc, Chiseled, Disc, Bed
DATE PLANTED:	2-17-94
DATE THINNED:	The test was not thinned. 250 seeds were distributed by a cone planter on 26' centers. A 4' alley was cut at a later date.
PLOT LENGTH:	22'
FERTILIZER:	2-10-94: Applied 2 qt/A Meta-Gro (2% Fe, 2% Zn, 1% Mn, & 1% Cu) + 50 gal/A of 4-10-10 (20.5 lb/A N, 51.3 lb/A P, and 51.3 lb/A K). 3-28-94: Applied 120 lb/A N as N-32.
HERBICIDE:	None
INSECTICIDE:	None
RAINFALL:	January 0.97"; February = 1.20"; March = 1.28"; April = 0.20"; May 2.46"; June 3.64"; Total 9.75"
IRRIGATIONS:	1-13 (preplant); 4-11, & 5-27; approx. 4"each
DATE HARVESTED:	6-30-94 with a MF 8 plot combine
SIZE HARVESTED PLOT:	2 rows, 22' each or 1/396 ACF
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	75
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	5,816 lb/A; yields corrected to 13% moisture
TEST C.V:	7.7 percent

GENERAL INFORMATION: Seventy-five hybrids were entered at this Lower Valley test site which made this the largest of 10 grain sorghum performance test sites in Texas. Above average yields were secured despite below optimum plant stands. At planting, sufficient seed were planted with a cone planter to attain a final plant stand of approximately 100-120,000 plants per acre, but distribution within some plots was not ideal, thus probably affecting final yields. The test was not hand- thinned. In the early growth stage, some yellow sugarcane aphids were present in certain areas of the test block. Although it appeared some seedlings were killed by the aphids, populations were not high enough to warrant an application of an insecticide.

Continuous plant growth and development resulted from a timely irrigation schedule and rainfall. Midge were observed but did not warrant an insecticide application.

The test mean yield was 5,816 lb/A compared to the past 3-year average of 5,444 lb/A. Excellent bushel weights were secured. The incidence of bird damage was minimal.

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1994

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Maturity Class ****	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	% Bird	Midge Damage %	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 *****
A7712	Asgrow Mexicana	Bz	P	M	78	50	7	0.0	0.0	58.4	14.4	6952	A
A7743	Asgrow Mexicana	Wh	R	M	77	46	6	0.0	0.0	58.2	13.3	6639	A-B
5323	ICI Seeds	R	P	ML	74	45	9	0.0	0.0	57.5	13.3	6595	A-C
WAC 690	AgriPro Biosciences, Inc.	B	P	ML	75	48	5	0.0	0.0	59.1	14.3	6583	A-D
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	L	74	50	8	0.0	1.0.	57.0	12.9	6421	A-E
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	L	76	49	7	0.0	0.0	56.1	12.4	6386	A-F
6922	Kelly Green	Bz	P	L	71	50	6	0.0	0.0	56.1	12.7	6322	A-G
HSC Wings	HyPerformer Seed Co.	Bz	*	L	71	45	5	0.0	0.0	56.3	12.9	6322	A-G
837	Cargill Hybrid Seeds	Bz	P	L	79	48	5	0.7	4.0	58.0	13.1	6275	A-G
KS 955	Northrup King Co.	R	P	L	76	50	8	0.0	1.0	58.8	14.4	6269	A-G
SG-942	Garrison & Townsend, Inc.	R	R	L	73	46	5	0.0	0.0	58.5	13.6	6252	A-H
DEKALB DK-56	DEKALB Genetics Corp.	R	P	ML	77	47	7	0.0	0.0	58.9	14.1	6238	A-H
TS-466	Texas Seed Co.	R	R	ML	73	48	8	0.0	0.0	57.6	12.6	6211	A-I
6844	Kelly Green	Bz	R	L	71	48	8	0.0	1.7	57.9	13.0	6196	A-I
HSC 893	HyPerformer Seed Co.	Bz	*	M	73	50	7	0.0	0.0	57.6	13.6	6179	A-J
8118	Pioneer Hi-Bred Int., Inc.	Bz	P	L	76	50	6	0.0	1.7	57.4	14.0	6154	A-J
XP5312	Asgrow Seed Co.	R	P	M	73	46	5	0.0	0.0	56.9	12.4	6154	A-J
F-524	Frontier Hybrids, Inc.	Bz	R	L	72	48	8	0.0	1.0	57.4	12.7	6142	A-J
HY 1320	HyPerformer Seed Co.	R	*	ML	75	46	8	0.0	1.7	58.5	13.8	6128	A-J
WAC 685	AgriPro Biosciences, Inc.	B	P	ML	74	46	7	0.0	0.0	57.6	13.7	6126	A-J
NC+ 8B10	NC+ Hybrids	Bz	*	M	72	53	9	0.0	0.0	56.8	12.7	6120	A-J
NC+ 472	NC+ Hybrids	Bz	*	M	74	46	11	0.0	0.0	55.8	12.5	6116	A-J
A570	Asgrow Seed Co.	R	P	M	73	47	7	0.0	0.0	57.8	12.9	6112	A-J
A5702	Asgrow Mexicana	Bz	R	M	72	48	9	0.0	0.0	58.1	12.6	6097	A-J
SG-932	Garrison & Townsend, Inc.	Bz	R	L	73	45	4	0.0	1.7	57.2	12.5	6062	A-J
HSC Cherokee	HyPerformer Seed Co.	R	*	M	71	44	6	0.0	0.0	57.6	13.3	6042	A-K
AG 233	G. E. Pogue Seed Co., Inc.	Bz	R	L	72	49	8	0.0	0.0	58.2	12.6	6002	B-K
NC+ 7B90	NC+ Hybrids	Bz	*	M	72	49	8	0.0	0.0	56.8	12.8	6000	B-K
1710	Delta and Pine Land Co.	Bz	P	L	72	44	5	0.0	3.3	57.8	12.8	5989	B-K
ATx2752 x 90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	73	51	5	0.0	0.0	59.1	14.6	5964	B-K

Table 2A. (Continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Maturity Class ****	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	% Bird	Midge Damage %	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 *****
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	77	48	7	0.0	1.7	56.5	14.1	5960	B-K
Mycogen 9403X	Mycogen Plant Sciences	R	P	ML	74	45	7	0.0	1.7	58.2	13.8	5957	B-K
NC+ 7R37E	NC+ Hybrids	R	*	M	71	47	9	0.0	0.0	58.1	12.7	5957	B-K
WAC 660	AgriPro Biosciences, Inc.	B	P	ML	74	50	6	0.0	0.0	56.9	14.1	5956	B-K
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	R	P	ML	78	46	3	0.0	3.3	58.7	15.0	5945	B-K
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	73	48	7	0.0	0.0	59.1	13.6	5940	B-K
SG-833	Garrison & Townsend, Inc.	Bz	R	M	75	43	6	0.0	0.0	57.0	13.7	5934	B-K
WAC 681	AgriPro Biosciences, Inc.	B	P	ML	74	48	9	0.0	0.7	57.3	13.2	5923	B-K
5319	ICI Seeds	R	P	ML	74	48	7	0.0	3.3	57.1	12.7	5910	B-K
Mycogen 9405X	Mycogen Plant Sciences	Bz	P	L	78	45	5	0.0	1.0	56.3	13.3	5897	B-K
8310	Pioneer Hi-Bred Int., Inc.	Bz	P	L	74	47	8	0.0	2.3	57.6	13.3	5873	B-L
KS 735	Northrup King Co.	R	P	L	72	46	8	0.0	1.0	56.8	12.4	5848	B-L
GRI 06908	Genetic Resources Inc.	Bz	P	M	75	45	6	0.0	1.0	58.0	13.6	5842	B-L
WAC 686	AgriPro Biosciences, Inc.	B	P	M	70	44	9	0.0	0.0	58.2	13.5	5839	B-L
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	L	80	51	8	0.0	3.3	58.0	14.4	5835	B-L
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	L	71	49	10	0.0	0.7	56.8	12.4	5792	B-M
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	77	43	8	0.0	0.0	56.8	12.8	5781	B-M
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	78	48	7	0.0	2.3	59.5	14.5	5777	B-M
2665	Northrup King Co.	R	P	L	71	47	6	0.0	0.0	56.8	12.9	5742	B-M
Mycogen ORO Amigo	Mycogen Plant Sciences	Bz	P	L	73	48	8	0.0	6.7	56.9	13.5	5693	C-M
GRI 01943	Genetic Resources Inc.	R	P	ML	77	45	4	0.0	1.7	58.4	13.1	5669	C-M
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	R	P	M	70	43	5	0.0	0.0	57.4	12.5	5664	C-M
8313	Pioneer Hi-Bred Int., Inc.	Bz	P	L	74	44	7	0.7	2.3	57.1	13.3	5654	D-M
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	L	70	41	5	0.0	0.0	56.5	12.4	5653	D-M
KS 936	Northrup King Co.	R	P	L	76	49	7	0.0	0.0	59.0	14.3	5645	E-M
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	79	49	8	0.0	0.7	57.7	13.8	5603	E-M
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	74	44	7	0.0	4.0	59.2	13.5	5576	E-M
GRI 06943	Genetic Resources Inc.	R	P	M	75	46	6	0.0	0.0	57.6	13.3	5575	E-M
SGX-94043	Garrison & Townsend, Inc.	Bz	R	M	78	38	3	1.7	3.3	57.8	13.6	5540	E-M
6714	Kelly Green	Bz	P	L	71	44	6	0.0	0.0	56.8	12.2	5495	E-M

Table 2A. (Continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Bird	Midge Dam-Age %	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
1558	Delta and Pine Land Co.	Rt	P	M	72	43	10	0.0	0.0	57.4	13.3	5487	E-M
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	78	54	8	0.0	4.3	58.5	14.8	5478	F-M
RS290E	Richardson Seeds, Inc.	Rt	P	M	69	47	8	0.0	0.0	58.8	13.2	5452	F-M
Mycogen 9404X	Mycogen Plant Sciences	Bz	P	L	75	45	7	0.0	0.0	56.5	12.3	5412	G-M
ATx638 x (Tx430 x 77CS1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	78	48	9	0.0	3.7	57.8	14.0	5405	G-M
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	78	45	7	0.0	3.3	57.9	14.4	5321	H-M
1552	Delta and Pine Land Co.	Bz	P	M	75	45	6	0.0	0.0	57.7	13.6	5274	I-N
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	77	47	7	0.0	1.7	55.9	12.8	5258	J-N
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	78	51	8	0.0	9.3	57.5	13.7	5246	J-N
A807 x 86EO361	Tx. Agri. Exp. Stat. (DR)	R	P	ML	79	51	7	0.0	6.7	57.8	14.7	5114	K-N
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	74	47	7	0.0	1.0	56.8	13.1	4954	L-N
HB 94-55	HyPerformer Seed Co.	R	*	M	76	47	7	0.0	1.7	57.5	13.2	4906	M-N
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	78	49	7	0.0	8.3	56.5	14.3	4463	N
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	75	48	10	0.0	4.3	55.3	12.5	4429	N
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	L	80	49	7	0.0	21.7	55.9	14.1	3533	O

TEST MEAN= 5816 TEST C.V.= 7.7% LSD .05= 725.2

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

* Check hybrids were not entered in the test. Hybrids that are commonly grown in the area were already entered by commercial seed companies.

** Grain color designated by respective seed companies: R=Red Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

*** Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

**** 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	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
A7712	Asgrow Mexicana	1	6952	–	–	–	–
A7743	Asgrow Mexicana	2	6639	–	–	–	–
5323	ICI Seeds	3	6595	81	4518	–	–
WAC 690	AgriPro Biosciences, Inc.	4	6583	–	–	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	5	6421	58	5630	43	5290
DEKALB DK-55	DEKALB Genetics Corp.	6	6386	–	–	–	–
6922	Kelly Green Seeds, Inc.	7	6322	50	5911	84	3877
HSC Wings	HyPerformer Seed Co.	8	6322	51	5890	23	5580
837	Cargill Hybrid Seeds	9	6275	18	6359	16	5695
KS 955	Northrup King Co.	10	6269	–	–	–	–
SG-942	Garrison & Townsend, Inc.	11	6252	–	–	–	–
DEKALB DK-56	DEKALB Genetics Corp.	12	6238	54	5721	6	5854
TS-466	Texas Seed Co.	13	6211	45	5940	–	–
6844	Kelly Green Seeds, Inc.	14	6196	28	6171	–	–
HSC 893	HyPerformer Seed Co.	15	6179	13	6458	–	–
8118	Pioneer Hi-Bred Int'l., Inc.	16	6154	69	5284	–	–
XP5312	Asgrow Seed Company	17	6154	–	–	–	–
F-524	Frontier Hybrids, Inc.	18	6142	46	5937	18	5662
HY 1320	HyPerformer Seed Co.	19	6128	44	5945	–	–
WAC 685	AgriPro Biosciences, Inc.	20	6126	31	6105	–	–
NC+ 8B10	NC+ Hybrids	21	6120	–	–	–	–
NC+ 472	NC+ Hybrids	22	6116	6	6538	–	–
A570	Asgrow Seed Company	23	6112	–	–	–	–
A5702	Asgrow Seed Company	24	6097	12	9460	–	–
SG-932	Garrison & Townsend, Inc.	25	6062	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	26	6042	1	6752	55	5040
AG 233	G.E. Pogue Seed Co., Inc.	27	6002	26	6194	13	5744
NC+ 7B90	NC+ Hybrids	28	6000	–	–	–	–
1710	Delta and Pine Land Co.	29	5989	32	6102	12	5751
ATx2752 x 90M23	Tx. Agri. Exp. Stat. (GP)	30	5964	–	–	–	–

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	31	5960	–	–	–	–
Mycogen 9403x	Mycogen Plant Sciences	32	5957	–	–	–	–
NC+ 7R37E	NC+ Hybrids	33	5957	–	–	–	–
WAC 660	AgriPro Biosciences, Inc.	34	5956	40	5999	–	–
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	35	5945	10	6498	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	36	5940	–	–	–	–
SG-833	Garrison & Townsend, Inc.	37	5934	–	–	–	–
WAC 681	AgriPro Biosciences, Inc.	38	5923	–	–	–	–
5319	ICI Seeds	39	5910	20	6324	–	–
Mycogen 9405x	Mycogen Plant Sciences	40	5897	–	–	–	–
8310	Pioneer Hi-Bred Int'l., Inc.	41	5873	25	6199	–	–
KS 735	Northrup King Co.	42	5848	–	–	–	–
GRI 06908	Genetics Resources Inc.	43	5842	–	–	–	–
WAC 686	AgriPro Biosciences, Inc.	44	5839	4	6605	–	–
DEKALB DK-54	DEKALB Genetics Corp.	45	5835	–	–	–	–
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	46	5792	47	5936	32	5458
ATx638 x RTx430	TX. Agri. Exp. Stat. (FM)	47	5781	–	–	–	–
A1 x 8B2668	Tx. Agri. Exp. Stat. (DR)	48	5777	–	–	–	–
2665	Northrup King Co.	49	5742	38	6016	19	5661
Mycogen ORO Amigo	Mycogen Plant Sciences	50	5693	17	6361	25	5565
GRI 01943	Genetic Resources Inc.	51	5669	–	–	–	–
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	52	5664	–	–	–	–
8313	Pioneer Hi-Bred Int'l., Inc.	53	5654	5	6541	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	54	5653	48	5923	56	4953
KS 936	Northrup King Co.	55	5645	61	5424	3	5938
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	56	5603	–	–	–	–
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	57	5576	–	–	–	–
GRI 06943	Genetic Resources Inc.	58	5575	–	–	–	–
SGX-94043	Garrison & Townsend, Inc.	59	5540	–	–	–	–
6714	Kelly Green Seeds, Inc.	60	5495	27	6191	81	4069

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
1558	Delta and Pine Land Co.	61	5487	35	6094	46	5256
A807 x 8B2668	Tx. Agri. Exp. Stat. (DR)	62	5478	33	6101	–	–
RS 290E	Richardson Seeds, Inc.	63	5452	–	–	–	–
Mycogen 9404x	Mycogen Plant Sciences	64	5412	–	–	–	–
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	65	5405	–	–	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	66	5321	–	–	–	–
1552	Delta and Pine Land Co.	67	5274	29	6165	5	5903
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	68	5258	55	5674	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	69	5246	–	–	–	–
A807 x 86E0361	Tx. Agri. Exp. Stat. (DR)	70	5114	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	71	4954	57	5662	–	–
HB 94-55	HyPerformer Seed Co.	72	4906	–	–	–	–
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	73	4463	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	74	4429	39	6010	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	75	3533	–	–	–	–
Myc T-E 77E	Mycogen Plant Sciences	–	–	2	6713	33	5457
EX 90800	AgriPro Seeds	–	–	3	6646	–	–
Myc ORO EXP. 4312X	Mycogen Plant Sciences	–	–	7	6516	–	–
WAC 672	AgriPro Biosciences, Inc.	–	–	8	6514	–	–
WAC 657	AgriPro Biosciences, Inc.	–	–	9	6503	–	–
EX 19318	AgriPro Seeds	–	–	11	6483	–	–
EX 90763	AgriPro Seeds	–	–	14	6426	–	–
KG-6952	Kelly Green Seeds, Inc.	–	–	15	6425	–	–
W-816-E	George Warner Seed Co., Inc.	–	–	16	6415	–	–
Myc ORO Quest	Mycogen Plant Sciences	–	–	19	6339	49	5168
EX 81781	AgriPro Seeds	–	–	21	6320	–	–
dk 790E	Douglass W. King Co., Inc.	–	–	22	6305	–	–
W-917-E	George Warner Seed Co., Inc.	–	–	23	6245	28	5490
ATx2792 x Tx2783	Tx. Agri. Exp. Stat.	–	–	24	6218	41	5326
DEKALB X9011(X)	DEKALB Genetics Corp.	–	–	30	6136	–	–

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
NC+ 7B90	NC+ Hybrids	–	–	36	6053	17	5658
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	37	6028	10	5781
DEKALB DK-62	DEKALB Genetics Corp.	–	–	41	5997	2	6072
DEKALB X-325(X)	DEKALB Genetics Corp.	–	–	42	5969	–	–
Myc T-E X-8342	Mycogen Plant Sciences	–	–	43	5968	–	–
Myc ORO Ultra	Mycogen Plant Sciences	–	–	49	5921	73	4583
A.BON34 x 86E0361	Tx. Agri. Exp. Stat. (DR)	–	–	52	5839	36	5420
EX 19045	AgriPro Seeds	–	–	53	5813	–	–
Myc Grower's 3260	Mycogen Plant Sciences	–	–	56	5672	–	–
737	Cargill Hybrid Seeds	–	–	59	5615	–	–
dk 785E	Douglass W. King Co., Inc.	–	–	60	5474	–	–
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	61	5447	–	–
DEKALB DK-37	DEKALB Genetics Corp.	–	–	63	5420	35	5434
EX 19044	AgriPro Seeds	–	–	64	5401	–	–
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	65	5354	–	–
EX 29772	AgriPro Seeds	–	–	66	5349	–	–
A807 x R3224(t)	Tx. Agri. Exp. Stat.(DR)	–	–	67	5334	37	5388
DEKALB DK-50	DEKALB Genetics Corp.	–	–	68	5324	30	5463
ATx635 x 89E066sis	Tx. Agri. Exp. Stat. (DR)	–	–	70	5254	–	–
A1 x Tx2868	Tx. Agri. Exp. Stat.	–	–	71	5149	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	72	5130	–	–
A1 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	73	5117	–	–
EX 29773	AgriPro Seeds	–	–	74	5116	–	–
EX 19042	AgriPro Seeds	–	–	75	5091	–	–
EX 29771	AgriPro Seeds	–	–	76	5085	–	–
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	77	5081	–	–
A8618 x Tx2783	Tx. Agri. Exp. Stat. (FM)	–	–	78	4876	76	4446
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	79	4875	–	–
ATx631 x R.9021	Tx. Agri. Exp. Stat. (FM)	–	–	80	4628	69	4704
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	82	4450	83	3917

Table 2B. Weslaco, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	83	4248	85	3811		
Number Entries:		75		88		85	
Test Mean Yield (lb/A):			5816		5853		5178

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

TABLE 3. AGRONOMIC AND TEST INFORMATION: GREGORY

TEST:	1994 Dryland Grain Sorghum Performance Test
LOCATION:	John Hunt's Farm, San Patricio County, Gregory, Texas
COOPERATORS:	Pustjevosky and Sons, Darwin Anderson, Dennis Pietsch, Leon Synatschk, and Kenneth Schaefer
SOIL TYPE:	Victoria clay
ROW WIDTH:	38"
PREVIOUS CROP:	Grain Sorghum
LAND PREPARATION:	Plowed stalks with a Lehman plow, bedded (2)
DATE PLANTED:	3-2-94 with cone planter
DATE THINNED:	This year the test block was not thinned. 175 seeds were distributed by a cone-planter on 26 foot centers. A four foot alley was cut for a final plot length of 22 feet.
PLOT LENGTH:	22'
FERTILIZER:	65+33+0; Applied 325 lb/A of 20-10-0 Preplant
HERBICIDE:	Broadcast 1 qt/A AAtrex 4L (atrazine) prior to planting
INSECTICIDE:	Applied 6 lb/A Furadan at planting.
RAINFALL:	Was not recorded, but received above normal rainfall throughout the growing season
IRRIGATIONS:	None
DATE HARVESTED:	7-1-94 with a MF8 plot combine
SIZE HARVESTED PLOT:	2 rows x 22'
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	62
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	4,720 lb/A; yields corrected to 13% moisture
TEST C.V.:	8.3 percent

GENERAL INFORMATION: This test site is representative of conditions in the Coastal Bend Area (Texas Crop Reporting District 8-S) which is considered a major grain sorghum production area in Texas. This year it is estimated that 440,000 acres of grain sorghum were harvested in this District compared to 411,000 acres in 1993. It is also estimated that yield in this District will be 3,795 lb/A compared to 3,643 lb/A in 1993.

