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1988 Grain Sorghum Performance Tests in Texas

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1988 GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS

by

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GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS -- 1988

D. R. Pietsch, Randy Gaas, D. T. Rosenow, F. R. Miller, and G. C. Peterson,

INTRODUCTION

For decades, sorghum has been a major commodity in Texas but recently, acreage has been declining to an all time low of 2.1 million acres in 1988 (1). This is the smallest acreage since the introduction of hybrid sorghum in 1956-57. Probable factors contributing to this acreage reduction include: (a) participation by farmers in various government supported programs, (b) farmers changing to different commodities determined by price differential, and precipitation patterns.

Figure 1 shows sorghum acreage and yield in Texas from 1949-1988. During this 40-year period, acreage peaked in 1958 at 7.619 million acres. Yield per acre during this 40-year period has increased from 1,064 lb/A in 1951-52 to 3,528 lb/A in 1987. State mean yield is projected to be approximately 3,360 lb/A for 1988. This increase in yield can be attributed to continuous improvements in lines and hybrids developed through plant breeding efforts and improved agronomic and cultural practices employed by farmers.

The trend of sorghum acreage and yield in Texas for the period 1949-1988 is shown in Figure 2 by use of a regression line. Yield for this period has shown an annual increase of 55.2 pounds per year while acreage has decreased at a rate of approximately 36,000 acres per year.

Historically, sorghum in Texas has been used primarily for livestock feed and export markets but recently, emphasis has been placed on using sorghum for food purposes also. Dr. L. W. Rooney, Cereal Chemist, Department of Soil and Crop Science, Texas A&M University, has conducted numerous quality studies on sorghum and has reported the following:

"Increased sorghum production ultimately depends upon increased utilization of sorghum for domestic livestock feeds, industrial processing and for exports. To recapture lost markets, maintain existing ones, and increase exports, the quality and image of U.S. sorghum must be improved significantly.

The feeding value of newer sorghum hybrids has been documented at 95% the value of yellow dent corn. However, many feeders do not use sorghum even when it is 15-20% lower in price than corn. The reasons often relate to the dirty, off colored formulated feed produced by typical U.S. sorghum with a red pericarp. In some Asian countries, the cosmetic appeal of rations is critically important to feeders. The dark color of sorghum ration is not preferred so the amount of sorghum is limited to 15% even though sorghum is frequently 15-20% lower than the cost of corn.

In the USA, the broiler industry recently quit using sorghum during the last 10 days prior to slaughter because sorghum fed birds allegedly had greater numbers of black specs than corn fed birds. The result was greater losses of birds fed sorghum during inspection compared to corn fed broilers. This cosmetic effect cost sorghum producers significant markets. The presence of black or purple glumes in sorghum gives the appearance of large amounts of trash in the grain even though that is not the case. Thus, the appearance of sorghum definitely affects consumers acceptance and willingness to buy sorghum domestically and internationally.

Sorghum appearance can be improved by the development and production of white sorghums with tan plant color and straw color glumes. These types of sorghum produce grain with significantly improved eye appeal to consumers. When mixed into feeds, the ration is light in color more closely resembling a white corn ration. When a tan plant yellow endosperm hybrid is used the ration resembles more closely a yellow corn based ration.

Sorghum hybrids with these characteristics can be developed by the seed industry. In fact, they must be if sorghum grain is to remain competitive in international markets. The key is for the industry to develop and merchandise new hybrids for production in the sorghum belt.

Yellow endosperm and cream color hybrids are currently grown extensively in some areas of Kansas and Nebraska with great success because they are drought resistant and high yielding. These hybrids are not as well adapted to hotter, wetter growing areas i.e. the Gulf Coast where grain weathering is a critical problem. However, sorghum hybrids for the Gulf Coast can be developed if effort is put forth.

Development of sorghums for production in areas close to port facilities is critically significant because these sorghums are exported. The yellow sorghums grown in some areas of Kansas/Nebraska could enhance our markets but freight rates are prohibitive.

The future well-being of the U.S. sorghum industry depends on the quality of the grain. The seed industry provides a key role in developing new hybrids with improved quality."

GRAIN SORGHUM PERFORMANCE TESTING IN TEXAS

This report gives results of five irrigated and five non-irrigated grain sorghum performance test sites. Approximate locations of test sites are shown in Figure 3 and represent the major grain sorghum production areas in Texas.

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

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

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

ENTRIES

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

FIELD-PLOT TECHNIQUE

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

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

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

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

DATA

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

- Grain color**--determined at harvest; R = red, W = white, B = brown, M = mixed.
- Maturity class**--maturity designated by a respective seed company for that particular hybrid. Early (E), medium-early (ME), medium (M), medium-late (ML), and late (L) designations are used.
- Days to 50 percent flower**--number of days from planting to, and including, the day that an estimated 50 percent of the plants have reached anthesis.
- Plant height**--average inches from the ground to the tip of the panicle.
- Panicle exertion**--average inches from the flag leaf to the base of the panicle.
- Stand**--visual estimate of plants in harvest area taken from all three replications.
- Emergence rating**--based on a scale of 1-10, presented in Table 5A.
- Moisture percentage**--determined with an electrical resistance meter from threshed grain from all replications.
- Test weight**--pounds per bushel of grain determined with an official test weight apparatus.
- Bird damage**--visual rating or percentage, not used in yield calculations.
- Lodging**--visual rating or percentage, not used in yield calculations.
- Midge damage**--percentage estimated but not used in yield calculations.
- Desirability rating**--based on a scale of 1-5. This rating is an overall index of potential for a hybrid in the market place. It is based primarily on seed color as affected by weathering, panicle exertion, leaf quality and retention, lodging, height uniformity, and other visible factors. The rating scale is presented in Table 6A.
- Greenleaf retention rating**--based on % of potential green leaves on the hybrid but which remain green at harvest.
- Smut per plot**--number of plants showing smut within the harvested area. Taken from all replications and averaged.
- Threshing percentage**--calculated by dividing plot grain weight by plot head weight x 100.
- Check hybrids**--those hybrids that are commonly used in a respective area that were not entered by a commercial company. They were included in the test on the basis of a survey taken by area county agents, farmers, and seed dealers.
- Yield**--determined as follows: plot panicle weight x threshing percentage x acre conversion factor x moisture correction factor. All yields are corrected to 13 percent moisture.
- Statistical significance**--shown for the yield of hybrids within each maturity group. Yields followed by the same letter are not significantly different at the 0.05 alpha level based on Duncan's multiple range test.
- Greenbug rating**--visual estimate presented in Table 3A and 6A.

RESULTS

Two additional test sites were added in 1988 which made a total of 10 locations where grain sorghum performance test were conducted. The Danevang and McKinney test sites are representative of conditions in the Upper Coast Region and Northern Blacklands respectively. The Dumas (Etter) test previously located on the North Plains Research Field, was moved to an on-farm location near Stinnett.

An optimum planting date was achieved at all test sites but cold weather restricted early plant growth at the South and Central test sites. Warm weather followed thus encouraging rapid plant growth and development. Despite widespread drought conditions, above normal to excellent yields were recorded at all test sites with the exception of College Station. High populations of greenbugs at post-flowering reduced potential yields of many hybrids.

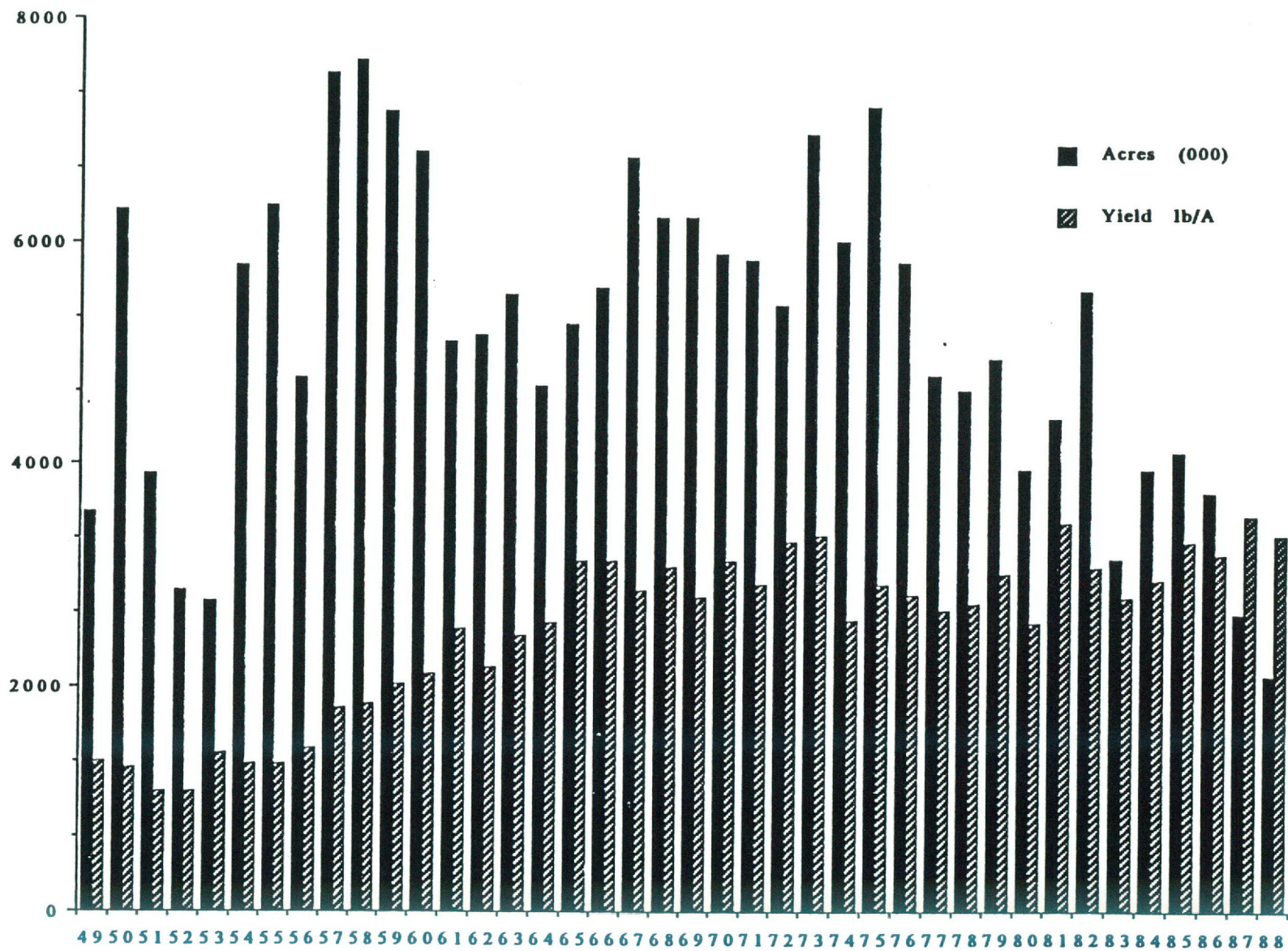
Good growing conditions contributed to excellent yields at the Lubbock Irrigated test site. Below average rainfall at the Lubbock Dryland test site resulted in moisture stress thus reducing potential yields.