An optimum planting date and timely rainfall were contributing factors that resulted in excellent yields. Seeds were distributed by a cone planter to achieve a final plant population of approximately 80,000 plants per acre. The test was not thinned. Excellent stands were achieved in most plots except where poor quality seed was used. Greenbugs were observed in the test block, but populations were not severe enough to warrant an application of an insecticide.

The test mean yield was 4,720 lb/A compared to the past three-year average of 4,209 lb/A. Midge damage was recorded prior to harvest and shown in the following Table. Lodging was not observed in the test block.

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1994

Hybrid 1	Company Or Brand Name	Grain Color 2	Plant Color 3	Maturity Class 4	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	% Stand	Midge Damage %	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 5
8305	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	78	54	10	100.0	0.0	56.8	18.6	5419	A
XP5312	Asgrow Seed Co.	R	P	M	78	53	8	100.0	1.0	56.5	13.5	5402	A
8310	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	76	54	11	100.0	0.0	58.4	16.1	5373	A-B
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	M	75	53	9	100.0	0.3	56.3	15.8	5354	A-B
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	80	53	9	98.3	0.0	56.3	18.2	5347	A-C
CHECK	Tx. Agri. Exp. Stat.	R	P	ML	77	56	9	100.0	0.7	59.8	13.5	5334	A-C
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	M	76	59	10	100.0	0.0	57.2	13.8	5325	A-C
737	Cargill Hybrid Seeds	Bz	P	M	74	48	11	100.0	0.0	58.0	13.2	5308	A-C
AG 233	G. E. Pogue Seed Co., Inc.	Bz	R	ML	76	53	10	98.3	0.3	58.2	17.4	5217	A-D
CHECK	Tx. Agri. Exp. Stat.	R	P	ML	76	53	10	100.0	0.0	58.0	15.4	5207	A-D
Mycogen 444E	Mycogen Plant Sciences	Bz	P	M	76	50	11	100.0	0.0	58.0	16.4	5200	A-D
HSC Wings	HyPerformer Seed Co.	Bz	*	ML	77	52	9	100.0	0.0	58.0	16.8	5165	A-D
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	R	P	ML	83	52	7	100.0	0.7	57.7	18.5	5158	A-D
HY 1320	HyPerformer Seed Co.	R	*	ML	79	53	8	100.0	0.0	58.6	15.7	5153	A-D
A570	Asgrow Seed Co.	R	P	M	77	57	12	98.3	0.0	59.1	12.9	5144	A-E
CHECK	Tx. Agri. Exp. Stat.	R	R	L	79	53	9	95.0	0.7	59.5	16.8	5088	A-F
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	79	52	8	96.7	0.0	59.7	15.5	5087	A-F
F-524	Frontier Hybrids, Inc.	Bz	R	ML	76	54	8	98.3	0.0	57.6	16.9	5006	A-G
1710	Delta and Pine Land Co.	Bz	P	ML	78	51	9	100.0	0.0	57.1	18.2	4977	A-H
ATx2752 x 90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	77	56	9	93.3	1.7	60.7	18.4	4963	A-H
AQL41 x 8B2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	76	58	14	97.5	0.0	58.0	17.3	4937	A-H
A807 x 8B2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	82	54	11	100.0	1.7	58.0	19.1	4932	A-H
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	78	48	8	96.7	1.7	57.8	17.6	4911	A-I
DEKALB DK-37	DEKALB Genetics Corp.	Bz	P	ME	73	53	12	96.7	0.0	57.9	15.7	4904	A-I
CHECK	Tx. Agri. Exp. Stat.	R	P	ML	80	51	10	100.0	2.3	56.6	18.7	4898	A-I
2665	Northrup King Co.	R	P	ML	77	48	7	100.0	2.3	58.5	16.2	4885	A-I
DEKALB DK-58	DEKALB Genetics Corp.	Bz	P	ML	79	57	11	100.0	2.3	56.5	16.4	4879	A-I
TS 477A	Texas Seed Co.	R	R	ML	76	56	10	100.0	0.0	59.0	13.3	4868	A-I
ATx2752 x 90M24	Tx. Agri. Exp. Stat. (GP)	R	P	ML	79	55	8	95.0	2.7	59.3	18.7	4812	A-J
A806 x 8B2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	81	56	12	100.0	0.7	58.8	19.5	4786	A-J

Table 3A (continued)

Hybrid 1	Company Or Brand Name	Grain Color 2	Plant Color 3	Maturity Class 4	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	% Stand	Midge Damage %	Test Weight lb/bu	Moisture %	Yield %	Stat. Sig., 0.05 5
Mycogen 9405X	Mycogen Plant Sciences	Bz	P	ML	82	52	9	96.7	2.0	57.1	19.2	4785	A-J
CHECK	Tx. Agri. Exp. Stat.	Bz	R	L	78	51	9	96.7	2.7	57.9	17.2	4782	A-J
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	M	75	49	10	98.3	0.0	57.2	13.6	4779	A-J
NC+ 472	NC+ Hybrids	Bz	*	M	76	50	9	100.0	1.7	56.9	14.9	4732	A-K
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	R	P	M	77	54	8	95.0	0.0	56.9	12.8	4727	A-K
KS 735	Northrup King Co.	R	P	ML	79	50	10	100.0	0.7	58.3	15.0	4715	A-K
1558	Delta and Pine Land Co.	Rt	P	M	76	50	9	95.0	0.0	59.1	15.0	4697	A-K
8313	Pioneer Hi-Bred Int., Inc.	Bz	P	ML	75	49	11	100.0	1.7	58.9	15.8	4692	A-K
DEKALB X-329	DEKALB Genetics Corp.	Bz	P	ME	76	51	12	100.0	0.7	57.2	18.0	4671	A-L
HSC Cherokee	HyPerformer Seed Co.	R	*	M	79	51	8	98.3	0.3	58.6	13.8	4647	A-L
NC+ 7R37E	NC+ Hybrids	R	*	M	76	51	10	96.7	1.7	58.5	16.7	4632	A-L
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	81	59	13	98.3	2.3	57.0	19.8	4615	A-L
DEKALB DK-56	DEKALB Genetics Corp.	R	P	ML	81	54	11	100.0	0.7	57.2	17.2	4614	A-L
837	Cargill Hybrid Seeds	Bz	P	ML	82	51	9	96.7	1.7	57.2	15.5	4590	B-L
Mycogen 9404X	Mycogen Plant Sciences	Bz	P	ML	80	52	10	100.0	0.0	57.5	13.2	4540	C-L
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	83	54	8	95.0	0.0	56.5	19.5	4482	D-L
857	Cargill Hybrid Seeds	Bz	P	ML	80	49	8	95.0	0.0	55.0	18.8	4447	D-M
CHECK	Tx. Agri. Exp. Stat.	R	P	M	79	56	12	100.0	0.0	57.9	13.8	4341	E-M
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	80	57	10	98.3	5.7	57.5	19.8	4330	F-N
CHECK	Tx. Agri. Exp. Stat.	R	P	ME	73	47	11	98.3	2.7	57.8	13.0	4306	F-N
A35 x (430 x 9188)	Tx. Agri. Exp. Stat. (DR)	R	P	ML	82	50	13	100.0	0.7	56.5	19.8	4250	G-N
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	83	58	9	91.7	6.7	56.9	16.6	4222	G-N
HB 94-55	HyPerformer Seed Co.	R	*	M	81	52	8	86.7	1.7	57.0	19.6	4191	H-N
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	81	49	9	98.3	0.7	56.1	14.6	4187	H-N
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	81	52	10	100.0	4.0	57.6	18.6	4116	I-N
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	77	49	9	90.0	3.3	58.4	12.9	4112	I-N
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	82	50	7	86.7	1.7	56.2	19.2	4022	J-N
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	79	47	9	95.0	6.7	55.5	14.8	3953	K-N
1552	Delta and Pine Land Co.	Bz	P	M	80	50	7	95.0	0.0	57.5	19.2	3898	L-O

Table 3A (continued)

Hybrid 1	Company Or Brand Name	Grain Color 2	Plant Color 3	Matu-rity Class 4	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	Midge Dam-age %	Test Weight lb/bu	Mois-ture %	Yield %	Stat. Sig., 0.05 5
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	83	53	6	91.7	3.3	57.2	17.4	3693	M-O
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	82	49	11	96.7	5	57.6	13.2	3570	N-O
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	86	50	10	90.0	6.7	56.2	19.7	3235	O

TEST MEAN= 4720 TEST C.V.= 8.3% LSD .05= 633.7

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

1 ICI 5323, Asgrow 570, Douglass King dk790, W-917E, AgriPro 9210, and SG-942 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 Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

3 Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

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

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

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

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
8305	Pioneer Hi-Bred Int'l., Inc.	1	5419	–	–	–	–
XP5312	Asgrow Seed Company	2	5402	–	–	–	–
8310	Pioneer Hi-Bred Int'l., Inc.	3	5373	5	5425	22	4539
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	4	5354	21	5117	–	–
DEKALB DK-55	DEKALB Genetics Corp.	5	5347	–	–	–	–
CHECK (ICI 5323)	Tx. Agri. Exp. Stat.	6	5334	34	4860	10	4553
ATx378 x RTx430	Tx. Agri. Exp. Stat.	7	5325	15	5173	17	4334
737	Cargill Hybrid Seeds	8	5308	19	5134	–	–
AG 233	G.E. Pogue Seed Co., Inc.	9	5217	3	5514	4	4702
CHECK (Asgrow 570)	Tx. Agri. Exp. Stat.	10	5207	–	–	–	–
Mycogen 444E	Mycogen Plant Sciences	11	5200	–	–	–	–
HSC Wings	HyPerformer Seed Co.	12	5165	4	5497	3	4706
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	13	5158	11	5258	–	–
HY 1320	HyPerformer Seed Co.	14	5153	20	5121	–	–
A570	Asgrow Seed Co.	15	5144	–	–	–	–
CHECK (dk 790)	Tx. Agri. Exp. Stat.	16	5088	–	–	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	17	5087	–	–	–	–
F-524	Frontier Hybrids, Inc.	18	5006	14	5201	19	4318
1710	Delta and Pine Land Co.	19	4977	23	5086	8	4581
ATx2752 x 90M23	Tx. Agri. Exp. Stat. (GP)	20	4963	–	–	–	–
AQL41 x 8B2668	Tx. Agri. Exp. Stat. (DR)	21	4937	–	–	–	–
A807 x 8B2668	Tx. Agri. Exp. Stat. (DR)	22	4932	13	5207	–	–
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	23	4911	–	–	–	–
DEKALB DK-37	DEKALB Genetics Corp.	24	4904	10	5276	13	4396
CHECK (W-917E)	Tx. Agri. Exp. Stat.	25	4898	16	5183	11	4481
2665	Northrup King Co.	26	4885	53	4524	9	4523
DEKALB DK-58	DEKALB Genetics Corp.	27	4879	–	–	–	–
TS 477A	Texas Seed Co.	28	4868	–	–	–	–
ATx2752 x 90M24	Tx. Agri. Exp. Stat. (GP)	29	4812	–	–	–	–
A806 x 8B2668	Tx. Agri. Exp. Stat. (DR)	30	4786	–	–	–	–

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
Mycogen 9504x	Mycogen Plant Sciences	31	4785	–	–	–	–
CHECK (AgriPro 9210)	Tx. Agri. Exp. Stat.	32	4782	–	–	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	33	4779	59	4322	56	3650
NC+ 472	NC+ Hybrids	34	4732	36	4831	–	–
A92NF3 x Tx2880	Tx. Agri. Exp. Stat.	35	4727	–	–	–	–
KS 735	Northrup King Co.	36	4715	–	–	–	–
1558	Delta and Pine Land Co.	37	4697	46	4724	54	3829
8313	Pioneer Hi-Bred Int'l., Inc.	38	4692	7	5402	2	4828
DEKALB X-329	DEKALB Genetics Corp.	39	4671	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	40	4647	47	4685	29	4175
NC+ 7R37E	NC+ Hybrids	41	4632	–	–	–	–
DEKALB DK-54	DEKALB Genetics Corp.	42	4615	1	5851	–	–
DEKALB DK-56	DEKALB Genetics Corp.	43	4614	39	4812	27	4183
837	Cargill Hybrid Seeds	44	4590	29	4935	23	4219
Mycogen 9404x	Mycogen Plant Sciences	45	4540	–	–	–	–
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	46	4482	–	–	–	–
857	Cargill Hybrid Seeds	47	4447	18	5152	41	4102
CHECK (SG-932)	Tx. Agri. Exp. Stat.	48	4341	–	–	–	–
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	49	4330	9	5278	–	–
CHECK (SG-942)	Tx. Agri. Exp. Stat.	50	4306	–	–	–	–
A35 x (430 x 9188)	Tx. Agri. Exp. Stat. (DR)	51	4250	–	–	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	52	4222	–	–	–	–
HB 94-55	HyPerformer Seed Co.	53	4191	–	–	–	–
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	54	4187	–	–	–	–
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	55	4116	–	–	–	–
ATxARG-1 x Tx436	Tx. Agri. Exp. Stat. (FM)	56	4112	68	3470	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	57	4022	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	58	3953	64	3590	–	–
1552	Delta and Pine Land Co.	59	3898	56	4351	58	3634
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	60	6393	–	–	–	–

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	61	3570	69	3464	–	–
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	62	3235	–	–	–	–
XP5702	Asgrow Seed Company	–	–	2	5557	–	–
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	6	5410	6	4590
8118	Pioneer Hi-Bred Int'l., Inc.	–	–	8	5301	1	4836
NC+ 7B90	NC+ Hybrids	–	–	12	5243	51	3893
TS 466	Texas Seed Co.	–	–	15	5200	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	22	5098	–	–
Myc T-E SONORA	Mycogen Plant Sciences	–	–	24	5074	–	–
Myc Grower's 3150	Mycogen Plant Sciences	–	–	25	5047	–	–
5319	ICI Seeds	–	–	26	5009	–	–
727	Cargill Hybrid Seeds	–	–	27	4970	–	–
Myc ORO Quest	Mycogen Plant Sciences	–	–	28	4943	30	4172
NC+ 573E	NC+ Hybrids	–	–	30	4911	–	–
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	–	–	31	4895	–	–
CHECK (Myc T-E Y-75)	Tx. Agri. Exp. Stat.	–	–	32	4876	21	4248
DEKALB X-325(x)	DEKALB Genetics Corp.	–	–	33	4874	–	–
Myc T-E RANGER	Mycogen Plant Sciences	–	–	35	4848	35	4141
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	37	4829	–	–
dk 780	Douglass W. King Co., Inc.	–	–	38	4820	24	4210
ATx2755 x MR120-90M8	Tx. Agri. Exp. Stat. (GP)	–	–	40	4795	52	3851
Myc Grower's 1313	Mycogen Plant Sciences	–	–	41	4794	31	4163
Myc ORO Zenith	Mycogen Plant Sciences	–	–	42	4793	–	–
Myc Grower's 3260	Mycogen Plant Sciences	–	–	43	4792	–	–
dk 785E	Douglass W. King Co., Inc.	–	–	44	4734	–	–
Myc ORO Amigo	Mycogen Plant Sciences	–	–	45	4732	25	4209
5616	ICI Seeds	–	–	48	4679	–	–
SC-710	SEEDCO Corporation	–	–	49	4656	36	4134
KS 737	Northrup King Co.	–	–	50	4655	57	3643
CHECK (Myc ORO Baron)	Tx. Agri. Exp. Stat.	–	–	51	4587	–	–

Table 3B. Gregory, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	52	4536	–	–
A1 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	54	4524	–	–
ATx2752 x GR134A-90M50	Tx. Agri. Exp. Stat. (GP)	–	–	55	4425	–	–
A807 x R3224(t)	Tx. Agri. Exp. Stat. (DR)	–	–	57	4346	–	–
Myc Grower's 3157	Mycogen Plant Sciences	–	–	58	4338	53	3833
Myc ORO Ultra	Mycogen Plant Sciences	–	–	60	3915	61	3621
A803 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	–	–	61	3891	–	–
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	62	3639	–	–
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	63	3622	–	–
A1 x GR134A-90M50	Tx. Agri. Exp. Stat. (GP)	–	–	65	3581	–	–
A8618 x RTx2783	Tx. Agri. Exp. Stat. (FM)	–	–	66	3527	73	2783
A1 x Tx2783	Tx. Agri. Exp. Stat.	–	–	67	3516	–	–
ATx631 x R.9021	Tx. Agri. Exp. Stat. (FM)	–	–	70	3282	74	2377
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	–	–	71	2785	–	–
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	72	2672	55	3721
Number Entries:		62		72		74	
Test Mean Yield (bu/A):			4720		4683		4019

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

TABLE 4. AGRONOMIC AND TEST INFORMATION: CASTROVILLE

TEST:	1994 Irrigated Grain Sorghum Performance Test
LOCATION:	Stinson & Stinson, Inc., Castroville, Texas
COOPERATORS:	Hilton Stinson, R.Q. Stinson, Wayne Scholtz, Steve Bradshaw, Dennis Pietsch, and Leon Synatschk
SOIL TYPE:	Castroville clay loam
ROW WIDTH:	36"
PREVIOUS CROP:	Corn
LAND PREPARATION:	Shred stalks, disked twice, chiseled, bedded
DATE PLANTED:	3-11-94, by hand, using JD80 Planter
DATE THINNED:	Not thinned
PLOT LENGTH:	25'
FERTILIZER:	600# 20-10-10 preplant
HERBICIDE:	1 pt/A of Atrazine banded 18"
INSECTICIDE:	Disyston 5 lb/A
RAINFALL:	April-May= 8", June & July=0
IRRIGATIONS:	1 application of approximately 3"
DATE HARVESTED:	7-19-94 with a MF 8 plot combine
SIZE HARVESTED PLOT:	2 rows, 25 feet long
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	52
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	6,834 lb/A; yields corrected to 13% moisture
TEST C.V.:	5.9%

GENERAL INFORMATION: An optimum planting date, good growing conditions, and excellent plant stands were contributing factors that resulted in outstanding yields at this test site.

An excellent seedbed was available for the March 11 planting. Seeds were distributed to achieve a final plant population of approximately 100,000 plants per acre. Seedling emergence was rapid and excellent plant growth and development resulted from timely rains. A good fertilization program was used to provide the necessary plant nutrients needed for maximum sorghum production.

The test block did not stress throughout the growing season as timely rains in May and June or supplemental irrigation provided the needed moisture. Weeds were controlled by a herbicide resulting in a very clean test block.

The test mean yield was 6,834 lb/A compared to the past 3-year average of 5,613 lb/A with 22 hybrids in the test producing over 7,000 lb/A. Excellent bushel weights were also attained as reflected in the following Table. Bird and midge damage were not observed in the test. Root lodging was observed in some plots but the incidence was minimal.

The test block was shredded, fertilized, and irrigated for a ratoon crop. Results of the ratoon crop are presented in Table 4A-1.