Excellent yields were attained at the Dumas test site due to good growing conditions and timely rainfall.

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

1. Tables 2-11 summarize agronomic and test data information.
2. Tables 2A-11A present all performance test data obtained for hybrids entered at the respective locations. Some of these hybrids are in the experimental stage and seeds are not yet available in quantities for farm planting.
3. Tables 2B-11B are summaries of hybrids showing test yields and test ranks at respective locations for given time periods. The summaries are helpful in selection of hybrids for a particular area. Those hybrids not entered for a respective year are designated (--). Hybrids with same yields were ranked by computer.
4. Tables S1-S4 give agronomic and test results from supplementary grain sorghum tests conducted by Dr. John Sij at Beaumont and Eagle Lake, Texas.
5. Table S5-S6 gives results of a supplementary grain sorghum variety test conducted at Halfway, Texas, in cooperation with the High Plains Research Foundation.

Figure 1. Texas Grain Sorghum Acreage and Yield, 1949-1988



Year

Figure 2. Texas Grain Sorghum Yield and Acreage, 1949-1988

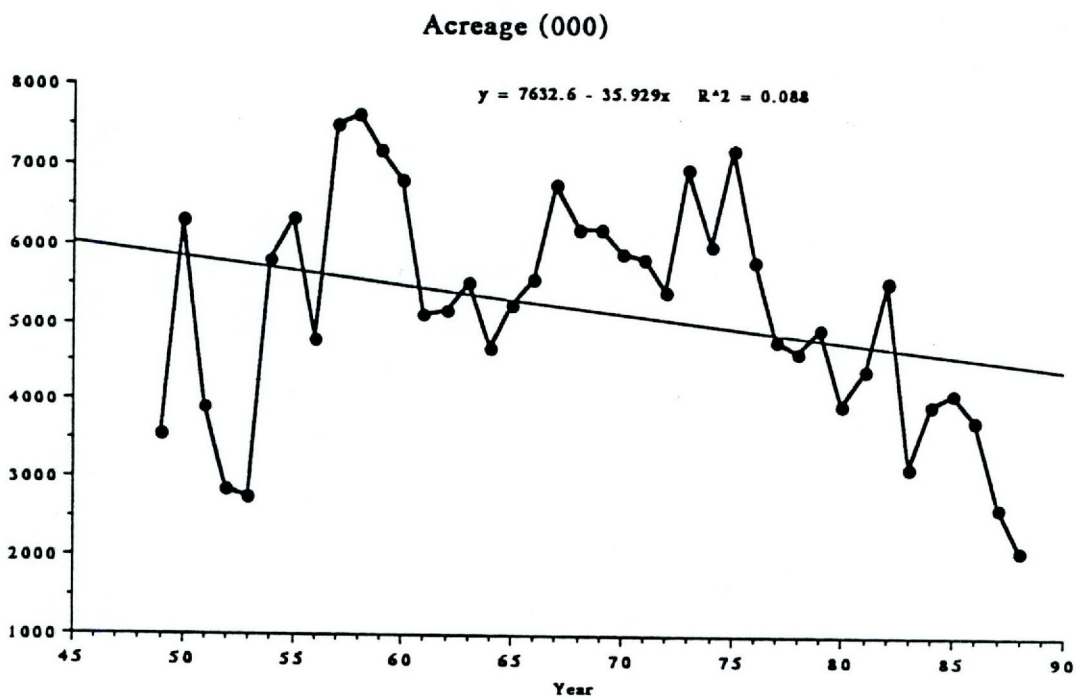
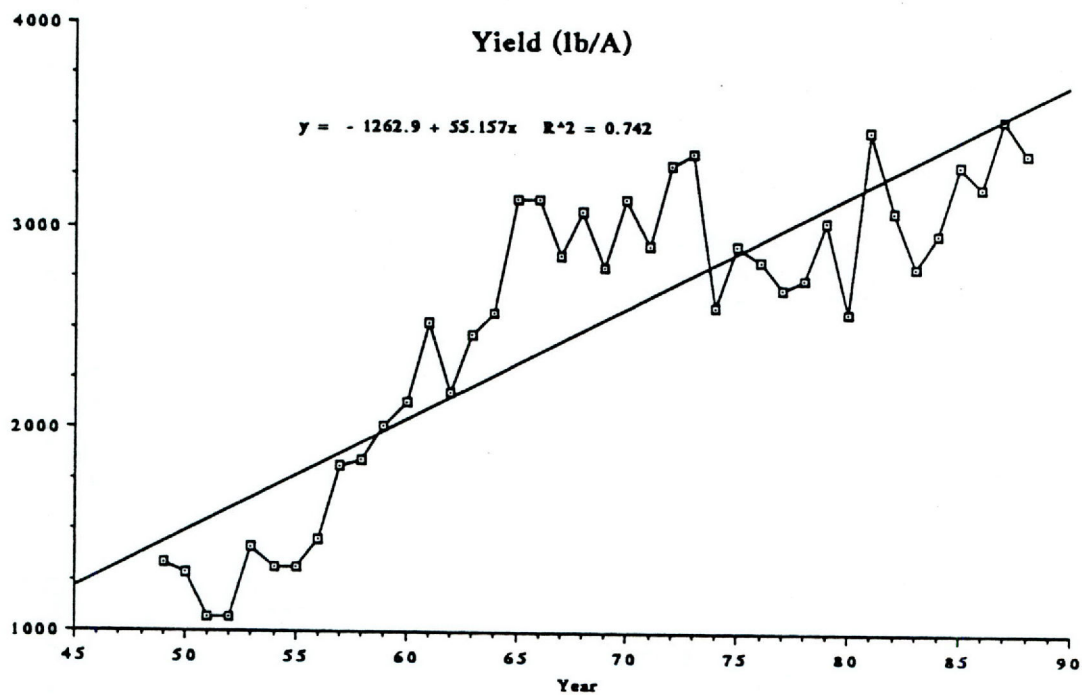