Table 4A. GRAIN SORGHUM PERFORMANCE TEST; CASTROVILLE, TEXAS 1994

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Maturity Class ****	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 *****
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	82	61	11	56.0	12.9	7966	A
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	81	57	7	57.4	12.9	7891	A-B
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	82	61	5	58.2	13.3	7851	A-C
837	Cargill Hybrid Seeds	Bz	P	ML	82	55	7	56.6	13.1	7645	A-D
1506	Delta and Pine Land Co.	Ct	P	M	78	64	11	55.4	12.9	7571	A-E
HY 1320	HyPerformer Seed Co.	R	*	ML	80	55	5	59.1	12.4	7460	A-F
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	84	61	6	58.1	12.8	7457	A-F
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	78	60	7	57.2	12.4	7364	A-G
CHECK	Tx. Agri. Exp. Stat.	Bz	R	ML	80	56	7	58.7	12.9	7287	A-G
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ML	78	57	7	58.9	12.6	7223	A-H
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	80	55	5	56.5	12.9	7210	A-I
NC+ 7B90	NC+ Hybrids	Bz	*	M	79	55	7	58.3	12.5	7119	B-J
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	77	57	8	57.5	12.6	7111	B-J
HSC Wings	HyPerformer Seed Co.	Bz	*	ML	79	56	7	60.3	12.5	7072	B-K
F-524	Frontier Hybrids, Inc.	Bz	R	ML	77	57	8	56.3	12.9	7062	B-K
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	82	57	8	58.7	15.8	7055	B-K
HM 2250	Harvest Master Seed Co.	Bz	P	ML	77	55	8	58.6	12.3	7051	B-K
TS-488	Texas Seed Co.	R	R	M	80	54	7	58.9	12.4	7049	B-K
Mycogen T-E Sonora	Mycogen Plant Sciences	Bz	P	M	76	53	10	57.9	12.5	7035	C-L
Mycogen 611E	Mycogen Plant Sciences	Bz	P	ML	85	54	5	58.0	13.0	7019	C-M
NC+ 472	NC+ Hybrids	Bz	*	M	76	51	8	58.4	12.6	7009	C-M
8310	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	79	57	9	58.8	13.3	7004	C-M
A1 x 90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	82	64	7	59.3	13.2	6990	D-M
A570	Asgrow Seed Co.	R	P	M	80	60	11	58.3	13.1	6971	D-N
HSC Cherokee	HyPerformer Seed Co.	R	*	M	77	53	8	55.9	12.5	6945	D-O
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	79	57	7	58.3	13.0	6937	D-O
HB 94-50	HyPerformer Seed Co.	Ct	*	M	80	62	10	57.7	13.0	6894	D-P
XP5312	Asgrow Seed Co.	R	P	M	77	56	6	57.4	11.6	6864	D-P
857	Cargill Hybrid Seeds	Bz	P	ML	82	53	6	54.9	13.1	6857	D-P
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	80	55	7	59.3	13.1	6761	E-P

Table 4A (continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
8313	Pioneer Hi-Bred Int., Inc.	Bz	P	ML	79	50	8	59.2	13.3	6755	E-P
HM X	Harvest Master Seed Co.	Bz	P	ML	76	51	8	59.5	11.5	6725	E-Q
1552	Delta and Pine Land Co.	Bz	P	M	80	56	5	59.6	13.1	6614	F-Q
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	81	52	10	56.9	12.8	6589	G-Q
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	82	53	8	54.9	13.5	6577	G-Q
737	Cargill Hybrid Seeds	Bz	P	ML	74	53	11	55.9	12.4	6567	G-Q
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	78	55	9	57.1	12.3	6557	G-Q
2665	Northrup King Co.	R	P	ML	78	52	6	59.1	12.8	6542	G-Q
HB 94-55	HyPerformer Seed Co.	R	*	M	82	55	6	59.7	12.9	6536	G-Q
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ML	80	56	7	58.2	12.9	6522	G-Q
DEKALB DK-56	DEKALB Genetics Corp.	R	P	ML	83	57	9	58.4	13.4	6399	H-Q
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	81	52	7	59.1	13.4	6348	I-Q
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	84	55	8	58.6	13.3	6249	J-Q
ATx2752 x 90M50	Tx. Agri. Exp. Stat. (GP)	R	P	ML	77	54	8	54.7	12.9	6205	K-Q
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	79	51	6	59.1	13.0	6177	L-Q
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	83	51	6	58.7	13.0	6165	M-Q
8305	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	79	57	9	56.9	13.1	6163	M-Q
1558	Delta and Pine Land Co.	Rt	P	M	79	54	7	58.0	13.1	6120	N-Q
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	79	55	9	57.1	12.1	6088	O-Q
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	81	55	8	56.6	12.7	6052	P-Q
KS 735	Northrup King Co.	R	P	ML	79	55	9	54.2	12.5	5871	Q-R
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	81	49	8	58.0	12.1	5254	R

TEST MEAN= 6835 TEST C.V.= 5.9% LSD .05= 658.7

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Table 4A (continued)

Note 3: Hybrids with same yields were ranked by computer.

1 AgriPro AG 233, ICI 5319, and AgriPro 9850 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 Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

3 Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

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

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

Table 4A-1. Ratoon results from 52 hybrids entered in the 1994 Castroville Grain Sorghum Performance Test.

Hybrid	Company or Brand Name	Test Wt. lb/bu	Moisture %	Ratoon Yield lb/A	Stat. Sig. 0.05	Main Crop lb/A	Total Yield lb/A
NC+ 7B90	NC+ Hybrids	57.4	15.8	3938	A	7119	11057
Mycogen T-E Sonora	Mycogen Plant Sciences	59.1	15.5	3716	A-B	7035	10751
CHECK (AG233)	Tx. Agri. Exp. Stat.	56.5	17.3	3639	A-C	7287	10926
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	57.9	15.6	3620	A-C	7111	10731
F-524	Frontier Hybrids Inc.	58.0	16.2	3579	A-D	7062	10641
KS 735	Northrup King Co.	57.2	16.1	3523	A-D	5871	9394
HM 2250	Harvest Master Seed Co.	58.3	15.8	3496	A-E	7051	10547
XP5312	Asgrow Seed Co.	57.9	15.6	3431	A-F	6864	10295
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	56.0	15.7	3395	A-G	6577	9972
ATx2752 x 90M50	Tx. Agri. Exp. Stat. (GP)	56.5	16.2	3329	A-G	6205	9534
CHECK (ICI 5319)	Tx. Agri. Exp. Stat.	60.3	15.4	3296	A-G	7223	10519
HB 94-50	HyPerformer Seed Co.	60.1	16.1	3265	A-H	6894	10159
1506	Delta and Pine Land Co.	57.4	16.2	3253	A-H	7571	10824
837	Cargill Hybrid Seeds	55.7	15.4	3247	A-H	7645	10892
ATx399 x RTx430	Tx. Agri. Exp. Stat.	55.7	15.5	3245	A-H	6557	9802
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	60.0	16.2	3214	A-I	6177	9391
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	58.1	15.9	3156	A-J	6348	9504
HSC Wings	HyPerformer Seed Co.	59.0	16.0	3140	A-J	7072	10212
DEKALB DK-55	DeKalb Genetics Corp.	55.2	15.9	3131	A-J	7891	11022
1552	Delta and Pine Land Co.	61.5	16.1	3128	A-J	6614	9742
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	55.9	16.1	3096	A-J	7210	10306
NC+ 472	NC+ Hybrids	58.2	15.5	3055	A-J	7009	10064
2665	Northrup King Co.	59.1	16.1	3003	A-J	6542	9545
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	58.0	15.5	2984	A-J	6589	9573
TS-488	Texas Seed Co.	60.0	16.2	2971	A-J	7049	10020
857	Cargill Hybrid Seeds	54.8	15.6	2971	A-J	6857	9828
HM X	Harvest Master Seed Co.	60.4	16.3	2965	A-J	6725	9690
HSC Cherokee	HyPerformer Seed Co.	56.8	16.1	2958	A-J	6945	9903
737	Cargill Hybrid Seeds	56.7	15.3	2911	A-J	6567	9478
A570	Asgrow Seed Co.	57.6	15.5	2880	B-J	6971	9851
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	61.4	16.1	2814	B-J	6761	9575
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	60.8	16.0	2806	B-J	6165	8971
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	57.8	16.0	2783	B-K	6937	9720
1558	Delta and Pine Land Co.	60.0	16.2	2749	B-K	6120	8869
8313	Pioneer Hi-Bred Int. Inc.	59.0	16.3	2735	B-K	6755	9490

Table 4A-1 (continued)

Hybrid	Company or Brand Name	Test Wt. lb/bu	Moisture %	Ratoon Yield lb/A	Stat. Sig. 0.05	Main Crop lb/A	Total Yield lb/A
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	59.1	16.1	2729	B-K	7851	10580
8310	Pioneer Hi-Bred Int. Inc.	59.0	16.1	2726	B-K	7004	9730
HY 1320	HyPerformer Seed Co.	59.2	16.2	2726	B-K	7460	10186
ATx378 x RTx430	Tx. Agri. Exp. Stat.	59.0	15.3	2658	B-K	7364	10022
CHECK (AP 9850)	Tx. Agri. Exp. Stat.	59.4	16.1	2634	C-L	6522	9156
HB- 94-55	HyPerformer Seed Co.	59.1	16.2	2629	C-L	6536	9165
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	59.0	16.0	2546	D-L	7457	10003
DEKALB DK-56	DeKalb Genetics Corp.	56.7	17.4	2457	E-L	6399	8856
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	58.5	15.8	2400	F-L	6088	8488
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	56.4	16.1	2349	G-L	7055	9404
ATxARG-1 x R8925	Tx. Agri. Exp, Stat. (FM)	58.2	15.8	2231	H-L	5254	7485
A1 x 90M23	Tx. Agri. Exp. Stat. (GP)	59.6	16.1	2170	I-L	6990	9160
8305	Pioneer Hi-Bred Int. Inc.	55.5	18.5	2151	J-M	6163	8314
Mycogen 611E	Mycogen Plant Sciences	56.5	16.4	2113	J-M	7019	9132
DEKALB DK-54	DeKalb Genetics Corp.	52.7	16.4	1752	K-M	7966	9718
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	55.2	15.9	1632	L-M	6052	7684
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	54.8	22.4	1216	M	6249	7465

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

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
DEKALB DK-54	DEKALB Genetics Corp.	1	7966	1	7456	–	–
DEKALB DK-55	DEKALB Genetics Corp.	2	7891	–	–	–	–
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	3	7851	–	–	–	–
837	Cargill Hybrid Seeds	4	7645	7	6552	13	6254
1506	Delta and Pine Land Co.	5	7571	33	5902	25	5899
HY 1320	HyPerformer Seed Co.	6	7460	10	6420	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	7	7457	–	–	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	8	7364	34	5861	14	6189
CHECK (AgriPro AG 233)	Tx. Agri. Exp. Stat.	9	7287	–	–	–	–
CHECK (ICI 5319)	Tx. Agri. Exp. Stat.	10	7223	14	6363	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	11	7210	–	–	–	–
NC+ 7B90	NC+ Hybrids	12	7119	–	–	–	–
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	13	7111	19	6168	3	6686
HSC Wings	HyPerformer Seed Co.	14	7072	24	6094	9	6361
F-524	Frontier Hybrids, Inc.	15	7062	11	6416	19	6094
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	16	7055	9	6473	–	–
HM 2250	Harvest Master Seed Co.	17	7051	5	6670	12	6259
TS-488	Texas Seed Co.	18	7049	–	–	–	–
Mycogen T-E Sonora	Mycogen Plant Sciences	19	7035	20	6143	35	5551
Mycogen 611E	Mycogen Plant Sciences	20	7019	–	–	–	–
NC+ 472	NC+ Hybrids	21	7009	–	–	–	–
8310	Pioneer Hi-Bred Int'l., Inc.	22	7004	40	5741	23	5972
A1 x 90M23	Tx. Agri. Exp. Stat. (GP)	23	6990	–	–	–	–
A570	Asgrow Seed Company	24	6971	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	25	6945	41	5707	41	5340
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	26	6937	–	–	–	–
HB 94-50	HyPerformer Seed Co.	27	6894	–	–	–	–
XP5312	Asgrow Seed Company	28	6864	–	–	–	–
857	Cargill Hybrid Seeds	29	6857	4	6721	4	6619
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	30	6761	17	6218	–	–

Table 4B. Castroville, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
8313	Pioneer Hi-Bred Int'l., Inc.	31	6755	23	6102	5	6607
HM X	Harvest Master Seed Co.	32	6725	–	–	–	–
1552	Delta and Pine Land Co.	33	6614	28	5965	11	6319
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	34	6589	–	–	–	–
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	35	6577	–	–	–	–
737	Cargill Hybrid Seeds	36	6567	35	5856	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	37	6557	38	5786	38	5507
2665	Northrup King Co.	38	6542	16	6228	6	6580
HB 94-55	HyPerformer Seed Co.	39	6536	–	–	–	–
CHECK (AgriPro 9850)	Tx. Agri. Exp. Stat.	40	6522	–	–	–	–
DEKALB DK-56	DEKALB Genetics Corp.	41	6399	6	6635	7	6478
ATx638 x RTX430	Tx. Agri. Exp. Stat. (FM)	42	6348	–	–	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	43	6249	–	–	–	–
ATx2752 x 90M50	Tx. Agri. Exp. Stat. (GP)	44	6205	–	–	–	–
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	45	6177	–	–	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	46	6165	–	–	–	–
8305	Pioneer Hi-Bred Int'l., Inc.	47	6163	–	–	–	–
1558	Delta and Pine Land Co.	48	6120	37	5810	31	5708
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	49	6088	47	5542	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	50	6052	18	6208	–	–
KS 735	Northrup King Co.	51	5871	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	52	5254	50	5196	–	–
XP5702	Asgrow Seed Company	–	–	2	6854	–	–
8118	Pioneer Hi-Bred Int'l., Inc.	–	–	3	6755	2	6728
CHECK (Myc T-E Y-75)	Tx. Agri. Exp. Stat.	–	–	8	6505	46	5199
A8618 x RTx2783	Tx. Agri. Exp. Stat. (FM)	–	–	12	6397	–	–
TS-466	Texas Seed Co.	–	–	13	6396	–	–
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	15	6310	–	–
Myc ORO Amigo	Mycogen Plant Sciences	–	–	21	6123	16	6174
CHECK	Tx. Agri. Exp. Stat.	–	–	22	6119	–	–

Table 4B. Castroville, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
A35 x Tx2862	Tx. Agri. Exp. Stat. (GP)	–	–	25	6088	–	–
A35 x GR134A-90M50	Tx. Agri. Exp. Stat. (GP)	–	–	26	6072	–	–
Myc T-E Ranger	Mycogen Plant Sciences	–	–	27	5974	22	6004
Myc ORO Quest	Mycogen Plant Sciences	–	–	29	5955	–	–
dk 785E	Douglass W. King Co., Inc.	–	–	30	5943	37	5519
dk 790E	Douglass W. King Co., Inc.	–	–	31	5915	8	6406
KS 737	Northrup King Co.	–	–	32	5905	59	4569
Myc ORO Zenith	Mycogen Plant Sciences	–	–	36	5833	–	–
A35 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	39	5777	–	–
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	42	5704	–	–
A35 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	–	–	43	5644	–	–
5323	ICI Seeds	–	–	44	5622	–	–
727	Cargill Hybrid Seeds	–	–	45	5545	–	–
CHECK (??)	Tx. Agri. Exp. Stat.	–	–	46	5543	–	–
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	48	5426	–	–
A35 x GR107-90M18	Tx. Agri. Exp. Stat. (GP)	–	–	49	5197	–	–
ATx631 x R.9021	Tx. Agri. Exp. Stat.	–	–	51	5177	54	4754
dk 934x	Douglass W. King Co., Inc.	–	–	52	5102	–	–
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	53	4917	56	4693
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	–	–	54	4379	55	4720
Number Entries:		52		54		62	
Test Mean Yield (bu/A):			6834		5993		5612

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

TABLE 5. AGRONOMIC AND TEST INFORMATION: DANEVANG

TEST:	1994 Dryland Grain Sorghum Performance Test
LOCATION:	E. E. Berndt Farm - Danevang, Texas
COOPERATORS:	E. E. Berndt, Dennis Pietsch, John Cosper, and Leon Synatschk
SOIL TYPE:	Lake Charles clay
ROW WIDTH:	40"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Shredded stalks, disked, bedded, hipped
DATE PLANTED:	3-4-94: hand-dropped through a 8 row International planter
DATE THINNED:	Test was not thinned, 200 seeds were distributed/row
PLOT LENGTH:	25'
FERTILIZER:	118-48-5-8S-2.7 qt/A Zn
HERBICIDE:	1 1/2 qt/A Lariat
INSECTICIDE:	5 lb/A Counter
RAINFALL:	Approximately 16.6 inches from plant to harvest
IRRIGATIONS:	None
DATE HARVESTED:	7-28-93 with MF 8 plot combine
SIZE HARVESTED PLOT:	2 Rows, 25 feet long
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	60
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	5,716 lb/A; yields corrected to 13% moisture
TEST C.V.:	6.0 percent

GENERAL INFORMATION: Sixty hybrids were entered by 13 commercial seed companies and TAES at this site which is representative of conditions in the Upper Coast Area of Texas.

Timely rainfall throughout the growing season resulted in outstanding yields despite the incidence of head smut. A March 3, planting was secured which is an optimum date for this area. At planting, sufficient seed was distributed by hand through the planter to attain a plant population of approximately 90,000 plants per acre. The test was not hand-thinned. Excellent stands were attained.

Good growing conditions in addition to timely rains insured good plant growth and development . This year, conditions were favorable for the development of head smut. Readings were taken by Mr. Delroy Collins, Research Associate, and Jairo Osario, Graduate Student, Department of Plant Pathology and Microbiology, Texas A & M University on June 21, 1994. These reading are presented in Table 5A-1. The incidence of head smut was high in some hybrids which may have reduced potential yields.

The test mean yield was 5,716 lb/A compared to the past 3 year average of 4,870 lb/A . Twenty-one hybrids in the test produced over 6,000 lb/A. Bushel weights ranged from 52.2 lb/bu to 61.5 lb/bu. The incidence of midge damage was minimal. No lodging occurred in the test block.

Table 5A. GRAIN SORGHUM PERFORMANCE TEST; DANEVANG, TEXAS 1994

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Maturity Class ****	Days To 50% Flower	Plant Height Inches	Head Exsertion Inches	% Stand	Midge Damage %	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 *****
A807 x 86EO361	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	59	10	100.0	0.0	57.0	13.2	6966	A
A570	Asgrow Seed Co.	R	P	M	83	60	11	100.0	0.0	57.6	13.4	6699	A-B
HY 1320	HyPerformer Seed Co.	Bz	*	M	84	58	9	100.0	0.0	59.7	13.4	6698	A-B
8305	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	83	60	10	100.0	0.0	57.2	13.4	6493	A-C
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	85	62	12	100.0	0.0	57.8	13.5	6430	A-D
SG-942	Garrison & Townsend, Inc.	R	R	L	83	59	8	100.0	0.0	58.9	13.6	6428	A-D
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	Wt	T	ML	84	67	11	100.0	0.7	59.6	13.5	6401	A-E
837	Cargill Hybrid Seeds	Bz	P	ML	85	55	9	100.0	1.7	58.0	13.4	6358	A-F
HB 94-55	HyPerformer Seed Co.	R	*	M	85	56	6	100.0	0.0	59.1	13.5	6309	A-G
A807 xTx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	58	8	100.0	0.0	61.0	13.5	6305	A-G
HSC Wings	HyPerformer Seed Co.	Bz	*	M	83	60	9	100.0	0.0	58.4	13.4	6263	B-G
NC+ 472	NC+ Hybrids	Bz	*	M	82	53	9	100.0	0.0	59.5	13.0	6206	B-H
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	83	57	8	100.0	0.0	59.6	13.6	6201	B-I
5319	ICI Seeds	Bz	P	ML	83	59	9	100.0	0.0	58.0	13.4	6153	B-I
F-524	Frontier Hybrids, Inc.	Bz	P	ML	83	58	9	100.0	0.0	61.5	13.4	6138	B-J
TS 466	Texas Seed Co.	R	R	ML	83	58	10	100.0	0.0	58.2	13.4	6129	B-J
SG-919	Garrison & Townsend, Inc.	R	R	M	85	55	7	100.0	0.0	57.0	13.1	6124	B-J
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	R	P	ML	83	57	9	100.0	0.0	58.6	13.3	6105	B-J
1710	Delta and Pine Land Co.	Bz	P	ML	83	57	9	100.0	0.0	59.2	13.3	6081	B-K
8310	Pioneer Hi-Bred Int., Inc.	Bz	P	ML	83	60	9	100.0	0.0	57.7	13.6	6029	B-L
2665	Northrup King Co.	R	P	ML	83	54	8	100.0	0.0	57.8	13.4	6014	B-M
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	84	55	9	100.0	0.0	57.2	13.4	5975	C-M
1552	Delta and Pine Land Co.	Bz	P	M	85	55	7	100.0	0.0	57.8	13.6	5957	C-M
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	86	55	9	93.3	3.3	57.9	13.0	5932	C-M
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ME	82	55	11	100.0	0.0	58.6	13.1	5876	C-N
NC+ 7R37E	NC+ Hybrids	Bz	P	M	82	55	9	100.0	0.0	58.5	13.5	5867	C-N
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	56	10	100.0	1.0	58.5	13.4	5815	C-O
DEKALB DK-56	DEKALB Genetics Corp.	R	P	ML	85	59	10	100.0	0.0	57.4	13.5	5783	D-O
HSC Cherokee	HyPerformer Seed Co.	R	*	ML	83	56	9	100.0	0.0	57.1	13.5	5739	D-O
8313	Pioneer Hi-Bred Int., Inc.	Bz	P	ML	82	51	10	100.0	0.0	56.4	13.4	5723	E-P

Table 5A. (Continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	Midge Dam-Age %	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
857	Cargill Hybrid Seeds	Bz	P	ML	85	53	10	100.0	0.0	56.4	12.9	5693	F-P
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	R	P	ML	82	60	9	100.0	0.0	58.4	13.6	5692	F-P
HSC 893	HyPerformer Seed Co.	R	*	M	83	54	8	100.0	0.0	58.7	13.3	5690	F-P
KS 735	Northrup King Co.	R	P	ML	82	56	10	100.0	0.0	56.5	13.2	5640	G-Q
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	86	64	9	93.3	3.3	57.8	13.4	5633	G-Q
1558	Delta and Pine Land Co.	Rt	P	M	82	55	9	100.0	0.0	58.0	13.4	5633	G-Q
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ME	80	58	10	100.0	0.0	57.6	13.3	5627	G-Q
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	R	P	ML	82	59	10	100.0	0.0	57.9	13.4	5625	G-Q
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	84	55	7	100.0	0.0	60.2	13.5	5516	H-R
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	56	7	100.0	0.0	58.7	13.6	5507	H-S
737	Cargill Hybrid Seeds	Bz	P	ML	81	53	10	100.0	0.0	55.2	12.4	5495	I-S
SG-833	Garrison & Townsend, Inc.	R	R	M	85	57	14	100.0	0.0	57.2	13.2	5446	J-S
ATx399 x RTx430	Tx. Agri. Exp. Stat.	R	P	ML	82	55	11	100.0	0.0	56.7	12.8	5443	J-S
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	R	P	ML	83	55	9	100.0	0.0	59.6	13.5	5437	J-S
XP5312	Asgrow Seed Co.	R	P	M	82	57	8	100.0	0.0	56.1	13.2	5399	K-T
Mycogen 444E	Mycogen Plant Sciences	Bz	P	M	83	55	10	100.0	0.0	56.2	13.2	5399	K-T
5323	ICI Seeds	R	P	ML	84	57	9	100.0	0.0	57.6	13.6	5336	L-U
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	85	55	11	100.0	0.0	57.9	13.2	5316	M-U
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	84	52	8	100.0	0.0	57.8	13.2	5219	N-V
ATx378 x RTx430	Tx. Agri. Exp. Stat.	R	P	ML	83	60	10	100.0	0.0	53.6	13.3	5178	N-V
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	R	P	ML	84	58	8	100.0	0.0	54.5	12.7	5138	O-V
A2-2(B) x 8BE	Tx. Agri. Exp. Stat. (DR)	R	P	ML	86	58	10	100.0	0.0	58.0	13.5	5033	P-V
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	85	60	8	95.0	1.7	57.4	13.1	5029	P-V
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	86	58	10	95.0	1.7	56.5	13.3	4983	Q-V
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	85	53	8	100.0	0.0	55.9	12.9	4847	R-V
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	86	52	7	100.0	4.0	55.8	13.0	4821	S-V
Mycogen 9404X	Mycogen Plant Sciences	Bz	P	ML	85	57	9	100.0	0.0	57.8	12.9	4741	T-W
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	85	55	11	100.0	1.7	57.6	11.7	4712	U-W
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	83	53	9	100.0	0.0	56.1	13.0	4635	V-W
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	84	47	8	93.3	0.0	52.2	11.9	4161	W

TEST MEAN= 5716 TEST C.V.= 6.0% LSD .05= 551.8

Table 5A (continued)

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

* T-E Sonora and DEKALB DK-37 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 Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

*** Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

**** 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 5A-1. Head Smut Counts from 60 Hybrids Entered in the 1994 Danevang Grain Sorghum Performance Test.