FIGURE 3. GRAIN SORGHUM PERFORMANCE TEST LOCATIONS IN TEXAS

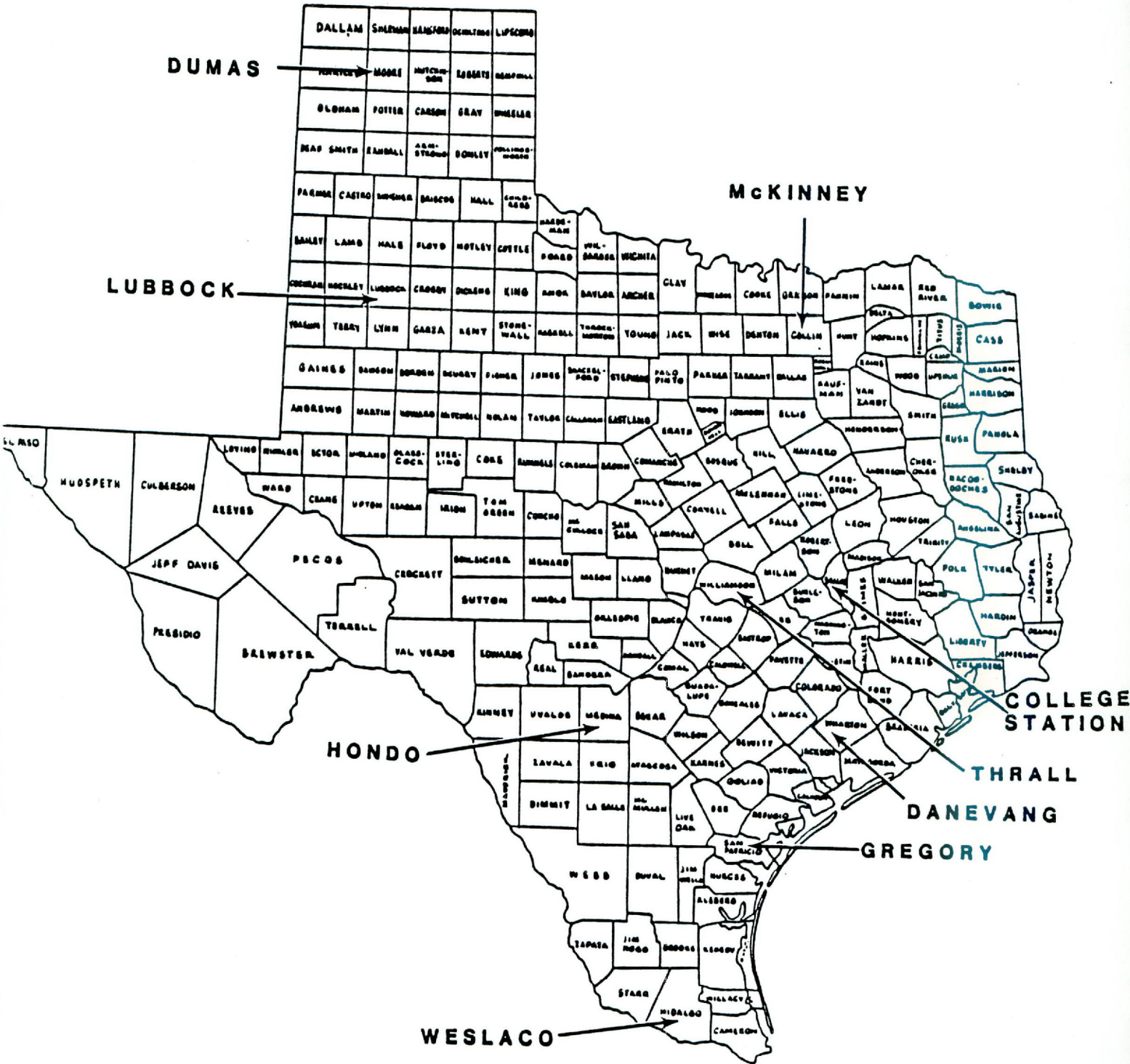


Table 1. Name, address, and hybrid designation of participants in the 1988 Texas Grain Sorghum Performance Test

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|--|------------------------|---------|---------|--------|----------|-----------------|--------|----------|---------|---------|--------|
| AgriPro Seeds P.O. Box 237 Tekamah, NE 68061 | AgriPro AP 965 | - | X | - | X | - | - | X | X | - | X |
| | AgriPro AP 985 | - | X | - | X | - | - | X | X | - | X |
| ASGROW SEED CO. Box 1945 Plainview, TX 79072 | XP 5017 X | X | X | X | X | X | X | X | X | X | X |
| | GS 712 | X | X | X | X | X | X | X | X | - | X |
| | XP 4147 X | - | - | - | - | - | X | X | X | X | X |
| | MUSTANG | - | - | - | - | - | - | X | - | - | - |
| | OSAGE | - | - | - | - | - | - | X | X | X | X |
| | TOPAZ | - | - | - | - | - | - | X | - | - | X |
| | XP 3137 X XP 2057 X | - - | - - | - - | - - | - - | - - | - - | - - | X - | X X |
| Big Crop Seed, Inc. P.O. Box 5866 Lubbock, TX 79417 | Maxima | X | X | - | X | X | - | - | - | - | X |
| | Grande | - | - | - | - | - | - | - | - | X | - |
| | Superior | - | - | - | - | - | - | - | - | - | X |
| BROWNING SEED, INC. P.O. Box 1836 Plainview, TX 79073-1836 | Challenger XX | - | - | X | - | - | X | X | - | - | - |
| Cargill Hybrid Seeds P.O. Box 5645 Minneapolis, MN 55440 | 6670 | X | X | X | X | X | X | X | X | X | X |
| | DR 1125 | X | X | X | - | - | - | - | X | X | X |
| | 5572 | X | X | X | X | X | X | X | - | - | - |
| | 4462 | X | X | X | X | X | X | X | - | - | - |
| | 630 | - | - | - | X | X | X | X | X | X | X |
| | 3385 | - | - | - | X | X | X | X | - | - | - |
| | 40 | - | - | - | - | - | - | - | X | X | X |
| | 70 | - | - | - | - | - | - | - | X | X | X |
| | 1022 | - | - | - | - | - | - | - | X | X | X |

Table 1. (Continued)