Hybrid	Company	# Head Smut
A570	Asgrow Seed Company	0
A570	Asgrow Seed Company	0
A570	Asgrow Seed Company	0
TOTAL		**0**
XP5312	Asgrow Seed Company	30
XP5312	Asgrow Seed Company	33
XP5312	Asgrow Seed Company	33
TOTAL		**96**
857	Cargill Hybrid Seeds	21
857	Cargill Hybrid Seeds	11
857	Cargill Hybrid Seeds	28
TOTAL		**60**
837	Cargill Hybrid Seeds	32
837	Cargill Hybrid Seeds	24
837	Cargill Hybrid Seeds	7
TOTAL		**63**
737	Cargill Hybrid Seeds	15
737	Cargill Hybrid Seeds	16
737	Cargill Hybrid Seeds	17
TOTAL		**48**
DEKALB DK-54	DEKALB Plant Genetics	21
DEKALB DK-54	DEKALB Plant Genetics	16
DEKALB DK-54	DEKALB Plant Genetics	12
TOTAL		**49**
DEKALB DK-55	DEKALB Plant Genetics	23
DEKALB DK-55	DEKALB Plant Genetics	28
DEKALB DK-55	DEKALB Plant Genetics	9
TOTAL		**60**
DEKALB DK-56	DEKALB Plant Genetics	28
DEKALB DK-56	DEKALB Plant Genetics	10
DEKALB DK-56	DEKALB Plant Genetics	29
TOTAL		**67**
1552	Delta and Pine Land Co.	1
1552	Delta and Pine Land Co.	0
1552	Delta and Pine Land Co.	0
TOTAL		**1**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
1558	Delta and Pine Land Co.	8
1558	Delta and Pine Land Co.	2
1558	Delta and Pine Land Co.	1
TOTAL		**11**
1710	Delta and Pine Land Co.	8
1710	Delta and Pine Land Co.	18
1710	Delta and Pine Land Co.	23
TOTAL		**49**
F-524	Frontier Hybrids, Inc.	13
F-524	Frontier Hybrids, Inc.	27
F-524	Frontier Hybrids, Inc.	10
TOTAL		**50**
SG-942	Garrison & Townsend, Inc.	3
SG-942	Garrison & Townsend, Inc.	0
SG-942	Garrison & Townsend, Inc.	0
TOTAL		**3**
SG-833	Garrison & Townsend, Inc.	18
SG-833	Garrison & Townsend, Inc.	21
SG-833	Garrison & Townsend, Inc.	9
TOTAL		**48**
SG-919	Garrison & Townsend, Inc.	15
SG-919	Garrison & Townsend, Inc.	54
SG-919	Garrison & Townsend, Inc.	18
TOTAL		**87**
HY 1320	HyPerformer Seed Co.	0
HY 1320	HyPerformer Seed Co.	0
HY 1320	HyPerformer Seed Co.	0
TOTAL		**0**
HSC 893	HyPerformer Seed Co.	0
HSC 893	HyPerformer Seed Co.	0
HSC 893	HyPerformer Seed Co.	0
TOTAL		**0**
HSC Cherokee	HyPerformer Seed Co.	0
HSC Cherokee	HyPerformer Seed Co.	0
HSC Cherokee	HyPerformer Seed Co.	0
TOTAL		**0**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
HSC Wings	HyPerformer Seed Co.	16
HSC Wings	HyPerformer Seed Co.	16
HSC Wings	HyPerformer Seed Co.	10
TOTAL		**42**
HB94-55	HyPerformer Seed Co.	1
HB94-55	HyPerformer Seed Co.	1
HB94-55	HyPerformer Seed Co.	0
TOTAL		**2**
5323	ICI Seeds	36
5323	ICI Seeds	38
5323	ICI Seeds	23
TOTAL		**97**
5319	ICI Seeds	7
5319	ICI Seeds	25
5319	ICI Seeds	26
TOTAL		**58**
Mycogen 444E	Mycogen Plant Sciences	13
Mycogen 444E	Mycogen Plant Sciences	19
Mycogen 444E	Mycogen Plant Sciences	15
TOTAL		**47**
Mycogen 9404x	Mycogen Plant Sciences	6
Mycogen 9404x	Mycogen Plant Sciences	12
Mycogen 9404x	Mycogen Plant Sciences	14
TOTAL		**32**
NC+ 472	NC+ Hybrids	16
NC+ 472	NC+ Hybrids	9
NC+ 472	NC+ Hybrids	23
TOTAL		**48**
NC+ 7R37E	NC+ Hybrids	37
NC+ 7R37E	NC+ Hybrids	36
NC+ 7R37E	NC+ Hybrids	39
TOTAL		**112**
2665	Northrup King Co.	12
2665	Northrup King Co.	9
2665	Northrup King Co.	6
TOTAL		**27**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
KS 735	Northrup King Co.	14
KS 735	Northrup King Co.	9
KS 735	Northrup King Co.	8
TOTAL		**31**
8305	Pioneer Hi-Bred Int., Inc.	18
8305	Pioneer Hi-Bred Int., Inc.	15
8305	Pioneer Hi-Bred Int., Inc.	6
TOTAL		**39**
8313	Pioneer Hi-Bred Int., Inc.	0
8313	Pioneer Hi-Bred Int., Inc.	0
8313	Pioneer Hi-Bred Int., Inc.	1
TOTAL		**1**
8310	Pioneer Hi-Bred Int., Inc.	0
8310	Pioneer Hi-Bred Int., Inc.	0
8310	Pioneer Hi-Bred Int., Inc.	0
TOTAL		**0**
TS 466	Texas Seed Co.	14
TS 466	Texas Seed Co.	16
TS 466	Texas Seed Co.	6
TOTAL		**36**
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	5
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	4
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	9
TOTAL		**18**
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	12
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	18
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	4
TOTAL		**34**
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	23
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	4
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	18
TOTAL		**45**
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	0
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	0
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	1
TOTAL		**1**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	56
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	41
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	29
TOTAL		**126**
ATx638 x (Tx430 x 77CS1)	Tx. Agri. Exp. Stat. (FM)	26
ATx638 x (Tx430 x 77CS1)	Tx. Agri. Exp. Stat. (FM)	18
ATx638 x (Tx430 x 77CS1)	Tx. Agri. Exp. Stat. (FM)	32
TOTAL		**76**
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	43
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	24
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	24
TOTAL		**91**
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	25
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	50
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	69
TOTAL		**144**
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	31
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	15
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	28
TOTAL		**74**
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	7
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	5
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	2
TOTAL		**14**
ATx2752 x RT430	Tx. Agri. Exp. Stat. (FM)	9
ATx2752 x RT430	Tx. Agri. Exp. Stat. (FM)	9
ATx2752 x RT430	Tx. Agri. Exp. Stat. (FM)	17
TOTAL		**35**
ATx399 x RTx430	Tx. Agri. Exp. Stat. (FM)	13
ATx399 x RTx430	Tx. Agri. Exp. Stat. (FM)	21
ATx399 x RTx430	Tx. Agri. Exp. Stat. (FM)	17
TOTAL		**51**
ATx378 x RTx430	Tx. Agri. Exp. Stat. (FM)	33
ATx378 x RTx430	Tx. Agri. Exp. Stat. (FM)	22
ATx378 x RTx430	Tx. Agri. Exp. Stat. (FM)	43
TOTAL		**98**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	8
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	13
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	3
TOTAL		**24**
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	3
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	8
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	11
TOTAL		**22**
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	1
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	4
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	6
TOTAL		**11**
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	4
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	2
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	7
TOTAL		**13**
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	5
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	2
A92NF3 x Tx2880	Tx. Agri. Exp. Stat. (GP)	14
TOTAL		**21**
ATx2752 x Tx2783	Tx. Agri. Exp. Stat. (GP)	0
ATx2752 x Tx2783	Tx. Agri. Exp. Stat. (GP)	0
ATx2752 x Tx2783	Tx. Agri. Exp. Stat. (GP)	0
TOTAL		**0**
AT2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	35
AT2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	28
AT2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	29
TOTAL		**92**
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	6
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	11
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	4
TOTAL		**21**
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	4
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	26
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	19
TOTAL		**49**

Table 5A-1 (continued).

Hybrid	Company	# Head Smut
A2-2(B) x 8BE2668	Tx. Agri. Exp. Stat. (DR)	33
A2-2(B) x 8BE2668	Tx. Agri. Exp. Stat. (DR)	26
A2-2(B) x 8BE2668	Tx. Agri. Exp. Stat. (DR)	34
TOTAL		**93**
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	5
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	0
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	0
TOTAL		**5**
A807 x 86EO361	Tx. Agri. Exp. Stat. (DR)	0
A807 x 86EO361	Tx. Agri. Exp. Stat. (DR)	1
A807 x 86EO361	Tx. Agri. Exp. Stat. (DR)	1
TOTAL		**2**
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	0
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	0
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	0
TOTAL		**0**
CHECK 1 (DK-37)	Tx. Agri. Exp. Stat.	17
CHECK 1 (DK-37)	Tx. Agri. Exp. Stat.	4
CHECK 1 (DK-37)	Tx. Agri. Exp. Stat.	7
TOTAL		**28**
CHECK 2 (T-E Sonora)	Tx. Agri. Exp. Stat.	16
CHECK 2 (T-E Sonora)	Tx. Agri. Exp. Stat.	16
CHECK 2 (T-E Sonora)	Tx. Agri. Exp. Stat.	12
TOTAL		**44**

Counts were made on 6-21-94 by Mr. Delroy Collins, Department of Plant Pathology and Microbiology, Texas A&M University, and Mr. Jario Osario, Graduate Student, Department of Plant Pathology and Microbiology. Plots are 2 rows, 25' long. Two hundred seeds were distributed by hand on 30' centers and a 5' alley cut at a later date.

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

HYBRID	COMPANY	1994		1993		1992	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
A807 x 86E0361	Tx. Agri. Exp. Stat.	1	6966	–	–	–	–
A570	Asgrow Seed Company	2	6699	–	–	–	–
HY 1320	HyPerformer Seed Co.	3	6698	9	6045	–	–
8305	Pioneer Hi-Bred Int'l., Inc.	4	6493	–	–	–	–
DEKALB DK-54	DEKALB Genetics Corp.	5	6430	2	6668	–	–
SG-942	Garrison & Townsend, Inc.	6	6428	–	–	–	–
ATx635 x 86E0361	Tx. Agri. Exp. Stat. (DR)	7	6401	–	–	–	–
837	Cargill Hybrid Seeds	8	6358	35	5273	42	4689
HB 94-55	HyPerformer Seed Co.	9	6309	–	–	–	–
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	10	6305	16	5916	–	–
HSC Wings	HyPerformer Seed Co.	11	6263	19	5754	25	5056
NC+ 472	NC+ Hybrids	12	6206	20	5704	7	5633
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	13	6201	–	–	–	–
5319	ICI Seeds	14	6153	12	5986	–	–
F-524	Frontier Hybrids, Inc.	15	6138	22	5692	–	–
TS-466	Texas Seed Co.	16	6129	32	5480	–	–
SG-919	Garrison & Townsend	17	6124	–	–	–	–
ATx2752 x ATx430	Tx. Agri. Exp. Stat.	18	6105	23	5687	22	5110
1710	Delta and Pine Land Co.	19	6081	15	5938	32	4957
8310	Pioneer Hi-Bred Int'l., Inc.	20	6029	4	6437	4	5914
2665	Northrup King Co.	21	6014	17	5834	1	6246
DEKALB DK-55	DEKALB Genetics Corp.	22	5975	–	–	–	–
1552	Delta and Pine Land Co.	23	5957	38	5204	55	4147
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	24	5932	–	–	–	–
CHECK (T-E Sonora)	Tx. Agri. Exp. Stat.	25	5876	46	4862	49	4431
NC+ 7R37E	NC+ Hybrids	26	5867	–	–	–	–
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	27	5815	40	5162	–	–
DEKALB DK-56	DEKALB Genetics Corp.	28	5783	27	5591	27	5034
HSC Cherokee	HyPerformer Seed Co.	29	5739	18	5773	19	5198
8313	Pioneer Hi-Bred Int'l., Inc.	30	5723	36	5234	13	5418

Table 5B. Danevang, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
857	Cargill Hybrid Seeds	31	5693	42	5051	59	3809
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	32	5692	26	5626	–	–
HSC 893	HyPerformer Seed Co.	33	5690	11	5992	–	–
KS 735	Northrup King Co.	34	5640	–	–	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	35	5633	–	–	–	–
1558	Delta and Pine Land Co.	36	5633	25	5628	51	4251
CHECK (DK-37)	Tx. Agri. Exp. Stat.	37	5627	52	4082	14	5399
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	38	5625	–	–	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	39	5516	–	–	–	–
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	40	5507	29	5489	–	–
737	Cargill Hybrid Seeds	41	5495	24	5663	–	–
SG-833	Garrison & Townsend, Inc.	42	5446	–	–	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	43	5443	39	5167	40	4764
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	44	5437	31	5482	–	–
XP5312	Asgrow Seed Company	45	5399	–	–	–	–
Mycogen 444E	Mycogen Plant Sciences	46	5399	–	–	–	–
5323	ICI Seeds	47	5336	6	6253	2	6009
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	48	5316	–	–	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat. (GP)	49	5219	–	–	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	50	5178	28	5523	20	5145
A92NF3 x Tx2880	Tx. Agri. Exp. Stat.	51	5138	–	–	–	–
A2-2(B) x 8BE	Tx. Agri. Exp. Stat. (DR)	52	5033	–	–	–	–
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	53	5029	–	–	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	54	4983	–	–	–	–
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	55	4847	–	–	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	56	4821	–	–	–	–
Mycogen 9404x	Mycogen Plant Sciences	57	4741	–	–	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	58	4712	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	59	4635	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	60	4161	–	–	–	–

Table 5B. Danevang, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
8118	Pioneer Hi-Bred Int'l., Inc.	–	–	1	6675	21	5117
5503	ICI Seeds	–	–	3	6479	–	–
dk 790E	Douglass W. King Co., Inc.	–	–	5	6369	18	5213
W-917-E	George Warner Seed Co., Inc.	–	–	7	6189	10	5548
Myc T-E X-8342	Mycogen Plant Sciences	–	–	8	6177	–	–
Myc Grower's 3150	Mycogen Plant Sciences	–	–	10	6002	–	–
NC+ 7B90	NC+ Hybrids	–	–	13	5975	34	4908
Myc Grower's 1313	Mycogen Plant Sciences	–	–	14	5974	–	–
dk 934x	Douglass W. King Co., Inc.	–	–	21	5697	–	–
XP5702	Asgrow Seed Company	–	–	30	5488	–	–
Myc ORO Amigo	Mycogen Plant Sciences	–	–	33	5432	17	5296
Myc Grower's 3260	Mycogen Plant Sciences	–	–	34	5294	31	4967
A1 x Tx2868	Tx. Agri. Exp. Stat. (GP)	–	–	37	5230	–	–
Myc ORO Quest	Mycogen Plant Sciences	–	–	41	5087	5	5756
dk 785E	Douglass W. King Co., Inc.	–	–	43	4987	11	5544
Myc ORO Ultra	Mycogen Plant Sciences	–	–	44	4938	24	5060
A803 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	–	–	45	4901	–	–
A1 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	47	4801	–	–
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	48	4668	15	5378
A807 x R3224(t)	Tx. Agri. Exp. Stat. (DR)	–	–	49	4649	47	4543
CHECK	Tx. Agri. Exp. Stat.	–	–	50	4605	–	–
KS 737	Northrup King Co.	–	–	51	4499	53	4224
Number Entries:		60		52		70	
Test Mean Yield (bu/A):			5716		5547		4676

TABLE 6. AGRONOMIC AND TEST INFORMATION: COLLEGE STATION

TEST:	1994 Irrigated Grain Sorghum Performance Test
LOCATION:	Texas A&M University Farm, College Station, Texas
COOPERATORS:	F. Miller, K. Prihoda, D. Jakubik, D. Pietsch, L. Synatschk
SOIL TYPE:	Ships clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Grain sorghum
LAND PREPARATION:	Shredded, disked, moldboarded, disked, bedded, cultivated, planted
DATE PLANTED:	3-29-94, cone planter
DATE THINNED:	The test block was not thinned. 150 seeds were distributed by a cone planter, on 21' centers. A four foot alley was cut for a final length of 17 feet.
PLOT LENGTH:	17'
FERTILIZER:	12-6-93: 470 lb/A 18-18-0 5-10-94: 328 lb/A 32-0-0
HERBICIDE:	10-27-93 1 lb/A Atrazine; 3-30-94 1 lb/A Milo-Pro
INSECTICIDE:	6 lb/A Furadan 15G at planting
RAINFALL:	March = 2.28", April = 1.74", May = 5.48 ", June=3.66", July=.11" Total= 13.27"
IRRIGATIONS:	None
DATE HARVESTED:	8-3-94
SIZE HARVESTED PLOT:	2 rows 17'
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	55
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	6,266 lb/A; yields corrected to 13% moisture
TEST C.V.:	14.6 percent

GENERAL STATEMENT: Good growing conditions and timely rainfall were contributing factors that resulted in above normal yields at this site. The season started with a full soil moisture profile from fall and winter rains. An excellent seedbed was available for the March 29 planting. Seeds were distributed in each row by a cone planter to attain a final plant population of approximately 110,000 plants per acre. The test was not thinned. Timely rainfall throughout the growing season resulted in continuous plant growth and development. Due to the timely rains, no irrigations were applied to the test.

The test mean yield was 6,266 lb/A compared to the past 3-year average of 5,441 lb/A. Fifteen hybrids in the test produced over 7,000 lb/A.