| Company & Address | Hybrid | College | | | | | | | | | | |
|---|---|----------|---------|-------|----------|---------|--------|----------|---------|---------|-------|---|
| | | Weslaco | Gregory | Hondo | Danevang | Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas | |
| CARMEX Route 3, Box 432A Harlingen, TX 78552 | 5560 | X | - | - | - | - | - | - | - | - | - | |
| | APOLO | X | - | - | - | - | - | - | - | - | - | |
| | JUPITER | X | - | - | - | - | - | - | - | - | - | |
| | PAGADOR | X | - | - | - | - | - | - | - | - | - | |
| | PAJARERO | X | - | - | - | - | - | - | - | - | - | |
| | Columbia Seeds 1607 57th Street Lubbock, TX 79412 | C.S. 737 | X | - | - | - | - | - | - | - | - | - |
| | C.S. 747 | X | - | - | - | - | - | - | - | - | - | |
| Conlee Seed Company P.O. Box 7247 Waco, TX 76714-7247 | Rustler | X | X | X | X | X | X | X | X | X | X | |
| | Wrangler II | X | X | X | X | X | X | X | X | X | X | |
| | Towhead | - | - | - | - | - | X | X | X | X | X | |
| | Pronto II | - | - | - | - | - | - | - | - | X | - | |
| | Rawhide | - | - | - | - | - | - | - | - | X | - | |
| | Exp. 473 | - | - | - | - | - | - | - | - | X | - | |
| DEKALB-PFIZER GEN. Route 2, Box 56 Lubbock, TX 79415 | DEKALB X-864-X | X | X | - | X | - | - | - | - | - | - | |
| | DEKALB DK-50 | - | X | - | X | - | - | - | - | - | - | |
| | DEKALB X-749-X | - | X | - | - | X | - | - | - | - | - | |
| | DEKALB DK-49 | - | - | X | - | - | - | - | - | - | - | |
| | DEKALB P-7728-X | - | - | - | - | - | X | - | - | - | - | |
| | DEKALB DK-37 | - | - | - | - | - | - | X | - | - | - | |
| | DEKALB X-832-X | - | - | - | - | - | - | X | - | - | - | |
| | DEKALB DK-66 | - | - | - | - | - | - | - | - | - | X | |
| | DyNA Seeds 6414 N. Sheridan Wichita, KS 67212 | DN 31 | - | X | - | - | - | X | X | - | - | X |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|--|----------------|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| EAST TEXAS SEED CO. Box 569 Tyler, TX 75710 | EAST TEXAS 610 | - | - | - | X | X | X | X | - | - | - |
| FRONTIER SEED CO. Box 177 Abernathy, TX 79311 | F-524 | X | - | - | - | X | X | - | - | - | - |
| Garrison Seed & Co., Inc. Drawer 2420 Hereford, TX 79045 | SG 932 | X | X | X | - | X | X | - | X | - | X |
| | SG 922 | X | X | X | - | X | X | - | X | X | X |
| | SG 688 | - | - | - | - | - | - | - | - | X | - |
| Garst Seed Company Eminence Route Garden City, KS 67846 | 5517 | - | - | - | - | - | - | - | - | X | - |
| | 5511 | - | - | - | - | - | - | - | - | X | - |
| GroAgri Seed Company P.O. Box 1656 Lubbock, TX 79408 | EX 3139 | X | X | - | - | - | X | - | - | - | - |
| | EX 3141 | X | X | - | X | - | X | X | - | - | X |
| | EX 3142 | X | - | - | - | - | X | - | - | - | - |
| | EX 3137 | - | - | - | - | - | - | X | - | - | - |
| | GSC 1153 | - | - | - | - | - | - | X | - | - | - |
| HyPerformer Seed Co. 5100 Poplar, Suite 3200 Memphis, TN 38137 | HSC Cherokee | X | X | X | - | X | X | - | - | - | - |
| | HSC Wings | X | X | X | - | X | X | - | - | - | - |
| Hoegemeyer Hybrids, Inc. Route 2 Hooper, NE 68031 | 688 | - | - | - | - | - | - | - | - | - | X |
| | 662 | - | - | - | - | - | - | - | - | - | X |
| | 671 | - | - | - | - | - | - | - | - | - | X |
| Douglass W. King Co. P.O. Box 200320 San Antonio, TX 78220 | DK 760 DR | X | X | X | X | - | X | - | - | - | - |
| | DK 775 | X | X | X | X | - | X | - | - | - | - |
| | DK 776 | X | X | X | X | - | X | - | - | - | - |
| | DK 801 X | X | X | X | X | - | X | - | - | - | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|--|----------------------|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| Northrup King Co. 6139 37th Lubbock, TX 79407 | S 9750 | X | X | X | X | X | X | - | X | - | X |
| | 2665 | X | X | - | X | X | X | X | X | - | X |
| | KS 780 | X | X | X | X | - | - | - | - | - | - |
| | KS 737 | - | - | - | - | - | X | X | X | - | X |
| | S 734GR | - | - | - | - | - | - | X | - | - | - |
| | 2656 | - | - | - | - | - | - | - | - | X | - |
| 2030 2660 2244 | | - | - | - | - | - | - | - | - | X | - |
| | | - | - | X | - | - | - | - | - | - | - |
| | | - | - | - | - | - | - | X | - | - | - |
| MASTER SEED CO. P.O. Box 615 Progreso, TX 78579 | M-911-R | X | - | - | - | - | - | - | - | - | - |
| | M-GOLD-R | X | - | - | - | - | - | - | - | - | - |
| | M-ELITE | X | - | - | - | - | - | - | - | - | - |
| | M-VICTORIA | X | - | - | - | - | - | - | - | - | - |
| M-929-R | | X | - | - | - | - | - | - | - | - | - |
| | | X | - | - | - | - | - | - | - | - | - |
| NC+ Hybrids Box 4408 3820 North 56 Street Lincoln, NE 68504 | NC+ 174 | X | - | - | X | - | - | - | - | - | - |
| | NC+ 572E | X | X | - | - | - | - | - | - | - | - |
| ORO Hybrids 624 27th Street Lubbock, TX 79404 | ORO G XTRA | X | X | X | X | X | X | - | X | X | X |
| | ORO BARON | X | X | X | X | X | X | X | X | X | X |
| | ORO EXP. 8801YX | - | - | - | - | - | - | X | - | X | - |
| | ORO EXP. 8704X | - | - | - | - | - | - | X | - | - | - |
| Pioneer Hi-Bred Intl., Inc. P.O. Box 788 Plainview, TX 79072 | Pioneer® hybrid 8358 | X | X | X | X | - | X | X | X | - | X |
| | Pioneer® hybrid 8260 | X | X | X | X | - | X | X | X | X | X |
| | Pioneer® hybrid 8230 | - | - | X | - | - | - | - | X | - | X |
| | Pioneer® hybrid 8452 | - | - | - | - | - | X | X | X | X | X |
| | Pioneer® hybrid 8493 | - | - | - | - | - | - | X | - | X | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|---|-----------------|---------|---------|-------|----------|-----------------|--------|----------|---------|---------|-------|
| SEEDTEC INTL. P.O. Box 2212 Hereford, TX 79045 | WAC D701G | X | X | X | X | X | X | X | X | X | X |
| | WAC 715DR | X | X | - | X | X | - | - | X | - | - |
| | WAC 686 | X | X | X | X | X | X | X | - | X | X |
| | X 62830 | X | X | X | X | X | X | X | X | X | X |
| | 3308 | X | X | X | X | X | X | X | X | X | X |
| | WAC 710DR | - | - | X | - | - | - | - | - | - | X |
| | ST-3258 | - | - | - | - | X | X | - | - | - | - |
| Summit Seed Company 622 28th St., Box 10121 Lubbock, TX 79408 | SS69 | X | X | - | X | X | X | X | - | - | X |
| | XS7711X | X | X | - | X | - | - | - | - | - | - |
| | XT6770X | X | X | - | - | - | - | - | - | - | - |
| | HT126DR | - | X | - | - | - | - | - | - | - | - |
| | XS8761EX T45 | - | - | - | - | X | X | - | X | X | X |
| | | - | - | - | - | - | - | X | - | X | - |
| TAYLOR-EVANS SEED P.O. Box 68 Tulia, TX 79088 | T-E Y-75 | X | X | X | X | X | X | - | X | - | X |
| | T-E DINERO | X | X | X | X | - | X | - | - | - | X |
| | T-E Y-77 | X | X | X | - | - | X | - | - | - | X |
| | T-E X-8646 | X | - | - | - | - | - | - | - | - | - |
| | T-E X-8762 | X | - | - | - | - | - | - | X | - | - |
| | T-E X-8767 | X | - | - | - | X | - | - | - | - | - |
| | T-E X-8769 | X | - | - | - | X | - | - | - | - | - |
| | T-E X-8765 | X | - | - | - | - | - | - | - | - | - |
| | T-E X-8726 | - | X | - | - | - | - | - | - | - | - |
| | T-E X-8727 | - | - | X | X | - | - | - | X | - | X |
| | T-E X-8768 | - | - | - | - | X | - | - | - | - | - |
| | T-E X-8766 | - | - | - | - | X | - | - | - | - | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|---|--|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| TAYLOR-EVANS SEED (Cont.) | T-E 42 | - | - | - | - | - | X | X | - | X | - |
| | T-E X-8761 | - | - | - | - | - | X | X | - | X | - |
| | T-E X-8764 | - | - | - | - | - | X | - | - | - | - |
| | T-E TUFF | - | - | - | - | - | - | X | - | X | - |
| | T-E 35 | - | - | - | - | - | - | X | - | X | - |
| | T-E Y-50 | - | - | - | - | - | - | X | - | - | - |
| | T-E Y-101-G | - | - | - | - | - | - | - | X | - | X |
| | T-E Y-60 | - | - | - | - | - | - | - | - | X | - |
| | T-E X-8682 | - | - | - | - | - | - | - | - | - | X |
| | Texas Seed Co., Inc. P.O. Box 588 Kenedy, TX 78119 | PS 477 | - | X | X | - | - | - | - | - | - |
| PS 466 | | - | X | X | - | - | - | - | - | - | - |
| Triumph Seed Co., Inc. P.O. Box 1050 Ralls, TX 79357 | Two 70-D | X | - | - | - | - | - | - | - | - | - |
| | Two 80-D | X | - | - | - | - | - | - | - | - | - |
| George Warner Seed Co. P.O. Box 1448 Hereford, TX 79045 | W-876 DR | X | X | - | X | - | - | - | - | - | - |
| | W-851 DR | X | X | - | X | - | - | - | - | - | - |
| | Wx 88117 | X | X | X | - | X | X | - | X | - | X |
| | Wx 88116 | X | X | - | X | - | - | - | X | - | X |
| | Wx 88105 | X | - | - | - | X | - | - | X | - | - |
| | W-844-E | - | X | X | X | X | X | X | X | X | X |
| | W-839 DR | - | X | - | X | - | - | - | - | - | - |
| | W-632-W | - | - | - | - | - | - | X | - | X | - |
| | Wx 88152 | - | - | - | - | - | - | X | - | X | - |
| | W-695-E | - | - | - | - | - | - | X | - | X | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|---|--------------------|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| Texas Agricultural Experiment Station (TAES) College Station, TX 77843 | RS610 | X | X | X | X | X | X | X | X | - | X |
| | ATx399 x RTx430 | X | X | X | X | X | X | X | X | - | X |
| | ATx378 x RTx430 | X | X | X | X | X | X | X | X | - | X |
| | ATx631 x RTx435 | X | X | X | X | X | X | X | X | X | X |
| | ATx631 x R.8505 | X | X | X | X | X | X | X | X | X | X |
| | ATx631 x 80C2241 | X | X | X | X | X | X | X | X | X | X |
| | ATx2752 x R.8503 | X | X | - | X | - | X | - | X | - | - |
| | ATx378 x RTx434 | X | - | X | - | X | - | - | X | - | X |
| | ATx378 x R.8504 | X | - | - | - | X | - | - | X | - | X |
| | ATx399 x R.8501 | - | X | - | - | X | X | X | - | X | - |
| | ATx626 x R.8504 | X | X | X | X | X | X | X | - | X | - |
| | ATx626 x RTx433 | X | X | X | X | X | X | X | X | X | X |
| | ATx626 x R.8503 | X | X | X | X | X | X | X | X | X | X |
| | ATx629 x R.8503 | X | X | X | X | X | X | X | X | X | X |
| | ATx629 x R.8604 | X | - | - | - | X | - | - | X | - | - |
| | ATx631 x R.8504 | X | X | X | X | X | X | X | X | - | X |
| | ATx631 x R.8511 | X | - | X | - | X | - | - | X | - | X |
| | A.Var x RTx435 | - | - | - | - | X | - | - | X | - | - |
| | A2Tx632 x RTx432 | X | X | X | X | X | X | X | X | X | X |
| | A28602 x SC103-12E | X | - | X | - | X | - | X | X | X | X |
| | A8618 x RTx2817 | X | X | - | - | X | X | - | X | - | - |
| | A8618 x R.8503 | - | X | - | X | X | X | X | - | - | - |
| | A8618 x R.8505 | X | - | - | - | X | - | - | X | - | X |
| A8618 x RTx432 | - | - | - | - | - | - | - | - | X | - | |
| A8618 x RTx433 | - | - | - | - | - | - | - | - | X | - | |
| ATx626 x R.8507 | - | - | - | - | - | - | - | - | X | - | |
| ATx399 x RTx432 | - | - | - | - | - | - | - | - | X | - | |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|----------------------|-------------------|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| TAES (cont) | ATx399 x Tx2536 | X | X | X | X | X | X | X | X | X | X |
| | ATx2752 x Tx430 | X | X | X | X | X | X | X | X | X | X |
| | A1 x Tx430 | X | X | X | X | X | X | X | X | X | X |
| | A4R x Tx430 | X | X | X | X | X | X | X | X | - | - |
| | A35 x Tx430 | - | X | - | - | X | X | X | X | X | - |
| | A1 x 77CS2 | - | - | X | - | X | - | - | - | - | - |
| | A1 x R3224 | - | - | - | X | - | X | - | X | X | - |
| | ATx630 x R3338wx | X | X | X | X | X | X | X | X | X | X |
| | A8201-2 x R6078 | X | X | - | X | - | - | X | X | - | - |
| | A1 x Tx435 | X | X | - | - | X | X | X | X | X | - |
| | A1 x Tx433 | X | - | - | X | X | - | - | X | - | - |
| | A1 x R.8507 | X | X | X | X | X | X | X | X | X | - |
| | A1 x R.8505 | X | - | - | - | X | - | - | X | - | - |
| | A1 x Tx432 | X | - | - | - | - | - | - | - | - | - |
| | A8201-2 x R4317 | - | X | - | - | X | - | - | X | - | - |
| | A1 x TAM428 | - | - | - | - | - | - | - | X | - | - |
| | A1 x R4317 | - | - | - | - | - | - | - | X | - | - |
| | A1 x Tx7078 | - | - | - | - | - | - | - | - | X | - |
| | AVG1 x Tx435 | - | - | - | - | X | - | - | - | - | - |
| | ATx631 x R3338wx | - | X | - | X | X | - | - | X | - | X |
| | A8201-2 x R3338wx | - | - | - | X | X | X | X | X | X | - |
| | AOK11 x R.8505 | - | - | - | - | X | - | - | - | - | - |
| | A8201-2 x Tx430 | - | - | - | - | - | - | - | X | X | - |
| | A1 x R2241 | - | X | X | X | X | X | X | - | - | X |
| | ATx399 x Tx2737 | - | - | - | - | - | - | - | X | X | - |
| | ATx3042 x Tx430 | - | - | - | - | - | - | - | - | X | - |
| | ATx3042 x Tx2737 | - | - | - | - | - | - | - | - | X | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|----------------------|--------------------|---------|---------|-------|----------|--------------------|--------|----------|---------|---------|-------|
| TAES (cont) | A1 x Tx434 | - | - | - | - | - | - | - | X | - | - |
| | A35 x Tx435 | - | - | - | - | - | - | - | - | X | - |
| | A1 x GR105-6 | - | X | X | - | - | - | - | X | - | - |
| | A1 x GR108-5 | - | - | X | - | - | - | - | X | - | - |
| | A35 x GR104-1 | - | - | X | - | - | X | - | - | X | - |
| | ATx378 x GR104-7 | - | X | - | - | X | - | - | - | - | - |
| | ATx378 x GR103-2 | - | - | - | - | X | - | X | - | - | - |
| | ATx399 x GR104-6 | X | - | - | X | - | - | X | - | - | - |
| | ATx399 x GR101-4 | - | - | - | - | - | - | X | - | - | - |
| | ATx623 x GR109-5 | X | X | - | X | - | - | - | - | - | - |
| | ATx623 x GR105-6 | - | X | - | - | - | - | - | X | - | - |
| | ATx623 x GR109-2 | - | - | - | X | - | - | - | - | - | - |
| | ATx623 x GR106-1 | - | - | - | X | - | - | - | - | - | - |
| | ATx623 x GR105-5 | - | - | - | - | X | - | - | - | - | - |
| | ATx2752 x GR105-7 | - | X | - | - | - | - | - | - | - | - |
| | ATx2752 x GR108-2 | - | X | - | - | - | - | - | X | - | - |
| | ATx2752 x GR103-2 | - | X | - | - | - | - | - | - | - | - |
| | ATx2752 x GR101-5 | X | - | - | X | X | X | X | - | - | - |
| | ATx2752 x GR105-8 | - | - | - | X | - | - | X | - | - | - |
| | ATx2752 x GR104-1 | X | - | - | - | X | - | X | X | - | X |
| | ATx2755 x MR102-4 | - | X | - | - | - | - | - | - | - | - |
| | ATx2755 x MR101-5 | - | X | - | - | - | X | - | - | - | - |
| | ATx2755 x MR102-3 | - | - | - | X | - | - | - | - | X | - |
| | ATx2755 x MR103-2B | - | - | - | - | X | - | - | - | - | - |
| | ATx2801 x MR103-2B | - | X | - | - | - | - | - | - | - | - |
| | ATx2801 x MR101-4 | X | - | - | X | - | - | - | - | X | - |
| | ATx2801 x MR102-2 | X | - | - | X | - | - | - | - | X | - |