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1994

Hybrid 1	Company Or Brand Name	Grain Color 2	Plant Color 3	Maturity Class 4	Days To 50% Flower	Plant Height Inches	Panicle Length Inches	Panicle Exsertion Inches	Desirability Rating 5	Test Weight lb/bu	Moisture %	Yield lb/A	Stat. Sig., 0.05 6
HY 1320	Hyperformer Seed Co.	R	*	ML	71	55	10	4	1.3	59.8	14.0	7998	A
A1 x Tx 2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	73	58	13	3	1.4	59.8	14.7	7964	A-B
HB 94-50	Hyperformer Seed Co.	Ct	*	M	71	59	12	9	2.6	58.2	14.5	7934	A-B
HSC Cherokee	Hyperformer Seed Co.	R	*	M	69	53	10	6	1.3	59.3	14.4	7875	A-B
1506	Delta and Pine Land Co.	Ct	P	M	71	61	12	9	2.1	59.0	14.5	7435	A-C
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	ML	69	60	11	8	1.8	57.3	14.3	7434	A-C
HSC 893	Hyperformer Seed Co.	Bz	*	M	70	53	11	5	1.5	58.8	14.8	7341	A-D
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	71	56	12	6	2.3	57.1	14.5	7334	A-D
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	71	55	14	7	1.6	60.2	14.5	7321	A-D
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	ML	69	55	11	5	1.8	58.8	14.5	7301	A-E
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	73	59	12	8	1.7	57.6	14.3	7204	A-E
AQL41 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	70	56	12	10	1.4	58.2	14.4	7129	A-F
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	R	P	ML	71	51	14	4	1.6	58.2	14.2	7119	A-F
F-524	Frontier Hybrids Inc.	Bz	R	ML	69	54	11	7	2.0	58.4	14.1	7055	A-F
8310	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	70	54	12	6	1.6	58.2	14.5	7025	A-F
DEKALB DK-56	DEKALB Genetics Corp.	R	P	ML	71	53	12	7	1.5	58.8	14.6	6970	A-F
A806 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	71	55	13	9	1.4	57.6	14.5	6948	A-F
Mycogen TE Y-75	Mycogen Plant Sciences	R	P	M	71	52	11	5	1.5	58.4	14.2	6947	A-F
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	71	56	13	7	1.5	60.4	14.9	6945	A-F
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	71	53	11	3	1.5	61.0	14.4	6910	A-F
A1 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	R	P	ML	73	56	13	6	1.9	58.8	14.5	6829	A-G
2665	Northrup King Co.	R	P	ML	71	51	11	5	2.1	56.9	13.1	6661	A-H
8313	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	71	51	13	8	2.1	58.8	14.5	6658	A-H
HB 94-55	Hyperformer Seed Co.	R	*	M	71	52	11	4	1.9	58.6	13.9	6580	A-H
8305	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	70	54	11	9	1.6	57.7	13.6	6550	A-H
TS-466	Texas Seed Co.	R	R	ML	70	54	12	4	1.8	58.8	13.6	6486	A-H
837	Cargill Hybrid Seeds	Bz	P	ML	72	52	13	4	1.6	58.0	14.0	6460	A-H
A807 x Tx436	Tx. Agri. Exp. Stat. (DR)	R	P	ML	72	53	14	6	1.6	56.4	15.0	6379	A-I
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	74	57	12	6	1.2	58.0	14.2	6328	A-I
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	70	57	11	5	2.1	62.0	14.6	6315	A-I

Table 6A (continued)

Hybrid 1	Company Or Brand Name	Grain Color 2	Plant Color 3	Matu-rity Class 4	Days To 50% Flower	Plant Height Inches	Panicle Length Inches	Head Exser-tion Inches	Desir-ability Rating 5	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 6
KS 735	Northrup King Co.	R	P	ML	70	54	11	4	1.8	58.6	13.6	6297	A-I
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	R	ML	70	51	11	6	2.1	57.7	13.4	6180	A-J
Mycogen 444E	Mycogen Plant Sciences	Bz	P	M	70	52	12	7	2.0	57.1	13.2	6117	B-J
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	R	P	ML	71	55	11	5	2.0	60.8	14.4	6114	B-J
A807 x R3224(t)	Tx. Agri. Exp. Stat. (DR)	R	P	ML	71	52	12	6	1.4	56.6	14.5	5992	C-J
1552	Delta and Pine Land Co.	Bz	P	M	72	53	10	6	1.7	60.4	14.5	5963	C-J
A803 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	72	53	13	8	1.6	59.6	14.6	5933	C-K
ATx635 x 8EO361	Tx. Agri. Exp. Stat. (DR)	Wt	T	ML	73	63	13	6	1.4	59.8	14.4	5888	C-L
KS 714Y	Northrup King Co.	C	P	ML	71	51	14	5	1.8	60.2	14.0	5798	C-L
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	75	49	13	4	1.2	56.8	13.8	5784	C-L
GRI 01943	Genetic Resources Inc.	R	P	ML	74	51	13	3	1.3	58.2	14.2	5736	C-L
1710	Delta and Pine Land Co.	Bz	P	ML	70	52	11	4	1.7	57.8	13.6	5699	C-L
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	70	55	12	7	1.6	57.9	13.9	5682	C-L
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	R	P	ML	69	51	12	5	2.1	59.6	14.6	5599	C-L
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	73	60	13	6	2.1	57.8	15.2	5504	D-L
ATx2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	R	P	ML	70	48	11	4	2.3	56.4	13.5	5419	E-L
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	73	52	12	6	1.3	59.2	14.5	5275	F-M
ATx638 x (Tx430x77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	71	52	14	7	1.6	58.4	14.2	5025	G-N
GRI 16908	Genetic Resources Inc.	Bz	P	M	72	52	12	4	1.7	56.8	13.5	4910	H-N
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	73	51	14	5	1.3	53.0	13.0	4602	I-N
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	74	54	13	2	1.4	56.4	14.4	4413	J-N
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	72	47	13	5	1.6	56.2	14.3	4127	K-N
GRI 22908	Genetic Resources Inc.	R	P	M	72	52	13	4	1.9	56.8	13.5	4113	L-N
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	73	51	13	5	1.9	55.8	13.2	3559	M-N
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	72	48	15	4	1.6	56.6	13.8	3457	N

TEST MEAN= 6266 TEST C.V.= 14.6% LSD .05= 1485

Note 1: The ANOVA procedure was used for statistical analysis.

Table 6A (continued)

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

1 Check hybrids were not entered in the test.

2 Grain color designated by respective seed companies: R=Red Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

3 Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

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

5 Dr. Fred Miller, Soil and Crop Sciences Department, Texas A&M University, College Station, Texas rated hybrids for desirability. The rating key is as follows: 1= very good 2= good 3= average 4= poor 5= very poor.

6 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	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
HY 1320	HyPerformer Seed Co.	1	7998	2	7457	–	–
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	2	7964	–	–	–	–
HB 94-50	HyPerformer Seed Co.	3	7934	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	4	7875	16	6566	–	–
1506	Delta and Pine Land Co.	5	7435	8	6926	21	6379
ATx378 x RTx430	Tx. Agri. Exp. Stat	6	7434	32	5883	43	5309
HSC 893	HyPerformer Seed Co.	7	7341	15	6567	–	–
DEKALB DK-55	DEKALB Genetics Corp.	8	7334	–	–	–	–
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	9	7321	–	–	–	–
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	10	7301	14	6661	8	6784
DEKALB DK-54	DEKALB Genetics Corp.	11	7204	1	7594	–	–
AQL41 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	12	7129	–	–	–	–
A807 x R8503	Tx. Agri. Exp. Stat. (DR)	13	7119	–	–	–	–
F-524	Frontier Hybrids, Inc.	14	7055	25	6302	9	6738
8310	Pioneer Hi-Bred Int'l., Inc.	15	7025	10	6833	–	–
DEKALB DK-56	DEKALB Genetics Corp.	16	6970	11	6813	22	6370
A806 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	17	6948	–	–	–	–
Mycogen T-E Y-75	Mycogen Plant Sciences	18	6947	5	7199	6	6887
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	19	6945	–	–	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	20	6910	–	–	–	–
A1 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	21	6829	–	–	–	–
2665	Northrup King Co.	22	6661	27	6220	7	6865
8313	Pioneer Hi-Bred Int'l., Inc.	23	6658	24	6304	–	–
HB 94-55	HyPerformer Seed Co.	24	6580	–	–	–	–
8305	Pioneer Hi-Bred Int'l., Inc.	25	6550	–	–	–	–
TS-466	Texas Seed Co.	26	6486	–	–	–	–
837	Cargill Hybrid Seeds	27	6460	6	7092	4	7153
A807 x Tx436	Tx. Agri. Exp. Stat. (DR)	28	6379	–	–	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	29	6328	–	–	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	30	6315	–	–	–	–

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

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
KS 735	Northrup King Co.	31	6297	–	–	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	32	6180	21	6387	27	6194
Mycogen 444E	Mycogen Plant Sciences	33	6117	–	–	–	–
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	34	6114	–	–	–	–
A807 x R3224(t)	Tx. Agri. Exp. Stat. (DR)	35	5992	–	–	–	–
1552	Delta and Pine Land Co.	36	5963	13	6667	35	5804
A803 x 8BE2668	Tx. Agri. Exp. Stat.	37	5933	–	–	–	–
ATx635 x 86E0361	Tx. Agri. Exp. Stat. (DR)	38	5888	–	–	–	–
KS 714Y	Northrup King. Co.	39	5798	40	5423	46	5074
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	40	5784	–	–	–	–
GRI 01943	Genetic Resources Inc.	41	5736	–	–	–	–
1710	Delta and Pine Land Co.	42	5699	7	6929	12	6610
ATx626 x R8503	Tx. Agri. Exp. Stat.	43	5682	–	–	–	–
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	44	5599	29	6180	–	–
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	45	5504	–	–	–	–
ATx2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	46	5419	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	47	5275	45	4997	–	–
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	48	5025	–	–	–	–
GRI 16908	Genetics Resources Inc.	49	4910	–	–	–	–
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	50	4602	–	–	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	51	4413	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	52	4127	44	5043	–	–
GRI 22908	Genetic Resources Inc.	53	4113	–	–	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	54	3559	38	5540	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	55	3457	–	–	–	–
XP5702	Asgrow Seed Company	–	–	3	7349	–	–
8118	Pioneer Hi-Bred Int'l., Inc.	–	–	4	7279	–	–
857	Cargill Hybrid Seeds	–	–	9	6842	13	6558
Myc Grower's 3260	Mycogen Plant Sciences	–	–	12	6738	–	–
DEKALB C-325(X)	DEKALB Genetics Corp.	–	–	17	6542	–	–

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

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	18	6525	–	–
Myc ORO Baron	Mycogen Plant Sciences	–	–	19	6488	–	–
Myc T-E SONORA	Mycogen Plant Sciences	–	–	20	6444	–	–
Myc ORO Quest	Mycogen Plant Sciences	–	–	22	6378	17	6506
Myc ORO Amigo	Mycogen Plant Sciences	–	–	23	6312	20	6381
Myc Grower's 3150	Mycogen Plant Sciences	–	–	26	6225	–	–
SPB 16908	Seed Source, Inc.	–	–	28	6210	14	6557
DEKALB DK-37	DEKALB Genetics Corp.	–	–	30	6064	52	4156
SPB 22908	Seed Source, Inc.	–	–	31	6054	–	–
KS 737	Northrup Kng Co.	–	–	33	5817	44	5265
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	34	5796	–	–
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	35	5642	–	–
A1 x Tx2864	Tx. Agri. Exp. Stat.	–	–	36	5592	32	5901
A1 x GR107-90M18	Tx. Agri. Exp. Stat. (GP)	–	–	37	5542	–	–
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	39	5442	10	6714
CHECK (Myc ORO Silverado)	Tx. Agri. Exp. Stat.	–	–	41	5367	–	–
SPB 22943	Seed Source, Inc.	–	–	42	5338	–	–
A1 x Tx2868	Tx. Agri. Exp. Stat.	–	–	46	4887	–	–
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	–	–	47	4606	49	4756
A86187 x RTx2783	Tx. Agri. Exp. Stat. (FM)	–	–	48	4199	3	7193
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	49	4134	51	4186
Number Entries:		55		50		53	
Test Mean Yield (bu/A):			6266		6094		6000

Table 7. 1994 Grain Sorghum Performance Test Field Data for 60 Hybrids.

The Thrall Grain Sorghum Performance Test was not harvested, but below you will find lodging notes taken on 7-12-94, flowering notes and an MDMV rating. Lodging was caused by severe stalk degradation due to hot and dry conditions. This degradation was due to low residual sugar in the stalk causing early death and decay. It's possible this test could have been hand-harvested, but this would have been labor intensive and variation would have been high.

Excellent soil moisture conditions were available for the March 4 planting date. Timely rains encouraged continuous plant growth and development. Potential yields were high but were not realized due to the adverse conditions. MDM readings were secured from two replications when grain sorghum was in the "boot" stage. Readings were made by Mr. Delroy Collins and Mr. John Alexander, College Station, Texas. The readings include MDM ratings and percent incidence. A rating key is found at the end of the following Table.

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
857	Cargill Hybrid Seeds	I	91	20	2.5	5
		II	88	50	2.5	1
		III	90	25		
837	Cargill Hybrid Seeds	I	90	50	2.5	2
		II	91	80	2.5	1
		III	88	70		
737	Cargill Hybrid Seeds	I	83	40	N/A	0
		II	84	60	2.5	2
		III	83	5		
DEKALB DK-37	DEKALB Genetics Corp.	I	80	50	2.5	2
		II	81	50	4	3
		III	80	40		
DEKALB DK-51	DEKALB Genetics Corp.	I	84	90	4	14
		II	86	70	2.5	4
		III	84	80		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
DEKALB DK-54	DEKALB Genetics Corp.	I	88	40	4	15
		II	86	50	2.5	4
		III	88	30		
DEKALB DK-55	DEKALB Genetics Corp.	I	87	95	4.0c	1
		II	85	95	4	4
		III	85	95		
DEKALB DK-56	DEKALB Genetics Corp.	I	88	95	3	9
		II	88	40	2.5	8
		III	87	80		
DEKALB X-329	DEKALB Genetics Corp.	I	84	20	4	1
		II	84	25	2.5- 3.0	4
		III	84	10		
1506	Delta and Pine Land Co.	I	86	50	3	2
		II	85	90	2.5	1
		III	86	50		
1552	Delta and Pine Land Co.	I	88	50	4.0c	4
		II	87	60	N/A	0
		III	87	40		
1505Y	Delta and Pine Land Co.	I	84	30	4.5	6
		II	84	95	2.5	2
		III	84	60		
F-524	Frontier Hybrids, Inc.	I	85	95	3	7
		II	86	95	4	2
		III	85	95		
HY 1320	HyPerformer Seed Co.	I	87	95	2.5	5
		II	88	95	2.5	1
		III	87	90		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
HB 94-50	HyPerformer Seed Co.	I	87	40	4	5
		II	86	60	3	4
		III	87	80		
HSC Cherokee	HyPerformer Seed Co.	I	84	95	2.5	2
		II	84	90	2.5	5
		III	85	95		
HB 94-55	HyPerformer Seed Co.	I	88	20	4.0c	3
		II	87	20	4.0c	2
		III	88	80		
HSC 893	HyPerformer Seed Co.	I	84	90	2.5	5
		II	84	95	2.5	1
		III	85	90		
5319	ICI Seeds	I	85	95	2.5	1
		II	87	90	3.5	7
		III	86	90		
5616	ICI Seeds	I	82	60	0	0
		II	83	90	0	0
		III	82	20		
Mycogen 444E	Mycogen Plant Sciences	I	85	95	2.5	3
		II	84	70	2.5	4
		III	84	10		
Mycogen 9404x	Mycogen Plant Sciences	I	88	25	4.25	4
		II	87	90	4.0c	1
		III	89	30		
Mycogen 9406x	Mycogen Plant Sciences	I	91	75	2.5	4
		II	91	95	2.5	4
		III	89	80		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
NC+ 472	NC+ Hybrids	I	84	80	4.25	6
		II	84	60	4.5	6
		III	86	50		
NC+ 7B90	NC+ Hybrids	I	84	95	2.5	1
		II	86	95	2.5	4
		III	85	90		
KS 560Y	Northrup King Co.	I	86	70	3	3
		II	84	60	3	2
		III	85	70		
KS 735	Northrup King Co.	I	85	100	2.5	1
		II	83	80	4	5
		III	84	40		
KS 737	Northrup King Co.	I	84	90	0	0
		II	84	95	2.5	3
		III	83	50		
2665	Northrup King Co.	I	87	70	2.5	2
		II	86	60	2.5	5
		III	85	80		
8601	Pioneer Hi-Bred Int., Inc.	I	82	90	2.5	4
		II	83	80	2.5	4
		III	82	70		
8699	Pioneer Hi-Bred Int., Inc.	I	83	95	4	2
		II	83	80	4	7
		III	81	50		
8310	Pioneer Hi-Bred Int., Inc.	I	85	90	4	4
		II	85	80	2.5	3
		III	85	20		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
8606	Pioneer Hi-Bred Int., Inc	I	83	90	4	8
		II	83	90	4	5
		III	84	40		
TS-466	Texas Seed Co.	I	84	95	2.5	2
		II	84	100	2.5	2
		III	85	40		
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	I	86	60	2.5	1
		II	87	60	2.5	5
		III	87	90		
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	I	90	90	2.5	4
		II	91	80	2.5	2
		III	92	50		
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	I	92	60	2.5	5
		II	89	80	2.5	4
		III	91	20		
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	I	91	30	0	0
		II	90	10	0	0
		III	92	10		
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	I	90	70	2.5	12
		II	88	80	3	5
		III	88	30		
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	I	90	60	2.5	8
		II	89	90	4	4
		III	86	85		
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	I	89	50	4	3
		II	89	60	4.0c	5
		III	90	50		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	I	87	95	4.5c	8
		II	86	90	4.0c	1
		III	86	80		
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	I	87	70	3	4
		II	89	50	2.5	6
		III	89	40		
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	I	89	85	3.5	2
		II	88	60	4	8
		III	88	60		
ATx2752 x RTx430	Tx. Agri. Exp. Stat. (FM)	I	86	70	2.5	4
		II	83	90	3	5
		III	84	90		
ATX399 x RTx430	Tx. Agri. Exp. Stat. (FM)	I	86	80	3	4
		II	84	80	2.5	7
		III	84	80		
ATx378 x RTx430	Tx. Agri. Exp. Stat. (FM)	I	84	95	4	2
		II	83	100	4	2
		III	85	95		
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	I	88	80	0	0
		II	88	75	0	0
		III	88	40		
ATx2752 x Tx2783	Tx. Agri. Exp. Stat. (GP)	I	86	90	3	5
		II	88	95	2.5	4
		III	87	90		
ATx2752 x Tx2864	Tx. Agri. Exp. Stat. (GP)	I	88	90	2.5	1
		II	85	95	4	4
		III	86	20		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	I	89	20	3	4
		II	87	50	4.0c	1
		III	87	10		
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	I	87	50	3.5	1
		II	86	40	0	0
		III	86	60		
A807 x R3224(t)	Tx. Agri. Exp. Stat. (DR)	I	89	70	2.5	8
		II	87	50	2.5	3
		III	88	40		
A35 x (430 x 9188)	Tx. Agri. Exp. Stat. (DR)	I	87	5	0	0
		II	87	20	4.25	5
		III	87	5		
A35 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	I	89	0	2.5	1
		II	87	5	4	4
		III	87	0		
CHECK 1 (AP 9210)	Tx. Agri. Exp. Stat.	I	83	40	0	0
		II	81	25	2.5	3
		III	81	40		
CHECK 2 (A507)	Tx. Agri. Exp. Stat.	I	87	85	4.25	6
		II	88	70	2.5	8
		III	85	30		
CHECK 3 (SG-942)	Tx. Agri. Exp. Stat.	I	88	95	2.5	6
		II	88	95	3	3
		III	88	50		
CHECK 4 (P-8313)	Tx. Agri. Exp. Stat.	I	83	90	0	0
		II	84	50	4.25	10
		III	85	90		

Table 7 (Continued)

Hybrid	Company	Rep	Days To 50% Flower	Lodging %	MDM Rating	MDM %
457-D (SP)	Frontier Hybrids, Inc.	I	85	95	2.5	3
		II	86	70	2.5	2
		III	85	80		

MDMV Rating Key:

0 =No MDMV
2-3.5 =Mosiac
4-5.0 =Necrosis
>4.25 =Shredding

c=chlorotic symptoms

% incidence=% of plants with "rating" infection

TABLE 8. AGRONOMIC AND TEST INFORMATION: McKINNEY

TEST:	1994 Dryland Grain Sorghum Performance Test
LOCATION:	Bailey Farms near Prosper, Texas
COOPERATORS:	Scott Bailey, Kenneth White, Dennis Pietsch, Leon Synatschk, Cloyce Coffman, and Jim Blalock
SOIL TYPE:	Houston black clay
ROW WIDTH:	30"
PREVIOUS CROP:	Corn
LAND PREPARATION:	Disked, Chiseled (2), field cultivated
DATE PLANTED:	3-23-94, hand-dropped through a JD Max-Emerge planter
DATE THINNED:	The test block was not thinned. 150 seeds were distributed by hand, on 30 foot centers. A five foot alley was cut for a final length of 25 feet.
PLOT LENGTH:	25'
FERTILIZER:	174+34+0+2 (Zn)
HERBICIDE:	Applied Bicep at label rate
INSECTICIDE:	Banded 4 lb/A Counter 15G in furrow at planting
RAINFALL:	Rainfall was not recorded at the test site but at the Texas A&M Station at Prosper which is located near the test site. March=.02", April=2.19", May = 7.15"; June = 1.82"; July =13.48"; August = 1.81"; Total=26.47"
IRRIGATIONS:	None
DATE HARVESTED:	8-19-94 with MF 8 plot combine
SIZE HARVESTED PLOT:	2 rows, 25 feet long
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	60
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	4,450 lb/A; yields corrected to 13% moisture
TEST C.V.:	13.6 percent

GENERAL INFORMATION: Good yields were attained at this site despite poor stands and lodging within the test. The test was planted on March 23 in marginal soil moisture conditions. Sufficent seeds were distributed to achieve a final plant population of approximately 80,000 plants per acre. Due to unexplainable reasons, seedling emergence was erratic which affected final plant stands and flowering dates. A visual estimate of stands were recorded at harvest from all 3 replications and presented in the following Table.

The test block did not receive any significant rainfall until the end of April when 2.00" were recorded which insured plant growth and development. Limited rainfall was recorded in June, but the test did receive 13.2" of rainfall between July 8 and July 15. Hot and dry weather conditions followed from the July rains until harvest. A combination of stalk rot and root lodging were observed in the test and presented in the Table. Visual estimates were made at harvest from all 3 replications.

The test mean yield was 4,450 lb/A compared to the past 3 year average of 5,085 lb/A Seven hybrids in the test produced over 5,000 lb/A with one hybrid producing 6,211 lb/A.