Table 1. (Continued)

| Company & Address | Hybrid | Weslaco | Gregory | Hondo | Danevang | College Station | Thrall | McKinney | Lub "I" | Lub "D" | Dumas |
|-------------------|--------------------|---------|---------|-------|----------|-----------------|--------|----------|---------|---------|-------|
| TAES (cont) | ATx2801 x MR101-5 | - | - | - | - | X | - | - | - | - | - |
| | ATx2801 x MR103-2A | - | - | - | - | X | - | - | - | - | - |
| | ATx399 x GR104-8 | - | - | - | - | - | - | - | X | - | X |
| | ATx2752 x GR105-6 | - | - | - | - | - | - | - | X | - | X |
| | A1 x GR108-4 | - | - | - | - | - | - | - | X | - | - |
| | ATx378 x GR107-3 | - | - | - | - | - | - | - | X | - | - |
| | ATx399 x GR108-5 | - | - | - | - | - | - | - | X | - | - |
| | ATx623 x GR107-3 | - | - | - | - | - | - | - | X | - | - |
| | ATx623 x GR107-4 | - | - | - | - | - | - | - | X | - | - |
| | ATx623 x GR108-5 | - | - | - | - | - | - | - | X | - | - |
| | ATx2752 x GR107-4 | - | - | - | - | - | - | - | X | - | - |
| | A1 x GR108-3 | - | - | - | - | - | - | - | - | X | - |
| | A35 x GR108-2 | - | - | - | - | - | - | - | - | X | - |
| | ATx2755 x MR107-1 | - | - | - | - | - | - | - | - | X | - |
| | ATx2755 x MR103-4 | - | - | - | - | - | - | - | - | X | - |
| | ATx2801 x MR103-1B | - | - | - | - | - | - | - | - | X | - |
| | ATx2801 x MR102-3 | - | - | - | - | - | - | - | - | X | - |
| | ATx2755 x MR103-2A | X | - | - | - | - | - | - | - | - | - |
| | CHECK 1 | X | X | X | X | X | X | X | X | X | X |
| | CHECK 2 | X | X | X | X | X | X | X | X | X | X |
| | CHECK 3 | X | X | X | X | X | X | - | - | - | X |
| | CHECK 4 | - | X | - | - | - | - | - | - | - | - |

TABLE 2. AGRONOMIC AND TEST INFORMATION: WESLACO

| | |
|----------------------|---|
| TEST: | 1988 Irrigated Grain Sorghum Performance Test |
| LOCATION: | Texas A&M University Research and Extension Center, Weslaco, Texas |
| COOPERATORS: | John Drawe, Ray Castaneda, and Dennis Pietsch |
| SOIL TYPE: | Hidalgo clay loam |
| ROW WIDTH: | 27" |
| PREVIOUS CROP: | Grain sorghum |
| LAND PREPARATION: | Disked, moldboard, disked, bedded |
| DATE PLANTED: | 2-24-88 |
| PLOT LENGTH: | 30' |
| FERTILIZER: | 164-0-0; applied 275 lb/A liquid 32-0-0 on 2-23-88, and 230 lb/A liquid 32-0-0 on 3-28-88 |
| HERBICIDE: | Igran (terbutryn) 1 lb/A on 2-26 |
| INSECTICIDE: | 6.5 lb/A of Furadan (carbofuran) at planting |
| RAINFALL: | February = 0.01"; March = 1.06"; April = 0.87"; May = 0.56"; June = 2.36"; July = 0.20"; Total = 5.06" |
| IRRIGATIONS: | 4-18-88 and 5-13-88; approx. 4" each |
| DATE HARVESTED: | 7-5&6-88 by hand, threshed 7-7&8-88 |
| SIZE HARVESTED PLOT: | 1/1,000 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 107 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 3 |
| MEAN PLANT POP.: | Plots were thinned to approx. 5-6 plants/foot |
| TEST MEAN: | 7099 lb/A; yields corrected to 13% moisture |
| TEST C.V.: | 4.7 percent |

GENERAL INFORMATION: Outstanding yields were attained at this test site due to excellent agronomic and cultural practices. The test block was planted on 2-24 & 25 which is approximately 7 to 10 days earlier than over the past 5-year period.

Although the test block experienced a brief period of cold weather in mid-March, plant growth and development was not hampered. The 107 hybrids entered in the test had a mean yield of 7,099 lb/A which is 848 lb/A more than the past 5-year average of 6,251 lb/A at this location. Excellent plant stands were secured after thinning. Midge was not a problem probably due to the early planting date. The incidence of smut was minimal.

All replications were weighed, threshed, and moisture and bushel weight were determined at the test site.