Table 8A. GRAIN SORGHUM PERFORMANCE TEST; MCKINNEY, TEXAS 1994

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	% Lodge	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	84	51	4	92	23.3	59.3	12.9	6211	A
SGX-94120	Garrison & Townsend Inc.	Y	R	M	85	46	6	83	5.0	58.9	12.6	5282	A-B
837	Cargill Hybrid Seeds	Bz	P	ML	84	47	4	82	16.7	57.4	12.3	5109	B-C
SG-925	Garrison & Townsend Inc.	R	R	ML	82	46	3	72	13.3	57.1	12.0	5073	B-C
8606	Pioneer Hi-Bred Int., Inc.	Bz	P	ME	79	45	6	98	25.0	57.2	12.2	5055	B-D
ATx638x(Tx430x77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	84	46	4	87	6.7	58.6	12.6	5032	B-E
HY 1320	Hyperformer Seed Co.	R	*	ML	85	50	3	82	36.7	58.9	12.9	5021	B-F
NC+ 472	NC+ Hybrids	Bz	*	M	83	42	3	88	3.3	55.9	11.3	4979	B-F
HB 94-55	Hyperformer Seed Co.	R	*	M	83	47	5	87	10.0	58.1	12.8	4964	B-F
8699	Pioneer Hi-Bred Int., Inc.	Bz	P	E	79	51	8	92	3.3	58.0	12.9	4926	B-F
Mycogen 444E	Mycogen Plant Sciences	Bz	P	M	83	44	3	87	6.7	57.2	11.9	4895	B-G
HSC Cherokee	Hyperformer Seed Co.	R	*	M	84	49	4	80	11.7	57.5	12.6	4880	B-G
8601	Pioneer Hi-Bred Int., Inc.	Bz	P	ME	79	46	7	88	15.0	56.8	12.4	4864	B-G
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	84	42	4	83	13.3	56.5	11.6	4846	B-G
8310	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	82	48	7	83	13.3	58.2	13.9	4827	B-H
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	84	54	4	88	3.3	58.4	13.0	4780	B-H
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	83	50	4	77	56.7	56.1	12.3	4763	B-H
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	83	49	6	82	3.3	57.4	13.2	4763	B-H
1506	Delta and Pine Land Co.	Ct	P	M	81	52	7	70	55.0	56.9	12.9	4749	B-H
HB 94-50	Hyperformer Seed Co.	Ct	*	M	80	51	6	70	72.5	57.1	13.9	4745	B-H
DEKALB DK-37	DEKALB Genetics Corp.	P	P	ME	78	48	6	82	16.7	58.1	13.2	4725	B-H
SG-919	Garrison & Townsend Inc.	R	R	M	83	45	6	87	25.0	57.3	11.9	4641	B-H
HSC Wings	Hyperformer Seed Co.	Bz	*	ML	84	45	2	70	60.0	56.6	12.6	4635	B-H
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ME	83	43	5	88	15.0	56.7	11.7	4632	B-H
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	84	47	4	90	20.0	58.3	12.5	4602	B-I
GW5931	Crosbyton Seed Co.	Bz	P	ME	81	42	6	83	11.7	56.9	12.2	4558	B-I
CHECK	Tx. Agri. Exp. Stat.	Bz	P	ME	78	43	6	83	18.3	55.7	12.1	4556	B-I
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	90	48	2	53	6.7	58.6	13.2	4538	B-I
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	84	46	3	80	35.0	56.0	11.7	4532	B-I
737	Cargill Hybrid Seeds	Bz	P	ML	84	45	6	88	3.3	55.2	11.5	4514	B-I

Table 8A (continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	% Lodge	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
AP9210	AgriPro Seeds	Bz	R	ME	80	44	6	88	3.3	58.2	12.7	4479	B-I
NC+ 7B90	NC+ Hybrids	Bz	*	M	84	46	3	85	43.3	56.6	12.1	4414	B-I
DEKALB X-329	DEKALB Genetics Corp.	Bz	P	ME	80	46	6	85	11.7	58.0	12.7	4383	B-I
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	R	P	ML	86	45	3	58	5.0	59.8	13.7	4382	B-I
DEKALB DK56	DEKALB Genetics Corp.	R	P	ML	83	46	5	77	23.3	58.4	12.9	4379	B-I
SG-833	Garrison & Townsend Inc.	Bz	R	M	84	44	6	70	13.3	56.7	11.9	4360	B-I
SGX-94012	Garrison & Townsend Inc.	R	R	ME	80	46	5	62	20.0	57.2	12.9	4353	B-I
1552	Delta and Pine Land Co.	Bz	P	M	83	47	4	70	6.7	57.8	12.8	4345	B-I
Mycogen T-E Prosper	Mycogen Plant Sciences	Bz	P	M	84	43	7	87	1.7	57.3	12.2	4325	B-I
KS524	Northrup King Co.	R	P	M	81	43	4	73	18.3	57.0	11.6	4277	B-I
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	51	4	58	26.7	59.4	13.2	4270	B-I
DEKALB DK-51	DEKALB Genetics Corp.	Bz	P	M	82	42	5	75	21.7	56.8	12.3	4213	B-I
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	86	47	3	83	5.0	57.4	12.3	4200	B-I
F-524	Frontier Hybrids Inc.	Bz	R	ML	83	48	4	65	56.7	57.6	12.7	4196	B-I
DEKALB DK-40Y	DEKALB Genetics Corp.	Y	P	M	80	44	5	63	5.0	57.1	12.2	4185	B-I
A803 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	85	49	6	88	5.0	58.8	13.4	4099	B-I
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	86	51	3	67	13.3	57.6	12.6	4025	B-I
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	84	46	3	88	40.0	56.9	12.1	4019	C-I
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	86	43	2	72	1.7	55.5	11.7	4008	C-I
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	86	44	4	72	3.3	58.5	12.4	3984	C-I
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	86	46	4	58	10.0	57.5	12.1	3893	C-J
5616	ICI Seeds	Bz	P	ME	79	43	6	77	8.3	55.2	11.9	3871	C-J
GW 5970	Crosbyton Seed Co.	R	P	M	79	47	4	63	16.7	59.2	12.9	3870	C-J
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	88	44	6	60	1.7	58.0	12.7	3795	D-J
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	83	49	4	63	26.7	57.5	12.5	3784	E-J
1482	Delta and Pine Land Co.	Bz	P	ME	79	44	5	73	6.7	55.5	11.8	3766	F-J
GW5770	Crosbyton Seed Co.	W	P	M	81	44	4	67	40.0	57.3	12.3	3634	G-J
KS 383Y	Northrup King Co.	C	P	ME	81	37	3	72	21.7	55.3	11.2	3568	H-J
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	86	43	4	50	1.7	54.9	12.6	3358	I-J
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	86	44	3	52	5.0	56.6	12.0	2745	J

TEST MEAN= 4450 TEST C.V.= 13.6% LSD .05= 978.1

Table 8A (continued)

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

* ET602 and ET504 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 Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

*** Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

**** 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. Three-year summary, Grain Sorghum Performance Test, McKinney, Texas.

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	1	6211	–	–	–	–
SGX-94120	Garrison & Townsend, Inc.	2	5282	–	–	–	–
837	Cargill Hybrid Seeds	3	5109	30	5044	10	6315
SG-925	Garrison & Townsend, Inc.	4	5073	–	–	–	–
8606	Pioneer Hi-Bred Int'l., Inc.	5	5055	11	5772	–	–
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	6	5032	–	–	–	–
HY 1320	HyPerformer Seed Co.	7	5021	–	–	–	–
NC+ 472	NC+ Hybrids	8	4979	6	5993	2	6657
HB 94-55	HyPerformer Seed Co.	9	4964	–	–	–	–
8699	Pioneer Hi-Bred Int'l., Inc.	10	4926	41	4743	65	5091
Mycogen 444E	Mycogen Plant Sciences	11	4895	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	12	4880	33	5002	5	6581
8601	Pioneer Hi-Bred Int'l., Inc.	13	4864	14	5672	20	6054
ATx399 x RTx430	Tx. Agri. Exp. Stat.	14	4846	45	4326	18	6065
8310	Pioneer Hi-Bred Int'l., Inc.	15	4827	12	5711	3	6601
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	16	4780	16	5458	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	17	4763	46	4223	22	6002
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	18	4763	15	5594	–	–
1506	Delta and Pine Land Co.	19	4749	1	6867	26	5931
HB 94-50	HyPerformer Seed Co.	20	4745	–	–	–	–
DEKALB DK-37	DEKALB Genetics Corp.	21	4725	24	5138	60	5264
SG-919	Garrison & Townsend, Inc.	22	4641	–	–	–	–
HSC Wings	HyPerformer Seed Co.	23	4635	18	5430	–	–
CHECK (ET 602)	Tx. Agri. Exp. Stat.	24	4632	19	5326	4	6591
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	25	4602	–	–	–	–
GW 5931	Crosbyton Seed Co.	26	4558	–	–	–	–
CHECK (ET 504)	Tx. Agri. Exp. Stat.	27	4556	–	–	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	28	4538	–	–	–	–
DEKALB DK-55	DEKALB Genetics Corp.	29	4532	–	–	–	–
737	Cargill Hybrid Seeds	30	4514	9	5838	–	–

Table 8B. McKinney, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
AP 9210	AgriPro Seeds	31	4479	–	–	–	–
NC+ 7B90	NC+ Hybrids	32	4414	2	6152	13	6254
DEKALB X-329	DEKALB Genetics Corp.	33	4383	–	–	–	–
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	34	4382	–	–	–	–
DEKALB DK-56	DEKALB Genetics Corp.	35	4379	7	5960	38	5591
SG-833	Garrison & Townsend, Inc.	36	4360	–	–	–	–
SGX-94012	Garrison & Townsend, Inc.	37	4353	–	–	–	–
1552	Delta and Pine Land Co.	38	4345	22	5158	48	5445
Mycogen T-E Prosper	Mycogen Plant Sciences	39	4325	38	4775	27	5913
KS 524	Northrup King Co.	40	4277	20	5221	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	41	4270	–	–	–	–
DEKALB DK-51	DEKALB Genetics Corp.	42	4213	44	4473	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	43	4200	–	–	–	–
F-524	Frontier Hybrids, Inc.	44	4196	35	4966	12	6283
DEKALB DK-40Y	DEKALB Genetics Corp.	45	4185	23	5150	52	5400
A803 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	46	4099	8	5936	–	–
A1 x Tx2783	Tx. Agri. Exp. Stat. (DR)	47	4025	–	–	–	–
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	48	4019	37	4829	9	6347
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	49	4008	–	–	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	50	3984	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	51	3893	–	–	–	–
5616	ICI Seeds	52	3871	32	5006	–	–
GW 5970	Crosbyton Seed Co.	53	3870	–	–	–	–
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	54	3795	–	–	–	–
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	55	3784	–	–	–	–
1482	Delta and Pine Land Co.	56	3766	34	4982	34	5650
GW 5770	Crosbyton Seed Co.	57	3634	–	–	–	–
KS 383Y	Northrup King Co.	58	3568	43	4631	49	4329
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	59	3358	–	–	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	60	2745	–	–	–	–

Table 8B. McKinney, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
NC+ 573E	NC+ Hybrids	–	–	3	6103	16	6158
W-625-Y	George Warner Seed Co., Inc.	–	–	4	6023	29	5751
W-818E	George Warner Seed Co., Inc.	–	–	5	6009	7	6359
Myc T-E Sonora	Mycogen Plant Sciences	–	–	10	5834	–	–
Myc ORO Amigo	Mycogen Plant Sciences	–	–	13	5686	21	6038
KS 397	Northrup King Co.	–	–	19	5445	–	–
Myc Grower's 3150	Mycogen Plant Sciences	–	–	21	5194	6	6434
Myc ORO Quest	Mycogen Plant Sciences	–	–	25	5129	–	–
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	26	5115	8	6351
Myc ORO Exp. 4331X	Mycogen Plant Sciences	–	–	27	5094	–	–
CHECK (ICI/Garst 5319)	Tx. Agri. Exp. Stat.	–	–	28	5084	11	6302
XP5702	Asgrow Seed Company	–	–	29	5061	–	–
Myc ORO Bonus	Mycogen Plant Sciences	–	–	31	5041	–	–
727	Cargill Hybrid Seeds	–	–	36	4962	–	–
HSC 893	HyPerformer Seed Co.	–	–	39	4771	–	–
Myc Grower's 3260	Mycogen Plant Sciences	–	–	40	4750	–	–
CHECK	Tx. Agri. Exp. Stat.	–	–	42	4731	–	–
Myc Grower's 1310AE	Mycogen Plant Sciences	–	–	47	4071	61	5206
Number Entries:		60		48		69	
Test Mean Yield (lb/A):			4450		5241		5735

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

TABLE 9. AGRONOMIC AND TEST INFORMATION: LUBBOCK-LIMITED IRRIGATION

TEST:	1994 Limited Irrigated Grain Sorghum Performance Test
LOCATION:	Texas A&M University Agricultural Research and Extension Center, Lubbock, Texas
COOPERATORS:	D.T. Rosenow, C.A. Woodfin, and D.R. Pietsch , Professor, Senior Research Associate, and Research Associate
SOIL TYPE:	Olton loam
ROW WIDTH:	40"
PREVIOUS CROP:	Cotton
LAND PREPARATION:	Disked and bedded
DATE PLANTED:	5-18-94; cone planter
DATE THINNED:	6-10-94, to 3" spacing = 52,000 plants/A
PLOT LENGTH:	16'
FERTILIZER:	60-0-0
HERBICIDE:	1.5 lb/A a.i. of MiloPro pre-emerge .
INSECTICIDE:	Applied 7.0 lb/A of Counter 15G (terbufos) for greenbug control prior to planting. Applied 0.5 pt/A Lorsban for late greenbug infestation on August 6.
RAINFALL:	May = 3.82"; June = 0.28", July = 2.08"; August = 0.09"; September = 1.18"; Total = 7.45"
IRRIGATIONS:	6-22-94 = 5" ; 7-20-94 = 5";
DATE HARVESTED:	9-28-94
SIZE HARVESTED PLOT:	1/408 of acre
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	60
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	5,931 lb/A; corrected to 13% moisture
TEST C. V.:	9.5%, Using the Nearest Neighbor Analysis

GENERAL INFORMATION: An optimum planting date was secured and excellent plant stands were attained after thinning. Reflective tape and balloons controlled birds quite well, except for the earliest hybrids. A few scattered pockets developed significant greenbugs. Considerable lodging occurred due to severe moisture stress during grain fill. Plots were harvested with a plot combine and all heads including those lodged plants were harvested. There was no midge or disease damage.

Excellent yields were obtained in spite of a very hot and dry season. Approximately 6 inches of rain in late April and early May eliminated the need for a pre-plant irrigation. Only two summer irrigations (limited irrigation) were applied. Following planting, the only effective rainfall received until September 8 was 0.60" on May 27, 1.45" and 0.63" on July 9 and 30 respectively. September rainfall was only 0.40" on Sept. 8 and 0.60" on Sept. 15. Also, abnormal high temperatures were recorded during the growing season with 23 days of 100 degrees F or higher, and an all-time record high temperature of 114 degrees F on June 27. Twelve of thirteen days from June 25 - July 7 were 100 degrees F or higher. In spite of limited moisture and high temperatures, excellent yield potential developed, but severe moisture stress developed during the grain fill stage. This resulted in premature plant death and lodging, especially in certain areas of the test block. This resulted in high variability within replications. To reduce this moisture stress induced variability, a Nearest Neighbor Analysis by AGROBASE/4TM was tried. It made significant adjustments in yields and reduced the coefficient of variation from 15.75% to 9.5%. The adjusted mean yield from the Nearest Neighbor Analysis are reported.

TABLE 9A. GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK "I", TEXAS,1994

Hybrid	Company Or Brand Name	Grain Color 1	Plant Color 2	Matu-rity Class 3	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Bird	% Lodge	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 4
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	64	50	4	2.0	0.0	11.3	7571	A
A35 x 89CC443	Tx. Agri. Exp. Stat. (DR)	R	P	ML	66	51	6	0.0	0.0	13.3	7336	A-B
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	64	50	5	0.0	7.0	11.9	7133	A-C
HY 1320	Hyperformer Seed Co.	R	*	M	64	50	2	0.3	15.0	12.0	6772	A-D
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	61	49	4	1.0	1.0	11.6	6751	A-D
DEKALB DK-58	DEKALB Genetics Corp.	Bz	P	L	62	46	4	0.7	25.3	11.3	6686	A-E
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	R	P	ML	60	47	3	0.7	6.7	11.6	6654	A-E
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	59	47	6	0.0	4.3	12.5	6622	A-E
DEKALB DK-56	DEKALB Genetics Corp.	Bz	P	ML	62	52	5	1.0	0.0	12.6	6571	B-F
Mycogen 611E	Mycogen Plant Sciences	Bz	P	ML	60	45	3	0.3	15.0	11.3	6539	B-G
Mycogen 444-E	Mycogen Plant Sciences	Bz	P	M	58	43	4	11.0	13.3	11.6	6532	B-G
AP 9850	AgriPro Seeds	R	P	ML	63	49	3	0.3	30.3	12.1	6485	B-H
F-524	Frontier Hybrids Inc.	Bz	R	L	59	47	3	0.7	0.0	11.6	6467	B-H
dk 790	Douglass King Co.	Bz	P	ML	60	47	3	0.3	1.7	11.3	6461	B-I
KS 735	Northrup King Co.	R	P	M	59	45	5	0.0	0.0	12.1	6435	B-J
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	R	P	ML	61	46	2	1.0	1.0	11.7	6360	C-J
dk 795	Douglass King Co.	R	P	ML	63	48	4	0.3	18.0	12.7	6342	C-K
DEKALB DK-66	DEKALB Genetics Corp.	Bz	P	L	68	47	2	0.0	71.7	12.2	6284	C-K
797	Cargill Hybrid Seeds	Bz	P	M	62	44	3	0.7	3.7	11.4	6226	C-L
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	58	42	2	10.7	1.7	11.3	6200	C-L
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	60	44	3	0.3	9.0	12.1	6190	C-L
837	Cargill Hybrid Seeds	Bz	P	ML	57	43	4	10.3	10.0	12.0	6181	C-L
ATx2752 x Tx2864	Tx. Agri. Exp. Stat. (DR)	R	P	ML	60	41	3	2.0	0.0	11.6	6177	C-L
A1 x Tx2864	Tx. Agri. Exp. Stat. (GP)	W	P	ML	60	45	3	3.3	0.3	11.5	6160	D-M
PP 777	Production Plus	Bz	T	ML	59	45	2	0.7	4.0	11.7	6147	D-M
A.BON34x92L50(435x3338)	Tx. Agri. Exp. Stat. (DR)	Wt	T	ML	64	45	1	0.0	0.7	11.0	6070	D-N
PP 644	Production Plus	Bz	T	ML	59	44	4	1.0	1.3	11.1	6051	D-N
Mycogen TE Y-75	Mycogen Plant Sciences	R	P	M	59	46	4	0.7	0.0	12.1	6018	D-N
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	62	49	3	0.3	1.3	11.6	5913	D-O
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	59	46	5	0.0	0.7	11.6	5910	D-O

Table 9A (continued)

Hybrid	Company Or Brand Name	Grain Color 1	Plant Color 2	Matu-rity Class 3	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Bird	% Lodge	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 4
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	60	48	8	0.3	6.7	12.2	5896	D-O
DEKALB DK-51	DEKALB Genetics Corp.	Bz	P	M	58	45	4	1.7	7.0	11.5	5846	D-O
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	59	45	5	0.7	30.0	10.9	5842	D-O
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	61	47	7	0.3	17.3	11.1	5837	D-O
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	62	46	5	0.0	0.3	11.9	5809	D-P
HSC 893	Hyperformer Seed Co.	Bz	*	M	60	44	4	0.0	10.0	11.5	5770	E-Q
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	65	50	3	0.0	9.3	11.5	5660	F-Q
AQL41 x 86EO361	Tx. Agri. Exp. Stat. (DR)	R	P	ML	60	50	9	0.3	0.0	11.6	5648	F-Q
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	67	44	3	1.7	50.0	9.8	5647	F-Q
A806 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	58	53	5	9.7	3.3	13.0	5628	F-R
HSC Cherokee	Hyperformer Seed Co.	R	*	M	60	46	5	0.3	1.3	11.5	5616	G-R
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	Wt	T	L	68	52	1	0.0	31.7	11.6	5601	G-R
PP 599W	Production Plus	Cr	T	M	64	46	4	0.0	1.0	10.4	5595	G-R
HB 94-50	Hyperformer Seed Co.	Ct	*	M	58	46	5	10.7	0.3	12.3	5594	G-R
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	70	46	2	0.0	0.0	11.2	5587	H-R
5536	ICI Seeds	Bz	P	M	59	43	3	0.7	0.7	11.0	5559	H-R
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	R	P	ML	61	50	4	4.0	0.7	12.7	5550	I-S
AQL41 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	59	47	8	0.7	0.7	11.6	5543	J-S
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	57	48	5	0.3	0.0	12.7	5501	K-T
ATx631 x GR137-90M39	Tx. Agri. Exp. Stat. (GP)	W	T	ML	60	48	5	0.0	30.0	12.6	5493	L-T
A1 x R90562	Tx. Agri. Exp. Stat. (DR)	R	P	ML	59	47	4	0.0	0.3	11.6	5391	L-T
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	R	P	ML	63	46	4	1.3	5.0	12.0	5308	M-T
A1 x RQL36	Tx. Agri. Exp. Stat. (DR)	R	P	ML	59	48	5	6.7	10.3	11.3	5304	N-T
AQL41 x Tx2783	Tx. Agri. Exp. Stat. (DR)	R	P	ML	59	50	8	4.0	1.0	11.5	5113	O-T
A.BON34 x 86E0361	Tx. Agri. Exp. Stat. (DR)	Wt	T	ML	65	46	2	0.0	14.0	11.7	4960	P-T
AQL41 x R6078	Tx. Agri. Exp. Stat. (DR)	R	P	ML	58	46	6	1.3	0.0	11.9	4858	Q-T
ATx631 x GR137-90M37	Tx. Agri. Exp. Stat. (GP)	W	T	ML	62	51	4	0.7	35.0	11.8	4818	R-T
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	58	46	4	1.7	0.0	12.0	4658	S-T
1506	Delta and Pine Land Co.	Ct	P	M	57	46	6	21.7	0.0	12.5	4537	S-T
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	55	47	5	12.0	0.0	11.7	4461	T

TEST MEAN= 5931 TEST C.V.= 9.5% LSD .05= 913.8

Table 9A (Continued)

Note 1: The Nearest Neighbor Analysis procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

1 Grain color designated by respective seed companies: R=Red Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

2 Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

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

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

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

HYBRID	COMPANY	1994		1993		1992	
		RANK	YIELD	RANK	YIELD	RANK	YIELD
DEKALB DK-55	DEKALB Genetics Corp.	1	7571	–	–	–	–
A35 x 89CC443	Tx. Agri. Exp. Stat. (DR)	2	7336	9	5643	21	7902
DEKALB DK-54	DEKALB Genetics Corp.	3	7133	–	–	–	–
HY 1320	HyPerformer Seed Co.	4	6772	19	5528	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	5	6751	11	5621	4	8335
DEKALB DK-58	DEKALB Genetics Corp.	6	6686	13	5602	–	–
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	7	6654	33	5147	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	8	6622	–	–	–	–
DEKALB DK-56	DEKALB Genetics Corp.	9	6571	34	5143	17	7968
Mycogen 611E	Mycogen Plant Sciences	10	6539	30	5335	9	8202
Mycogen 444E	Mycogen Plant Sciences	11	6532	25	5449	75	6441
AP 9850	AgriPro Seeds	12	6485	8	5652	–	–
F-524	Frontier Hybrids, Inc.	13	6467	26	5441	28	7712
dk 790	Douglass W. King Co., Inc.	14	6461	32	5155	5	8313
KS 735	Northrup King Co.	15	6435	–	–	–	–
ATx2752 x GR134B-90M50	Tx. Agri. Exp. Stat. (GP)	16	6360	23	5476	15	8020
dk 795	Douglass W. King Co., Inc.	17	6342	–	–	–	–
DEKALB DK-66	DEKALB Genetics Corp.	18	6284	10	5640	1	9054
797	Cargill Hybrid Seeds	19	6226	61	3769	77	6363
ATx399 x RTx430	Tx. Agri. Exp. Stat.	20	6200	37	5052	35	7625
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	21	6190	2	6087	13	8050
837	Cargill Hybrid Seeds	22	6181	5	5807	66	6907
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	23	6177	–	–	–	–
A1 x Tx2864	Tx. Agri. Exp. Stat. (GP)	24	6160	–	–	–	–
PP 777	Production Plus	25	6147	–	–	–	–
A.BON34 x 92L50 (435 x 3338)	Tx. Agri. Exp. Stat. (DR)	26	6070	–	–	–	–
PP644	Production Plus	27	6051	–	–	–	–
Mycogen T-E Y-75	Mycogen Plant Sciences	28	6018	15	5586	40	7478
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	29	5913	4	5881	–	–
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	30	5910	–	–	–	–

Table 9B. Lubbock-Limited Irrigation. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	31	5896	–	–	–	–
DEKALB DK-51	DEKALB Genetics Corp.	32	5846	7	5672	–	–
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	33	5842	–	–	–	–
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	34	5837	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	35	5809	43	4726	–	–
HSC 893	HyPerformer Seed Co.	36	5770	–	–	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	37	5660	1	6340	42	7462
AQL41 x 86E0361	Tx. Agri. Exp. Stat. (DR)	38	5648	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	39	5647	54	4347	–	–
A807 x Tx2783	Tx. Agri. Exp. Stat. (DR)	40	5628	31	5237	–	–
HSC Cherokee	HyPerformer Seed Co.	41	5616	46	4633	26	7743
ATx635 x 86E0361	Tx. Agri. Exp. Stat. (FM)	42	5601	47	4592	–	–
PP 599W	Production Plus	43	5595	–	–	–	–
HB 94-50	HyPerformer Seed Co.	44	5594	–	–	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	45	5587	14	5596	–	–
5536	ICI Seeds	46	5559	–	–	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	47	5550	20	5511	–	–
AQL41 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	48	5543	–	–	–	–
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	49	5501	50	4467	–	–
ATx631 x GR137-90M39	Tx. Agri. Exp. Stat. (GP)	50	5493	–	–	–	–
A1 x R90562	Tx. Agri. Exp. Stat. (DR)	51	5391	–	–	–	–
ATx2752 x GR108-90M30	Tx. Agri. Exp. Stat. (GP)	52	5308	42	4781	–	–
A1 x RQL36	Tx. Agri. Exp. Stat. (DR)	53	5304	–	–	–	–
AQL41 x Tx2783	Tx. Agri. Exp. Stat. (DR)	54	5113	–	–	–	–
A.BON34 x 86E0361	Tx. Agri. Exp. Stat. (DR)	55	4960	41	4840	71	6734
AQL41 x R6078	Tx. Agri. Exp. Stat. (DR)	56	4858	–	–	–	–
ATx631 x GR137-90M37	Tx. Agri. Exp. Stat. (GP)	57	4818	–	–	–	–
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	58	4658	60	3773	–	–
1506	Delta and Pine Land Co.	59	4537	–	–	–	–
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	60	4461	–	–	–	–

Table 9B. Lubbock-Limited Irrigation. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
Myc Grower's 3150	Mycogen Plant Sciences	–	–	3	5915	33	7680
Myc ORO Amigo	Mycogen Plant Sciences	–	–	6	5695	8	8242
A8618 x RTx2783	Tx. Agri. Exp. Stat. (FM)	–	–	12	5610	18	7952
SG-942	Garrison & Townsend, Inc.	–	–	16	5570	3	8465
Myc Grower's 3260	Mycogen Plant Sciences	–	–	17	5563	–	–
ST 686	AgriPro Seeds	–	–	18	5550	–	–
XP5702	Asgrow Seed Company	–	–	21	5489	–	–
dk 780	Douglass W. King Co., Inc.	–	–	22	5483	–	–
SG-925	Garrison & Townsend, Inc.	–	–	24	5450	45	7401
857	Cargill Hybrid Seeds	–	–	27	5434	23	7841
ATx2752 x GR134A-90M40	Tx. Agri. Exp. Stat. (GP)	–	–	28	5411	76	6372
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	29	5368	–	–
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	35	5073	–	–
dk 785E	Douglass W. King Co., Inc.	–	–	36	5072	43	7449
F-300G	Frontier Hybrids, Inc.	–	–	38	4897	–	–
Myc T-E SONORA	Mycogen Plant Sciences	–	–	39	4865	–	–
ATx635 x 87E0366sis	Tx. Agri. Exp. Stat. (DR)	–	–	40	4865	–	–
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	44	4647	–	–
5392	ICI Seeds	–	–	45	4642	–	–
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	48	4550	59	7068
A807 x (Tx430 x R9188)	Tx. Agri. Exp. Stat. (DR)	–	–	49	4536	–	–
A1 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	51	4400	–	–
Myc Grower's 3624	Mycogen Plant Sciences	–	–	52	4386	64	7037
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	53	4353	–	–
A1 x Tx2783	Tx. Agri. Exp. Stat.	–	–	55	4336	–	–
A1 x Tx430	Tx. Agri. Exp. Stat. (DR)	–	–	56	4193	55	7235
A.BON34 x 92L215	Tx. Agri. Exp. Stat. (DR)	–	–	57	4066	–	–
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	–	–	58	3975	58	7159
A807 x R3224 (t)	Tx. Agri. Exp. Stat. (DR)	–	–	59	3849	14	8023
A1 x GR107-90M18	Tx. Agri. Exp. Stat. (GP)	–	–	62	3614	–	–

Table 9B. Lubbock-Limited Irrigation. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
ATx631 x R.9021	Tx. Agri. Exp. Stat. (FM)	–	–	63	3555	60	7059
Number of Entries:		60		64		81	
Test Mean Yield (lb/A):			5931		5009		7447

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

TABLE 10. AGRONOMIC AND TEST INFORMATION: DUMAS

TEST:	1994 Irrigated Grain Sorghum Performance Test
LOCATION:	Tri-C Farms, Dumas, Texas
COOPERATORS:	Joe Cox, Buddy Cox, Mike Cox, Dennis Pietsch, Leon Synatschk, Robert Harris, and Jerry Nickerson
SOIL TYPE:	Sherman silty clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Fallow
LAND PREPARATION:	disked, sweep, chiseled, and bedded
DATE PLANTED:	5-24-94, by hand
DATE THINNED:	250 seeds were packaged for each 30' of row. A 5' alley was cut and plots were not thinned.
PLOT LENGTH:	25'
FERTILIZER:	175+52+0; Applied 200 lb/A of Anhydrous Ammonia pre-plant and 100 lb/A of 11-52-0 pre-plant
HERBICIDE:	Applied 1.5 lb/A of MiloPro
INSECTICIDE:	None
RAINFALL:	Estimated to be less than 3"
IRRIGATIONS:	Pre-plant and 3 irrigations of approximately 4"/irrigation
DATE HARVESTED:	10-11-94 with a MF8 plot combine
SIZE HARVESTED PLOT:	2 rows-25' long
TEST DESIGN:	Randomized block
NUMBER ENTRIES:	60
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	2
TEST MEAN:	7,472 lb/A; yields corrected to 13% moisture
TEST C. V.:	12.5 percent

GENERAL INFORMATION: Good yields were secured at this test site despite periods of very hot and dry weather conditions. An optimum planting date was secured with 250 seeds distributed by hand through a Max-Emerge II planter to achieve a final plant population of approximately 100,000 plants/A at harvest. Seedling emergence was rapid with excellent stands attained.

This year furrow dikes were used with every other row being diked. This agronomic technique is beneficial in helping to trap water from rainfall and reduce runoff thus conserving moisture that can be used by plants during the growing season. Very hot and dry conditions in June and July warranted additional irrigations to be applied to help alleviate plant stress. These hot and dry conditions may have affected final yields. Greenbug "hot-spots" were observed in several portions of the test block and was a contributing factor in plant lodging that is reported in the following Table.

The test mean yield was 7,474 lb/A compared to the past 3 year average of 8,435 lb/A. Fifteen hybrids in the test produced over 8,000 lb/A. Excellent bushel weights were attained at harvest.

Appreciation is expressed to Norman Wuthrich, Research Associate, Texas A&M University Research and Extension Center at Halfway, Texas, for recording flower notes at the appropriate times.

Table 10A. GRAIN SORGHUM PERFORMANCE TEST; DUMAS, TEXAS 1994

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	% Lodge	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
DEKALB DK-66	DEKALB Genetics Corp.	Bz	P	L	71	60	7	100.0	0.0	63.1	15.9	9489	A
8310	Pioneer Hi-Bred Int., Inc.	Bz	R	ML	66	56	8	100.0	0.0	60.1	14.3	8814	A-B
W-818E	George Warner Seed Co., Inc.	Bz	R	ML	66	59	8	100.0	0.0	64.7	14.4	8560	A-C
XP5312	Asgrow Seed Co.	R	P	M	66	55	8	100.0	0.0	57.7	13.4	8513	A-D
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	Rt	P	ML	69	59	8	100.0	0.0	62.2	13.7	8396	A-E
DEKALB DK-56	DEKALB Genetics Corp.	Bz	P	ML	67]	60	9	100.0	0.0	61.4	13.8	8202	A-F
W-917E	George Warner Seed Co., Inc.	R	R	ML	65	58	6	100.0	0.0	62.4	13.6	8162	A-G
CHECK	Tx. Agri. Exp. Stat.	Bz	P	M	64	55	8	97.0	3.3	58.5	13.2	8130	A-G
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	65	55	11	100.0	0.0	58.2	15.0	8121	A-G
GRI 16908	Genetic Resources Inc.	Bz	P	M	65	53	8	93.0	6.7	60.3	12.9	8051	A-G
A2-2(B) x 8BE2668	Tx. Agri. Exp. Stat. (DR)	R	P	ML	66	54	8	93.0	6.7	62.9	15.2	8049	A-G
CHECK	Tx. Agri. Exp. Stat.	R	P	L	.	61	7	100.0	0.0	63.0	16.2	8027	A-G
dk 790	Douglass W. King Co.	Bz	P	ML	65	56	7	98.0	1.7	59.4	13.6	8023	A-G
dk 795	Douglass W. King Co.	R	P	ML	67	54	6	100.0	0.0	63.3	14.1	8023	A-G
Mycogen ORO Amigo	Mycogen Plant Sciences	Bz	P	ML	65	57	7	100.0	1.7	61.3	13.6	8021	A-G
DEKALB DK-55	DEKALB Genetics Corp.	Bz	P	ML	67	54	6	100.0	0.0	60.6	12.6	7953	A-G
AP 9850	AgriPro Seeds	Bz	P	ML	69	57	7	100.0	0.0	60.4	14.1	7935	A-G
DEKALB DK-58	DEKALB Genetics Corp.	Bz	P	L	67	55	7	100.0	0.0	58.5	13.6	7930	A-G
ATx635 x 86EO361	Tx. Agri. Exp. Stat. (DR)	Wt	T	ML	67	62	7	100.0	0.0	62.8	13.5	7909	A-G
GRI 01943	Genetic Resources Inc.	R	P	ML	.	57	4	88.0	11.7	59.9	16.0	7890	A-G
HY 1320	HyPerformer Seed Co.	R	*	ML	68	57	6	97.0	3.3	63.2	14.5	7886	A-G
CHECK	Tx. Agri. Exp. Stat.	R	P	M	65	51	5	100.0	0.0	59.4	12.8	7880	A-G
HSC 893	HyPerformer Seed Co.	Bz	*	M	65	56	8	100.0	0.0	60.7	12.6	7873	A-G
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	68	58	8	100.0	2.3	62.9	14.6	7828	A-G
PP 599W	Production Plus	Cr	T	M	67	56	10	97.0	3.3	62.4	13.7	7776	A-G
Mycogen 9403X	Mycogen Plant Sciences	Bz	P	ML	67	57	6	100.0	0.0	61.7	14.2	7717	A-G
DEKALB DK-54	DEKALB Genetics Corp.	Bz	P	ML	66	59	8	100.0	3.3	62.1	14.8	7697	A-G
8118	Pioneer Hi-Bred Int., Inc.	Bz	P	L	70	59	9	100.0	0.0	58.7	15.1	7509	B-G
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	R	P	ML	68	58	6	100.0	0.0	61.6	14.4	7462	B-G
Mycogen 611E	Mycogen Plant Sciences	Bz	P	ML	66	52	6	100.0	0.0	59.8	12.3	7436	B-G

Table 10A. (Continued)

Hybrid *	Company Or Brand Name	Grain Color **	Plant Color ***	Matu-rity Class ****	Days To 50% Flower	Plant Height Inches	Head Exser-tion Inches	% Stand	% Lodge	Test Weight lb/bu	Mois-ture %	Yield lb/A	Stat. Sig., 0.05 *****
PP 644		Bz	T	ML	64	53	9	100.0	3.3	60.0	12.0	7405	B-G
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	R	P	ML	66	57	5	100.0	0.0	59.8	14.0	7396	B-G
ATx378 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	65	62	8	100.0	25.0	56.2	12.8	7395	B-G
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	66	50	8	97.0	3.3	59.3	12.6	7364	B-G
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	R	P	ML	66	50	7	100.0	0.0	59.3	13.0	7256	B-G
HSC Cherokee	HyPerformer Seed Co.	R	*	M	66	53	8	100.0	0.7	58.5	12.9	7253	B-G
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	66	56	8	100.0	1.7	61.2	13.6	7154	B-G
AQL41 x 86EO361	Tx. Agri. Exp. Stat. (DR)	R	P	ML	65	58	11	100.0	1.7	60.8	14.0	7144	B-G
PP 777	Production Plus	Bz	T	ML	66	56	7	100.0	1.7	61.3	13.4	7131	B-G
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	Wh	T	M	68	54	8	98.0	1.7	62.3	13.5	7081	B-G
CHECK	Tx. Agri. Exp. Stat.				65	52	8	100.0	0.0	61.9	13.0	7041	B-G
KS 735	Northrup King Co.	R	P	ML	65	54	8	100.0	0.0	61.2	14.1	7039	B-G
F-524	Frontier Hybrids, Inc.	Bz	R	ML	66	54	7	100.0	0.0	60.1	13.8	7013	B-G
1506	Delta and Pine Land Co.	Ct	P	M	64	60	11	100.0	25.0	59.5	13.5	6984	B-G
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	71	54	10	100.0	0.0	59.0	12.9	6939	B-G
8212Y	Pioneer Hi-Bred Int., Inc.	Wh	P	ML	64	50	6	100.0	3.7	61.4	13.4	6938	B-G
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	Rt	R	M	64	58	9	100.0	13.3	61.2	12.8	6927	B-G
797	Cargill Hybrid Seeds	Bz	P	M	66	48	6	98.0	1.7	60.1	12.4	6914	B-G
ATx638 x (Tx430x77CS1)	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	66	52	8	100.0	0.0	60.3	13.5	6848	C-G
HB 94-50	Production Plus	Ct	*	M	64	60	11	100.0	16.7	60.0	14.5	6823	C-G
A570	Asgrow Seed Co.	R	P	M	66	58	10	100.0	0.0	56.7	12.8	6776	C-G
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	Rt	T	M	70	48	7	100.0	0.0	60.7	14.0	6716	C-G
CHECK	Tx. Agri. Exp. Stat.				65	57	9	100.0	0.0	61.9	13.9	6668	C-G
837	Cargill Hybrid Seeds	Bz	P	ML	64	53	7	97.0	5.0	61.4	12.9	6651	C-G
RS 290E	Richardson Seeds Inc.	Rt	P	M	68	54	6	100.0	0.0	56.7	13.2	6588	D-G
GRI 06943	Genetic Resources Inc.	R	P	M	66	54	6	100.0	0.0	60.8	13.1	6491	E-G
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	66	50	8	100.0	0.0	59.5	12.3	6454	E-G
CHECK	Tx. Agri. Exp. Stat.				64	46	8	100.0	0.0	60.6	12.9	6345	F-G
ATx399 x RTx430	Tx. Agri. Exp. Stat.	Bz	P	M	64	51	10	100.0	3.3	56.4	12.0	6311	F-G
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	Rt	P	M	67	49	9	90.0	11.7	60.7	13.1	6215	G

TEST MEAN = 7472
TEST C.V. = 12.5
LSD .05 = 1508.3

Table10A (Continued)

Note 1: The ANOVA procedure was used for statistical analysis.

Note 2: Hybrid names starting or ending with an "X" denotes 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.

Note 3: Hybrids with same yields were ranked by computer.

Note 4: A dot indicates hybrids were late flowering.

* ICI 5536, KS 936, T-E Y-75, D&PL 1505y, NC+ 7R37E, and NC+ 7B44 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 Br=Brown Bz=Bronze Rt=Red translucent W=White Wt=White translucent Ct=Cream translucent

*** Plant color designated by respective seed companies: T=Tan R=Red P=Purple. Those hybrids designated with an (*) indicates company did not submit plant color.

**** 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 10B. Three-year summary, Grain Sorghum Performance Test, Dumas, Texas.