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., O.05 **** |
|-------------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|------------------|---------------|--------------------------------|
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 74 | 50 | 7 | 0 | 0.0 | 0.0 | 60.2 | 16.7 | 79.9 | 8054 | A |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 75 | 53 | 4 | 0 | 0.0 | 0.0 | 58.7 | 16.7 | 76.2 | 7902 | A-B |
| Wx88117 | George Warner Seed | R | ML | 70 | 55 | 5 | 0 | 0.0 | 0.0 | 61.5 | 16.1 | 80.5 | 7765 | A-C |
| DK775 | Douglass W. King | R | M | 74 | 53 | 4 | 1 | 0.0 | 0.0 | 61.5 | 16.2 | 81.2 | 7738 | A-D |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 75 | 52 | 5 | 0 | 0.0 | 0.0 | 58.7 | 16.8 | 75.4 | 7695 | A-E |
| A1 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 74 | 55 | 5 | 0 | 0.0 | 0.0 | 60.6 | 16.3 | 77.1 | 7693 | A-E |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 75 | 57 | 5 | 0 | 0.0 | 0.0 | 60.2 | 16.3 | 78.6 | 7685 | A-E |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 70 | 50 | 5 | 0 | 0.0 | 0.0 | 61.9 | 16.6 | 80.7 | 7632 | A-F |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 75 | 55 | 6 | 0 | 0.7 | 0.0 | 59.5 | 17.3 | 78.6 | 7620 | A-F |
| GS712 | ASGROW SEED CO. | R | ML | 73 | 53 | 4 | 0 | 0.0 | 0.0 | 60.3 | 16.2 | 78.8 | 7597 | A-G |
| M-Victoria | MASTER SEED CO. | R | ML | 74 | 53 | 5 | 0 | 0.0 | 0.0 | 58.9 | 16.1 | 78.2 | 7567 | A-H |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 75 | 53 | 5 | 0 | 0.0 | 0.0 | 60.0 | 16.3 | 79.7 | 7558 | A-I |
| 5560 | CARMEX | R | M | 71 | 53 | 6 | 0 | 0.0 | 0.0 | 60.7 | 16.3 | 79.7 | 7496 | A-J |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 75 | 56 | 6 | 0 | 0.0 | 0.0 | 60.3 | 16.6 | 77.7 | 7470 | A-K |
| 5572 | Cargill Hybrid | R | ML | 71 | 52 | 6 | 0 | 0.0 | 0.0 | 59.4 | 16.5 | 76.8 | 7458 | A-K |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | W | ML | 77 | 56 | 4 | 0 | 1.0 | 0.0 | 60.3 | 15.9 | 78.5 | 7454 | A-K |
| M-929-R | MASTER SEED CO. | R | ME | 74 | 54 | 5 | 0 | 0.0 | 0.0 | 61.4 | 16.1 | 81.6 | 7452 | A-K |
| EX 3141 | GroAgri Seed Co. | R | M | 74 | 49 | 5 | 0 | 0.0 | 0.0 | 60.9 | 16.1 | 82.0 | 7447 | A-K |
| Rustler | Conlee Seed Company | R | ML | 73 | 53 | 5 | 0 | 0.0 | 0.0 | 60.5 | 16.2 | 78.8 | 7436 | A-K |
| Wx88116 | George Warner Seed | R | ML | 71 | 52 | 5 | 0 | 0.0 | 0.0 | 61.2 | 17.0 | 78.6 | 7435 | A-K |
| DK776 | Douglass W. King | R | M | 70 | 52 | 6 | 0 | 0.0 | 0.3 | 60.5 | 16.0 | 79.9 | 7422 | A-L |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 76 | 56 | 4 | 0 | 0.0 | 0.0 | 58.4 | 16.3 | 75.6 | 7418 | A-L |
| T-E Dinero | TAYLOR-EVANS SEED | R | M | 70 | 49 | 5 | 0 | 0.0 | 0.0 | 57.8 | 16.6 | 76.0 | 7413 | A-L |
| Maxima | Big Crop Seed Inc. | R | L | 73 | 53 | 4 | 0 | 0.0 | 0.0 | 60.1 | 16.3 | 79.4 | 7411 | A-L |
| DK801x | Douglass W. King | R | M | 71 | 52 | 4 | 0 | 0.0 | 0.0 | 61.0 | 16.2 | 79.0 | 7406 | A-L |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 74 | 53 | 5 | 0 | 0.0 | 0.0 | 60.6 | 16.0 | 78.6 | 7399 | A-M |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 70 | 50 | 6 | 0 | 0.0 | 0.0 | 60.2 | 16.1 | 77.7 | 7395 | A-M |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 76 | 58 | 5 | 1 | 0.0 | 0.0 | 60.3 | 15.9 | 79.5 | 7393 | A-M |
| T-E X-8646 | TAYLOR-EVANS SEED | R | ML | 73 | 57 | 5 | 0 | 0.0 | 0.0 | 59.7 | 16.3 | 81.2 | 7388 | A-M |
| WAC 715DR | SEEDTEC INT. | R | ML | 71 | 58 | 7 | 3 | 0.0 | 0.0 | 59.4 | 16.6 | 78.3 | 7375 | A-M |
| HSC Cherokee | HyPerformer Seed | R | M | 73 | 51 | 6 | 0 | 0.0 | 0.0 | 61.0 | 16.5 | 79.3 | 7363 | B-M |
| W-876DR | George Warner Seed | R | ML | 70 | 55 | 6 | 0 | 0.3 | 0.0 | 59.7 | 16.8 | 79.1 | 7344 | B-N |
| Wrangler II | Conlee Seed Company | M | ML | 74 | 56 | 6 | 0 | 0.3 | 0.0 | 59.9 | 16.4 | 78.6 | 7327 | B-N |
| F-524 | FRONTIER SEED CO. | R | ML | 74 | 52 | 6 | 0 | 0.0 | 0.0 | 60.4 | 17.0 | 77.3 | 7326 | B-N |
| W-851DR | George Warner Seed | R | ML | 73 | 51 | 5 | 0 | 0.0 | 0.0 | 60.5 | 16.1 | 78.6 | 7310 | B-O |
| ORD G XTRA | ORD Hybrids | R | ML | 74 | 52 | 5 | 0 | 0.0 | 0.0 | 60.7 | 16.0 | 79.1 | 7302 | B-O |
| 6670 | Cargill Hybrid | R | ML | 74 | 53 | 4 | 0 | 0.0 | 0.0 | 60.3 | 16.3 | 79.0 | 7291 | B-O |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | R | M | 76 | 62 | 8 | 3 | 0.0 | 0.0 | 58.2 | 16.6 | 77.6 | 7288 | B-P |
| NC+ 174 | NC+ Hybrids | R | M | 71 | 52 | 5 | 0 | 0.0 | 0.0 | 60.3 | 16.5 | 77.3 | 7279 | B-P |
| A1 x Tx432 | Tx. Agri. Exp. Sta. | W | ML | 75 | 59 | 4 | 0 | 0.0 | 0.0 | 61.4 | 16.1 | 80.8 | 7266 | B-P |
| HSC Wings | HyPerformer Seed | R | M | 71 | 51 | 5 | 2 | 0.0 | 0.0 | 60.3 | 16.4 | 79.5 | 7258 | B-P |