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
DEKALB DK-66	DEKALB Genetics Corp.	1	9489	2	8912	1	12234
8310	Pioneer Hi-Bred Int'l., Inc.	2	8814	5	8650	–	–
W-818E	George Warner Seed Co.	3	8560	–	–	–	–
XP5312	Asgrow Seed Company	4	8513	–	–	–	–
ATx638 x RTx2783	Tx. Agri. Exp. Stat. (FM)	5	8396	–	–	–	–
DEKALB DK-56	DEKALB Genetics Corp.	6	8202	6	8492	30	9909
W-917E	George Warner Seed Co.	7	8162	–	–	–	–
CHECK (ICI 5536)	Tx. Agri. Exp. Stat.	8	8130	–	–	–	–
A807 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	9	8121	–	–	–	–
GRI 16908	Genetics Resources Inc.	10	8051	–	–	–	–
A2-2(B) x 8BE2668	Tx. Agri. Exp. Stat. (DR)	11	8049	–	–	–	–
CHECK (KS 936)	Tx. Agri. Exp. Stat.	12	8027	14	7828	6	10742
dk 790	Douglass W. King Co., Inc.	13	8023	29	7260	–	–
dk 795	Douglass W. King Co., Inc.	14	8023	–	–	–	–
Mycogen ORO Amigo	Mycogen Plant Sciences	15	8021	25	7489	29	9930
DEKALB DK-55	DEKALB Genetics Corp.	16	7953	–	–	–	–
AP 9850	AgriPro Seeds	17	7935	–	–	–	–
DEKALB DK-58	DEKALB Genetics Corp.	18	7930	15	7825	–	–
ATx638 x 86E0361	Tx. Agri. Exp. Stat. (DR)	19	7909	–	–	–	–
GRI 01943	Genetics Resources Inc.	20	7890	–	–	–	–
HY 1320	HyPerformer Seed Co.	21	7886	4	8691	–	–
CHECK (T-E Y-75)	Tx. Agri. Exp. Stat.	22	7880	23	7605	47	9507
HSC 893	HyPerformer Seed Co.	23	7873	26	7412	–	–
ATx631 x 80C2241	Tx. Agri. Exp. Stat. (FM)	24	7828	–	–	–	–
PP 599W	Production Plus	25	7776	–	–	–	–
Mycogen 9403X	Mycogen Plant Sciences	26	7717	–	–	–	–
DEKALB DK-54	DEKALB Genetics Corp.	27	7697	–	–	–	–
8118	Pioneer Hi-Bred Int'l., Inc.	28	7509	1	9081	–	–
ATx2752 x Tx2783	Tx. Agri. Exp. Stat.	29	7462	28	7275	–	–
Mycogen 611E	Mycogen Plant Sciences	30	7436	–	–	–	–

Table 10B. Dumas, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
PP 644	Production Plus	31	7405	–	–	–	–
ATx2752 x GR108-90M24	Tx. Agri. Exp. Stat. (GP)	32	7396	–	–	–	–
ATx378 x RTx430	Tx. Agri. Exp. Stat.	33	7395	17	7747	27	9986
ATx638 x R8503	Tx. Agri. Exp. Stat. (FM)	34	7364	–	–	–	–
ATx2752 x Tx2864	Tx. Agri. Exp. Stat.	35	7256	–	–	–	–
HSC Cherokee	HyPerformer Seed Co.	36	7253	38	7045	–	–
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	37	7154	12	7874	5	10811
AQL41 x 86E0361	Tx. Agri. Exp. Stat. (DR)	38	7144	–	–	–	–
PP 777	Production Plus	39	7131	–	–	–	–
ATxARG-1 x RTx436	Tx. Agri. Exp. Stat. (FM)	40	7081	31	7204	–	–
CHECK (D&PL 1505y)	Tx. Agri. Exp. Stat.	41	7041	–	–	–	–
KS 735	Northrup King Co.	42	7039	–	–	–	–
F-524	Frontier Hybrids, Inc.	43	7013	16	7815	18	10384
1506	Delta and Pine Land Co.	44	6984	–	–	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	45	6939	–	–	–	–
8212Y	Pioneer Hi-Bred Int'l., Inc.	46	6938	–	–	–	–
ATx626 x R8503	Tx. Agri. Exp. Stat. (FM)	47	6927	–	–	–	–
797	Cargill Hybrid Seeds	48	6914	43	6709	31	9898
ATx638 x (Tx430 x 77cs1)	Tx. Agri. Exp. Stat. (FM)	49	6848	–	–	–	–
HB 94-50	HyPerformer Seed Co.	50	6822	–	–	–	–
A570	Asgrow Seed Company	51	6776	–	–	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	52	6716	–	–	–	–
CHECK (NC+ 7R37E)	Tx. Agri. Exp. Stat.	53	6668	–	–	–	–
837	Cargill Hybrid Seeds	54	6651	10	8015	15	10443
RS 290E	Richardson Seeds Inc.	55	6588	–	–	–	–
GRI 06943	Genetic Resources Inc.	56	6491	–	–	–	–
ATx638 x RTx430	Tx. Agri. Exp. Stat. (FM)	57	6454	–	–	–	–
CHECK (NC+ 7B44)	Tx. Agri. Exp. Stat.	58	6345	–	–	–	–
ATx399 x RTx430	Tx. Agri. Exp. Stat.	59	6311	36	7115	–	–
ATx638 x RQL36	Tx. Agri. Exp. Stat. (FM)	60	6215	–	–	–	–

Table 10B. Dumas, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
XP5702	Asgrow Seed Company	–	–	3	8872	–	–
ATx635 x 86E0N361	Tx. Agri. Exp. Stat. (DR)	–	–	7	8467	–	–
ATx2752 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	8	8263	–	–
CHECK (Rustler)	Tx. Agri. Exp. Stat.	–	–	9	8108	13	10500
SG-942	Garrison & Townsend, Inc.	–	–	11	7960	2	11706
Myc T-E 77E	Mycogen Plant Sciences	–	–	13	7854	7	10738
857	Cargill Hybrid Seeds	–	–	18	7682	25	10061
A4R x Tx430	Tx. Agri. Exp. Stat. (DR)	–	–	19	7666	12	10506
Myc T-E X-9121	Mycogen Plant Sciences	–	–	20	7653	3	11230
W-816-E	George Warner Seed Co., Inc.	–	–	21	7638	10	10646
A8618 x RTx2783	Tx. Agri. Exp. Stat. (FM)	–	–	22	7615	46	9558
ATx631 x RTx436	Tx. Agri. Exp. Stat. (FM)	–	–	24	7567	–	–
A1 x GR108-90M23	Tx. Agri. Exp. Stat. (GP)	–	–	27	7369	–	–
F-380G	Frontier Hybrids, Inc.	–	–	30	7213	–	–
SG-925	Garrison & Townsend, Inc.	–	–	32	7173	33	9861
Jacques 611E	Jacques Seed Comapny	–	–	33	7161	4	10891
Myc Grower's 3150	Mycogen Plant Sciences	–	–	34	7122	–	–
A504	Asgrow Seed Company	–	–	35	7120	–	–
CHECK	Tx. Agri. Exp. Stat.	–	–	37	7069	–	–
2665	Northrup King Co.	–	–	39	7042	34	9843
Myc Grower's 1313	Mycogen Plant Sciences	–	–	40	6979	22	10171
Myc Grower's 3260	Mycogen Plant Sciences	–	–	41	6936	–	–
A8618 x RQL36	Tx. Agri. Exp. Stat. (FM)	–	–	42	6802	–	–
dk 780	Douglass W. King Co., Inc.	–	–	44	6659	–	–
CHECK	Tx. Agri. Exp. Stat.	–	–	45	6633	–	–
A.BON34 x 86E0N361	Tx. Agri. Exp. Stat. (DR)	–	–	46	6598	40	9765
A8618 x RTx430	Tx. Agri. Exp. Stat. (FM)	–	–	47	6575	–	–
ATx631 x R.9021	Tx. Agri. Exp. Stat. (FM)	–	–	48	6563	75	8147
Myc ORO Exp. 4312x	Mycogen Plant Sciences	–	–	49	6539	–	–
AP 9690	AgriPro Seeds	–	–	50	6464	–	–

Table 10B. Dumas, Texas. (Continued)

HYBRID	COMPANY	1994 RANK	1994 YIELD	1993 RANK	1993 YIELD	1992 RANK	1992 YIELD
Jacques 444E	Jacques Seed Comapny	–	–	51	6415	54	9338
A1 x Tx2864	Tx. Agri. Exp. Stat.	–	–	52	6392	–	–
dk 785	Douglass W. King Co., Inc.	–	–	53	6358	–	–
Myc T-E X-8342	Mycogen Plant Sciences	–	–	54	6334	–	–
A8618 x 91C1988	Tx. Agri. Exp. Stat. (FM)	–	–	55	6325	68	8464
A1 x GR107-90M17	Tx. Agri. Exp. Stat. (GP)	–	–	56	6318	–	–
A1 x 8BE2668	Tx. Agri. Exp. Stat. (DR)	–	–	57	6253	–	–
ATxARG-1 x R8925	Tx. Agri. Exp. Stat. (FM)	–	–	58	6136	–	–
ATxARG-1 x R8922	Tx. Agri. Exp. Stat. (FM)	–	–	59	6107	–	–
ATxARG-1 x 90T308	Tx. Agri. Exp. Stat. (FM)	–	–	60	6034	80	7463
Number Entries:		60		60		80	
Test Mean Yield (lb/A):			7472		7308		9595

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

SUPPLEMENT

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

TABLE S1. AGRONOMIC AND TEST INFORMATION: HALFWAY, TEXAS
Supplementary Grain Sorghum Test

TITLE:	Single row irrigated grain sorghum performance test at the Texas Agricultural Experiment Station, Halfway, Texas, 1994	
AUTHORS:	N.E. Wuthrich, J. W. Jones, C. A. Woodfin, G. C. Peterson, D. T. Rosenow, Research Associate, Senior Research Associates, Associate Professor and Professor.	
METHODS & MATERIALS:	Experimental Design:	Triple lattice
	Plot Size:	6.66 ft (2 beds x 21 ft)
	Plot Spacing:	Single row on 40-inch spaced beds
	Soil Type:	Pullman clay loam
	Previous Crop:	Cotton
	Fertilizer:	172 (N), 52 (Ca) lb/A NCal 23 liquid 23-0-0-7; 12 (N) & 42 (P) lb/A liquid 10-34-0.
	Herbicide:	1.3 lb ai/A Milogard pre-emerge, .5 ai/A Prowl layby
	Insecticide:	9.8 lbs/A Counter 15G preplant
	Irrigations:	Pre-emergence plus 2.2, 4.3, 1.7, 2.5, 2.6, 1.9 in/A applied on June 23, July 6, 13,19, Aug 10, and 24
	Rainfall:	Jan-Oct (7.39")
	Planting Date:	June 2
	Population:	83,657 plants/A
	Harvest Date:	October 13

RESULTS & DISCUSSION:

Table S2 contains all agronomic data recorded in 1994.

Yields were very good for this year with a test mean of 8,032 lb/A. Dry weather during the growing season increased the need for irrigation.

The systemic insecticide Counter 15G was applied preplant for greenbug control. Some lodging occurred due to lack of soil moisture and limited rainfall.

The entire plot (2 rows) was combine harvested. Lodged plants were hand harvested and included in plot yields. Grain yields were adjusted to 13% moisture and converted to pounds per acre.

Table S-2 Grain yield and other agronomic data for thirty-five grain sorghum hybrids evaluated under full irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1994.

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN)	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	LOD-GING %	MOIS-TURE %	MATU-RITY 7
DeKalb Genetics Corp.	DK-55	9430	A	62	59	6	1.0	5.0	0	12.1	ML
DeKalb Genetics Corp.	DK-54	9224	A-B	62	60	8	3.0	2.7	0	12.7	ML
Douglass W. King	dk 790E	9211	A-B	59	63	7	3.3	3.0	0	13.4	L
Asgrow	A 570	8878	A-B	64	58	6	2.3	2.3	3	13.2	M
Tx. Agri. Exp. Stat.	ATx2752 x GR108-90M24	8863	A-B	61	62	5	3.0	2.0	2	13.5	ML
DeKalb Genetics Corp.	DK-58	8782	A-B	62	59	4	1.7	4.0	0	14.9	ML
DeKalb Genetics Corp.	DK-56	8724	A-B	63	57	7	2.0	3.3	1	13.6	ML
Tx. Agri. Exp. Stat.	ATx2752 x RTx430	8713	A-B	59	61	5	3.7	2.0	0	13.3	ML
TX. AGRI. EXP. Stat.	ATX2752 X GR108-90M30	8703	A-B	63	58	7	3.3	2.7	0	13.2	ML
George Warner	W-902W	8687	A-B	62	64	7	3.3	3.0	14	14.1	L
DeKalb Genetics Corp.	DK-66	8443	A-B	67	61	4	3.0	2.3	27	12.8	L
Tx. Agri. Exp. Stat.	ATx2752 x Tx2864	8432	A-B	59	55	5	2.7	1.7	0	13.5	ML
Production Plus+	PP 644	8409	A-C	58	57	6	3.0	2.3	0	12.0	ML
Tx. Agri. Exp. Stat.	ATx2752 x GR108-90M23	8332	A-C	61	60	7	3.0	3.0	0	13.5	ML
Garrison & Townsend	SG-942	8180	A-C	63	59	5	3.0	2.0	4	13.2	L
Tx. Agri. Exp. Stat.	ATx635 x 86EON361	8072	A-C	62	67	6	3.3	1.3	5	13.1	ML
Northrup King	KS 714Y	8051	A-C	59	53	6	2.7	3.7	0	14.1	ML
Tx. Agri. Exp. Stat.	ATx2752 x Tx2783	8040	A-C	63	61	5	3.0	2.0	15	13.3	ML
Tx. Agri. Exp. Stat.	A1 x Tx2783	8029	A-C	60	62	4	2.3	3.7	1	12.8	ML
Asgrow	A 7712	7997	A-C	61	62	6	3.0	2.7	0	12.7	L
Frontier	F-524	7990	A-C	60	58	5	3.0	2.7	0	12.9	L
Tx. Agri. Exp. Stat.	A807 x 8BE2668	7956	A-C	58	56	7	3.0	4.0	0	13.8	ML
Tx. Agri. Exp. Stat.	ATx2752 x GR107-90M17	7943	A-C	60	57	7	3.3	2.0	0	13.5	ML
Production Plus+	PP 777	7848	A-C	59	56	4	3.0	1.7	4	12.5	ML
Seedco	SC-707	7762	A-C	59	58	7	3.0	3.0	0	13.4	M
Douglass W. King	dk 795	7726	A-C	62	59	6	3.3	3.0	8	14.0	L
Tx. Agri. Exp. Stat.	ATx399 x RTx430	7593	B-C	58	53	4	3.3	2.7	0	12.5	ML
Tx. Agri. Exp. Stat.	A.BON34 x 86EON361	7582	B-C	62	55	6	3.0	2.3	2	12.2	ML
Tx. Agri. Exp. Stat.	A1 x Tx2864	7582	B-C	59	54	4	2.3	3.0	0	13.5	ML
Northrup King	KS 735	7582	B-C	60	54	5	2.7	2.7	0	12.6	ML
Seedco	SC-710	7557	B-C	59	53	4	3.0	3.0	1	11.9	ML
Production Plus+	PP599W	7472	B-C	61	62	9	3.7	3.0	0	13.4	M
Tx. Agri. Exp. Stat.	A1 x 8BE2668	6611	C-D	58	55	5	3.0	4.0	0	13.0	ML
Tx. Agri. Exp. Stat.	A.BON34 x 90L50	5456	D	62	50	2	3.7	2.7	0	12.3	ML
Tx. Agri. Exp. Stat.	RS 610	5265	D	51	56	9	3.0	2.0	9	11.6	E

TEST MEAN= 8032.0 TEST C.V.=11.2 LSD .05=1472.7

Note 1: The ANOVA procedure was used for statistical analysis.

Table S-2. Grain yield and other agronomic data for thirty-five grain sorghum hybrids evaluated under full irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1994.

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN)	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	LOD-GING %	MOIS-TURE %	MATU-RITY 7

Note 2: No bird damage was observed in the test except for RS610 which had 38% and one other hybrid at 1%.

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 exsertion 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.

TABLE S3. AGRONOMIC AND TEST INFORMATION: HALFWAY, TEXAS
Supplementary Grain Sorghum Test

TITLE: Dryland grain sorghum performance test at the Texas Agricultural Experiment Station, Halfway, Texas, 1994

AUTHORS: N.E. Wuthrich, J. W. Jones, C. A. Woodfin, G. C. Peterson, D. T. Rosenow, Research Associate, Senior Research Associates, Associate Professor and Professor.

METHODS & MATERIALS:

Experimental Design:	Triple lattice
Plot Size:	6.66 ft (2 beds x 21 ft)
Plot Spacing:	Single row on 40-inch spaced beds
Soil Type:	Pullman clay loam
Previous Crop:	Fallow
Fertilizer:	None
Herbicide:	1.0 lb ai/A Milogard
Insecticide:	8.5 lbs/A Counter 15G preplant
Irrigations:	None
Rainfall:	Jan-June (5.81"), July-November (1.58")
Planting Date:	June 23
Population:	28,232 plants/A
Harvest Date:	November 3

RESULTS & DISCUSSION:

Table S4 contains all agronomic data recorded in 1994. The test mean was 1,915 lb/A. Sorghum hybrids bred for dryland conditions produced the highest yields.

Stored soil moisture and sporadic rainfall contributed to plant growth during the growing season. Test was planted on land reserved for dryland that was fallow the previous year.

The test was planted June 23 with soil moisture available for emergence. Furrow dikes were established in alternate rows June 9 and July 14. Plants were hand thinned to a uniform population.

The entire plot (2 rows) was combine harvested. Lodged plants were hand harvested and included in plot yields. Grain yields were converted to pounds per acre and were not adjusted for moisture.

Table S-4. Grain yield and other agronomic data for thirty-two grain sorghum hybrids evaluated under dryland at the Texas Agricultural Experiment Station, Halfway, Texas, 1994.

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN)	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	LOD-GING %	MOIS-TURE %	MATU-RITY 7
Northrup King	KS 383Y	2823	A	59	30	0	1.7	2.3	2	12.0	ME
Tx. Agri. Exp. Stat.	RS 610	2818	A	56	36	2	2.0	3.0	21	10.9	E
Tx. Agri. Exp. Stat.	A1 x P37-3	2590	A-B	62	40	0	2.7	3.3	1	10.7	ML
DeKalb Genetics Corp.	DK-39	2493	A-C	59	32	0	1.3	2.7	0	11.3	E
ICI	5643	2435	A-D	57	34	0	2.3	1.3	25	10.8	ME
Frontier	F-270G	2407	A-D	58	34	0	2.0	2.3	5	11.1	ME
Tx. Agri. Exp. Stat.	ATx2755 x Tx2882	2283	A-E	60	33	0	2.7	2.0	0	10.9	ML
Production Plus+	PP 333	2240	A-E	59	32	0	1.7	3.0	14	10.3	ME
Frontier	F-200	2223	A-F	56	36	1	2.3	2.3	32	10.6	E
Douglass W. King	dk 715E	2140	B-F	58	31	0	3.0	3.0	0	11.2	M
ICI	5616	2139	B-F	61	33	0	2.0	3.0	0	11.7	ME
DeKalb Genetics Corp.	DK-38	2068	B-F	57	31	0	1.0	3.7	1	11.4	E
Frontier	F-300G	2020	B-F	60	32	0	2.3	2.7	0	10.4	M
Tx. Agri. Exp. Stat.	A1 x R803	2006	B-F	60	36	0	2.7	2.3	5	11.4	ML
Asgrow	SENECA	1999	B-F	58	31	0	3.0	3.0	0	11.2	ME
Tx. Agri. Exp. Stat.	A35 x GR108-90M23	1949	B-F	63	35	0	2.7	3.0	0	13.7	ML
Tx. Agri. Exp. Stat.	A35 x RTx430	1943	B-F	59	34	0	3.3	2.7	0	11.8	ML
DeKalb Genetics Corp.	DK-40	1938	B-F	59	33	0	1.3	3.0	0	10.6	M
Asgrow	A 406	1863	C-G	64	32	0	3.3	2.3	1	11.8	M
Tx. Agri. Exp. Stat.	Check-1	1848	C-H	61	34	0	3.3	3.0	0	11.5	ML
Tx. Agri. Exp. Stat.	A35 x Tx2864	1838	C-H	61	35	0	3.0	1.3	0	11.1	ML
Tx. Agri. Exp. Stat.	A1 x RTx430	1795	D-H	61	36	0	2.7	2.7	0	11.2	ML
Tx. Agri. Exp. Stat.	A35 x Tx2783	1736	E-H	64	35	0	3.7	3.0	2	13.0	ML
Tx. Agri. Exp. Stat.	A35 x GR108-90M24	1669	E-H	64	37	0	2.7	3.0	0	12.4	ML
Tx. Agri. Exp. Stat.	A35 x GR126-90M36	1647	E-H	64	39	1	3.0	3.0	0	12.0	ML
Tx. Agri. Exp. Stat.	A1 x Tx2783	1613	E-H	64	38	0	3.3	2.3	1	11.4	ML
Northrup King	KS 524	1555	F-H	59	31	0	2.7	2.3	0	11.1	M
Production Plus+	PP 599W	1235	G-I	68	32	0	3.7	2.0	0	10.6	M
Tx. Agri. Exp. Stat.	A35 x GR108-90M30	1229	G-I	64	34	0	3.7	2.0	0	13.4	ML
Tx. Agri. Exp. Stat.	ATx399 x RTx430	1204	H-I	65	32	0	3.7	2.0	0	10.3	ML
Tx. Agri. Exp. Stat.	A35 x 88v1080	781	I	71	28	0	4.7	2.0	0	11.0	ML
Douglass W. King	dk 904W	756	I	70	30	0	4.3	2.0	0	9.5	M

TEST MEAN= 1915.0 TEST C.V.=11.0 LSD .05=546.0

Note 1: The ANOVA procedure was used for statistical analysis.

1 Moisture was not used in yield calculations

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

Table 5-4 Grain yield and other agronomic data for thirty-two grain sorghum hybrids evaluated under dryland at the Texas Agricultural Experiment Station, Halfway, Texas, 1994.

COMPANY OR BRAND NAME	HYBRID DESIGNATION	GRAIN YIELD lb/A 1	DUNCAN'S 5% LEVEL 2	DAYS TO FLOWER 3	PLANT HEIGHT (IN)	HEAD EXS. IN. 4	HEIGHT UNIF. 5	HEAD TYPE 6	LOD-GING %	MOIS-TURE %	MATU-RITY 7

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

4 Head exsertion 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. January 23, 1995

ACKNOWLEDGMENTS

Conducted by the Texas Agricultural Experiment Station (TAES), this program is financed in part by fees from participating commercial seed companies.

Appreciation for assistance and cooperation in conducting these tests is expressed to the following.

Farmers: Elvin Berndt (Danevang Test), Scott Bailey (McKinney Test) Joe, Buddy and Mike Cox (Dumas-Stinnett), Pustjevosky and Sons (Gregory Test), Hilton Stinson (Castroville Test).

Texas Agricultural Experiment Station: A. J. Bockholt, John Drawe, Frank Fojt III, Ralph Morgan, Calvin Rinn, Kenneth Schaeffer, Leon Synatschk, and Norman Wuthrich.

Texas Agricultural Extension Service: Darwin Anderson, Jim Blalock, Steve Bradshaw, Cloyce Coffman, John Cosper, Robert Harris, Wayne Scholtz, and Kenneth White.