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., 0.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|------------------|---------------|--------------------------------|
| Two 70-D | Triumph Seed Co. | R | M | 71 | 51 | 7 | 0 | 0.0 | 0.0 | 57.7 | 16.2 | 76.4 | 7254 | B-P |
| ORD Baron | ORD Hybrids | R | ML | 74 | 51 | 6 | 0 | 0.0 | 0.0 | 60.7 | 16.0 | 78.3 | 7253 | B-P |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 74 | 64 | 7 | 1 | 0.0 | 0.0 | 59.2 | 16.7 | 79.8 | 7219 | B-Q |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | R | ML | 75 | 53 | 4 | 0 | 0.0 | 0.0 | 59.7 | 16.4 | 75.3 | 7209 | B-Q |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 73 | 52 | 5 | 0 | 0.0 | 0.0 | 60.5 | 16.3 | 78.8 | 7203 | C-Q |
| S9750 | Northrup King Co. | R | L | 70 | 53 | 6 | 0 | 0.0 | 0.0 | 60.3 | 16.6 | 78.2 | 7188 | C-Q |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | R | M | 75 | 53 | 5 | 0 | 0.0 | 0.0 | 60.0 | 15.9 | 78.1 | 7173 | C-Q |
| SS69 | Summit Seed Co. | R | ML | 73 | 53 | 6 | 0 | 0.0 | 0.0 | 60.5 | 16.0 | 78.8 | 7171 | C-Q |
| Wx88105 | George Warner Seed | R | ML | 74 | 52 | 6 | 0 | 0.0 | 0.0 | 58.3 | 16.8 | 74.9 | 7160 | C-R |
| WAC D701G | SEEDTEC INT. | R | ML | 74 | 52 | 5 | 0 | 0.0 | 0.0 | 60.5 | 17.0 | 78.6 | 7159 | C-R |
| SG 932 | Garrison Seed Co. | R | ML | 71 | 52 | 5 | 0 | 0.0 | 0.0 | 60.6 | 16.7 | 74.2 | 7156 | C-R |
| M-Elite | MASTER SEED CO. | R | ML | 74 | 53 | 6 | 0 | 0.0 | 0.0 | 60.6 | 16.5 | 79.8 | 7152 | C-R |
| Two 80-D | Triumph Seed Co. | R | ML | 71 | 51 | 4 | 0 | 0.0 | 0.0 | 60.1 | 16.5 | 79.1 | 7150 | C-R |
| PAGADOR | CARMEX | R | M | 73 | 59 | 6 | 1 | 0.0 | 0.3 | 59.3 | 16.3 | 79.1 | 7148 | C-R |
| DR1125 | Cargill Hybrid | R | ML | 73 | 50 | 5 | 0 | 0.0 | 0.0 | 57.8 | 16.4 | 76.3 | 7148 | C-R |
| NC+ 572E | NC+ Hybrids | R | M | 70 | 51 | 6 | 0 | 0.0 | 0.0 | 60.3 | 16.3 | 79.4 | 7147 | C-R |
| M-911-R | MASTER SEED CO. | R | ML | 74 | 57 | 5 | 1 | 0.0 | 0.0 | 59.3 | 16.1 | 78.0 | 7142 | C-S |
| C.S. 737 | Columbia Seeds | R | M | 71 | 49 | 5 | 0 | 0.0 | 0.0 | 57.0 | 16.7 | 74.5 | 7138 | C-S |
| XP5017x | ASGROW SEED CO. | R | ML | 75 | 55 | 6 | 0 | 0.0 | 0.0 | 60.4 | 16.7 | 76.0 | 7134 | C-S |
| KS 780 | Northrup King Co. | R | ML | 70 | 50 | 6 | 0 | 0.0 | 0.0 | 58.3 | 16.4 | 76.3 | 7132 | C-S |
| ATx623 x GR109-5 | Tx. Agri. Exp. Sta. | R | ML | 70 | 51 | 5 | 0 | 0.0 | 0.0 | 60.3 | 16.4 | 79.4 | 7127 | C-S |
| T-E Y-77 | TAYLOR-EVANS SEED | R | ML | 74 | 52 | 5 | 1 | 0.0 | 0.0 | 60.9 | 16.2 | 79.2 | 7124 | C-S |
| WAC 686 | SEEDTEC INT. | R | M | 73 | 52 | 6 | 0 | 0.0 | 0.0 | 60.8 | 16.8 | 78.0 | 7122 | C-S |
| DK760DR | Douglass W. King | R | M | 74 | 54 | 6 | 1 | 0.0 | 0.0 | 60.5 | 16.3 | 79.2 | 7120 | C-S |
| SG 922 | Garrison Seed Co. | R | ML | 71 | 50 | 6 | 0 | 0.0 | 0.0 | 57.7 | 16.5 | 75.4 | 7115 | C-S |
| 3308 | SEEDTEC INT. | R | M | 75 | 50 | 5 | 0 | 0.0 | 0.0 | 60.5 | 15.9 | 80.8 | 7102 | C-S |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 70 | 50 | 6 | 0 | 0.0 | 0.0 | 57.5 | 15.7 | 78.9 | 7101 | C-S |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | R | ML | 73 | 50 | 5 | 0 | 0.0 | 0.0 | 61.0 | 17.0 | 78.7 | 7077 | C-S |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 74 | 48 | 5 | 0 | 0.0 | 0.0 | 60.9 | 16.8 | 79.2 | 7061 | D-S |
| C.S. 747 | Columbia Seeds | R | ML | 74 | 58 | 6 | 2 | 0.0 | 0.0 | 59.3 | 16.3 | 77.9 | 7037 | E-T |
| M-GOLD-R | MASTER SEED CO. | R | ME | 71 | 51 | 6 | 0 | 0.0 | 0.0 | 58.6 | 16.6 | 76.0 | 7035 | E-T |
| XS7711X | Summit Seed Co. | R | M | 71 | 53 | 7 | 0 | 0.0 | 0.0 | 58.0 | 17.0 | 73.3 | 7001 | E-U |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 71 | 47 | 7 | 0 | 0.0 | 0.3 | 57.2 | 15.8 | 76.3 | 6985 | F-U |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 73 | 49 | 4 | 1 | 0.0 | 0.0 | 61.1 | 17.1 | 77.0 | 6941 | F-V |
| X62830 | SEEDTEC INT. | R | L | 78 | 58 | 4 | 0 | 1.7 | 0.0 | 60.0 | 16.1 | 76.7 | 6906 | G-W |
| JUPITER | CARMEX | R | ML | 75 | 63 | 9 | 7 | 0.0 | 0.0 | 60.4 | 15.8 | 80.7 | 6893 | H-W |
| 2665 | Northrup King Co. | R | ML | 73 | 49 | 5 | 0 | 0.0 | 0.0 | 60.2 | 16.8 | 78.9 | 6883 | H-W |
| APOLD | CARMEX | W | ML | 73 | 55 | 5 | 2 | 0.0 | 0.0 | 60.5 | 16.8 | 79.0 | 6880 | H-W |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 74 | 57 | 8 | 4 | 0.0 | 0.0 | 57.0 | 16.1 | 79.7 | 6868 | I-W |
| 4462 | Cargill Hybrid | R | M | 69 | 51 | 6 | 0 | 0.7 | 2.3 | 59.9 | 17.3 | 79.3 | 6863 | I-W |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | R | ML | 74 | 60 | 7 | 9 | 0.0 | 0.0 | 58.9 | 15.9 | 80.2 | 6843 | J-W |

Table 2A. GRAIN SORGHUM PERFORMANCE TEST; WESLACO, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., 0.05 **** |
|--------------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|------------------|---------------|--------------------------------|
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 71 | 58 | 7 | 1 | 0.0 | 0.0 | 60.8 | 15.7 | 81.6 | 6839 | J-W |
| ATx399 x GR104-6 | Tx. Agri. Exp. Sta. | M | ML | 73 | 50 | 5 | 0 | 0.0 | 1.0 | 60.9 | 16.5 | 77.7 | 6823 | J-W |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | M | ML | 74 | 56 | 8 | 0 | 0.0 | 0.0 | 61.9 | 16.2 | 80.7 | 6823 | J-W |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | R | ML | 76 | 54 | 6 | 0 | 0.0 | 0.0 | 61.2 | 16.5 | 79.0 | 6821 | J-W |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | R | ML | 73 | 56 | 8 | 0 | 0.0 | 0.0 | 61.2 | 16.3 | 79.8 | 6794 | K-W |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 74 | 48 | 7 | 0 | 0.7 | 0.0 | 60.0 | 17.2 | 76.4 | 6730 | L-X |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 70 | 58 | 6 | 3 | 0.0 | 0.0 | 59.6 | 16.3 | 74.4 | 6704 | M-X |
| T-E X-8769 | TAYLOR-EVANS SEED | R | L | 74 | 52 | 5 | 0 | 0.0 | 0.0 | 61.1 | 16.8 | 78.2 | 6651 | N-X |
| ATx2801 x MR101-4 | Tx. Agri. Exp. Sta. | R | ML | 75 | 55 | 4 | 0 | 0.0 | 0.0 | 61.5 | 15.3 | 78.5 | 6616 | O-X |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 74 | 62 | 7 | 2 | 0.0 | 0.0 | 60.8 | 16.2 | 80.7 | 6593 | P-X |
| XT6770X | Summit Seed Co. | R | M | 74 | 49 | 4 | 0 | 0.0 | 0.0 | 59.3 | 16.4 | 75.7 | 6528 | Q-Y |
| T-E X-8762 | TAYLOR-EVANS SEED | W | ML | 77 | 53 | 5 | 0 | 0.0 | 0.0 | 57.9 | 16.8 | 74.9 | 6524 | Q-Y |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | R | ML | 74 | 54 | 5 | 0 | 0.0 | 0.0 | 56.8 | 16.4 | 76.0 | 6471 | R-Y |
| ATx2755 x MR103-2A | Tx. Agri. Exp. Sta. | R | ML | 74 | 54 | 3 | 0 | 0.0 | 0.0 | 59.4 | 15.6 | 74.7 | 6466 | R-Y |
| PAJARERO | CARMEX | R | ML | 75 | 62 | 6 | 6 | 0.0 | 0.0 | 57.6 | 14.9 | 77.8 | 6450 | S-Y |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | R | M | 78 | 43 | 5 | 0 | 0.0 | 0.0 | 61.1 | 16.9 | 76.8 | 6450 | S-Y |
| EX 3139 | GroAgri Seed Co. | R | M | 73 | 49 | 7 | 1 | 0.0 | 0.0 | 57.0 | 16.7 | 73.5 | 6367 | T-Y |
| DEKALB X-864-X | DEKALB-PFIZER GEN. | R | ML | 78 | 55 | 4 | 0 | 1.7 | 0.0 | 58.3 | 16.6 | 72.6 | 6366 | T-Y |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 78 | 59 | 5 | 0 | 0.0 | 0.0 | 57.6 | 15.8 | 73.9 | 6351 | T-Y |
| T-E X-8765 | TAYLOR-EVANS SEED | R | ML | 74 | 51 | 6 | 0 | 0.0 | 0.0 | 59.2 | 16.2 | 74.4 | 6341 | U-Y |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 77 | 57 | 6 | 0 | 3.7 | 0.0 | 59.4 | 16.5 | 74.3 | 6334 | U-Y |
| ATx2801 x MR102-2 | Tx. Agri. Exp. Sta. | R | ML | 74 | 53 | 4 | 0 | 0.0 | 0.0 | 60.8 | 16.0 | 76.3 | 6264 | V-Y |
| EX 3142 | GroAgri Seed Co. | R | M | 67 | 40 | 7 | 0 | 0.0 | 0.0 | 58.5 | 15.6 | 77.6 | 6221 | W-Y |
| T-E X-8767 | TAYLOR-EVANS SEED | R | L | 77 | 58 | 7 | 1 | 0.0 | 0.0 | 59.4 | 16.5 | 76.9 | 6101 | X-Y |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 67 | 52 | 7 | 2 | 0.0 | 1.7 | 58.4 | 15.2 | 75.2 | 5905 | Y |

TEST MEAN= 7099 TEST C.V.= 4.7 LSD .05=542.2

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

* DeKalb DK-50, PS 466 and Pioneer hybrid 8452 were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

** Grain Color : R=Red W=White B=Brown M=Mixed

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|-------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | 1 | 8054 | 63 | 6455 | 1 | 7752 |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 2 | 7902 | 3 | 7236 | 21 | 7159 |
| Wx 88117 | George Warner Seed Company | 3 | 7765 | — | — | — | — |
| DK 775 | Douglass W. King Company | 4 | 7738 | — | — | — | — |
| CHECK 1 | Tx. Agri. Exp. Sta. | 5 | 7695 | 8 | 7109 | — | — |
| A1 x R.8505 | Tx. Agri. Exp. Sta. | 6 | 7693 | — | — | — | — |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 7 | 7685 | 39 | 6714 | 38 | 6987 |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | 8 | 7632 | — | — | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 9 | 7620 | — | — | — | — |
| GS 712 | ASGROW SEED COMPANY | 10 | 7597 | 54 | 6570 | 11 | 7298 |
| M-VICTORIA | MASTER SEED COMPANY | 11 | 7567 | 2 | 7275 | 65 | 6649 |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 12 | 7558 | 5 | 7142 | 46 | 6926 |
| 5560 | CARMEX | 13 | 7496 | 38 | 6722 | 15 | 7252 |
| ATX626 X R.8504 | Tx. Agri. Exp. Sta. | 14 | 7470 | — | — | — | — |
| 5572 | Cargill Hybrid Seeds | 15 | 7458 | 26 | 6874 | 14 | 7257 |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | 16 | 7454 | — | — | — | — |
| M-929-R | MASTER SEED COMPANY | 17 | 7452 | 56 | 6566 | 62 | 6708 |
| EX 3141 | GroAgri Seed Company | 18 | 7447 | — | — | — | — |
| Rustler | Conlee Seed Company, Inc. | 19 | 7436 | 25 | 6888 | 24 | 7108 |
| Wx 88116 | George Warner Seed Company | 20 | 7435 | — | — | — | — |
| DK 776 | Douglass W. King Company | 21 | 7422 | — | — | — | — |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 22 | 7418 | 68 | 6408 | — | — |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | 23 | 7413 | 29 | 6817 | 26 | 7096 |
| Maxima | Big Crop Seed, Inc. | 24 | 7411 | — | — | — | — |
| DK 801 X | Douglass W. King Company | 25 | 7406 | — | — | — | — |

Table 2B. Weslaco (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| CHECK 2 | Tx. Agri. Exp. Sta. | 26 | 7399 | 61 | 6466 | 43 | 6938 |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 27 | 7395 | 79 | 6224 | 89 | 6337 |
| ATx631 x 8OC2241 | Tx. Agri. Exp. Sta. | 28 | 7393 | — | — | — | — |
| T-E X-8646 | TAYLOR-EVANS SEED COMPANY | 29 | 7388 | — | — | — | — |
| WAC 715DR | SEEDTEC INTERNATIONAL | 30 | 7375 | — | — | — | — |
| HSC Cherokee | HyPerformer Seed Company | 31 | 7363 | 74 | 6344 | — | — |
| W-876 DR | George Warner Seed Company | 32 | 7344 | 47 | 6631 | 30 | 7027 |
| Wrangler II | Conlee Seed Company, Inc. | 33 | 7327 | — | — | — | — |
| F-524 | FRONTIER SEED COMPANY | 34 | 7326 | — | — | — | — |
| W-851 DR | George Warner Seed Company | 35 | 7310 | 51 | 6577 | — | — |
| ORO G XTRA | ORO Hybrids | 36 | 7302 | 50 | 6600 | 6 | 7413 |
| 6670 | Cargill Hybrid Seeds | 37 | 7291 | 58 | 6526 | 10 | 7303 |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | 38 | 7288 | — | — | — | — |
| NC+ 174 | NC+ Hybrids | 39 | 7279 | 23 | 6906 | — | — |
| A1 x Tx432 | Tx. Agri. Exp. Sta. | 40 | 7266 | — | — | — | — |
| HSC Wings | HyPerformer Seed Company | 41 | 7258 | 37 | 6744 | — | — |
| Two 70-D | Triumph Seed Company | 42 | 7254 | — | — | — | — |
| ORO BARON | ORO Hybrids | 43 | 7253 | 81 | 6203 | — | — |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 44 | 7219 | — | — | — | — |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 45 | 7209 | — | — | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 46 | 7203 | — | — | — | — |
| S 9750 | Northrup King Company | 47 | 7188 | — | — | — | — |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | 48 | 7173 | — | — | — | — |
| SS69 | Summit Seed Company | 49 | 7171 | 43 | 6672 | — | — |
| Wx 88105 | George Warner Seed Company | 50 | 7160 | — | — | — | — |

Table 2B. Weslaco (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| WAC D701G | SEEDTEC INTERNATIONAL | 51 | 7159 | 31 | 6803 | 7 | 7349 |
| SG 932 | Garrison Seed & Company | 52 | 7156 | 28 | 6851 | 37 | 7009 |
| M-ELITE | MASTER SEED COMPANY | 53 | 7152 | 7 | 7133 | 5 | 7515 |
| Two 80-D | Triumph Seed Company | 54 | 7150 | — | — | — | — |
| PAGADOR | CARMEX | 55 | 7148 | 42 | 6683 | 58 | 6774 |
| DR 1125 | Cargill Hybrid Seeds | 56 | 7148 | 72 | 6356 | 45 | 6929 |
| NC+ 572E | NC+ Hybrids | 57 | 7147 | — | — | — | — |
| M-911-R | MASTER SEED COMPANY | 58 | 7142 | 0 | 7043 | 61 | 6726 |
| C.S. 737 | Columbia Seeds | 59 | 7138 | — | — | 9 | 7332 |
| XP 5017 X | ASGROW SEED COMPANY | 60 | 7134 | — | — | — | — |
| KS 780 | Northrup King Company | 61 | 7132 | — | — | — | — |
| ATx623 x GR109-5 | Tx. Agri. Exp. Sta. | 62 | 7127 | — | — | — | — |
| T-E Y-77 | TAYLOR-EVANS SEED COMANY | 63 | 7124 | 27 | 6854 | — | — |
| WAC 686 | SEEDTEC INTERNATIONAL | 64 | 7122 | — | — | — | — |
| DK 760 DR | Douglass W. King Company | 65 | 7120 | — | — | — | — |
| SG 922 | Garrison Seed & Company | 66 | 7115 | 87 | 6131 | 34 | 7018 |
| 3308 | SEEDTEC INTERNATIONAL | 67 | 7102 | 95 | 5806 | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 68 | 7101 | 24 | 6904 | 35 | 7013 |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | 69 | 7077 | — | — | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International, Inc. | 70 | 7061 | — | — | — | — |
| C.S. 747 | Columbia Seeds | 71 | 7037 | — | — | — | — |
| M-GOLD-R | MASTER SEED COMPANY | 72 | 7035 | 53 | 6571 | 63 | 6703 |
| XS7711X | Summit Seed Company | 73 | 7001 | 69 | 6398 | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 74 | 6985 | 82 | 6202 | 59 | 6757 |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 75 | 6941 | — | — | — | — |

Table 2B. Weslaco (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| X 62830 | SEEDTEC INTERNATIONAL | 76 | 6906 | - | - | - | - |
| JUPITER | CARMEX | 77 | 6893 | - | - | - | - |
| 2665 | Northrup King Company | 78 | 6883 | 62 | 6459 | 12 | 7282 |
| APOLO | CARMEX | 79 | 6880 | - | - | - | - |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 80 | 6868 | - | - | - | - |
| 4462 | Cargill Hybrid Seeds | 81 | 6863 | - | - | - | - |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | 82 | 6843 | 35 | 6751 | - | - |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 83 | 6839 | - | - | - | - |
| ATx399 x GR104-6 | Tx. Agri. Exp. Sta. | 84 | 6823 | - | - | - | - |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | 85 | 6823 | - | - | - | - |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | 86 | 6821 | 89 | 6101 | 83 | 6447 |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | 87 | 6794 | - | - | - | - |
| CHECK 3 | Tx. Agri. Exp. Sta. | 88 | 6730 | - | - | - | - |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 89 | 6704 | 11 | 7011 | 55 | 6824 |
| T-E X-8769 | TAYLOR-EVANS SEED COMPANY | 90 | 6651 | - | - | - | - |
| ATx2801 x MR101-4 | Tx. Agri. Exp. Sta. | 91 | 6616 | - | - | - | - |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 92 | 6593 | 32 | 6791 | 101 | 6103 |
| XT6770X | Summit Seed Company | 93 | 6528 | 75 | 6317 | - | - |
| T-E X-8762 | TAYLOR-EVANS SEED COMPANY | 94 | 6524 | - | - | - | - |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | 95 | 6471 | 59 | 6510 | - | - |
| ATx2755 x MR103-2A | Tx. Agri. Exp. Sta. | 96 | 6466 | - | - | - | - |
| PAJARERO | CARMEX | 97 | 6450 | - | - | - | - |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | 98 | 6450 | - | - | - | - |
| EX 3139 | GroAgri Seed Company | 99 | 6367 | - | - | - | - |
| DEKALB X-864-X | DEKALB-PFIZER GENETICS | 100 | 6366 | - | - | - | - |

Table 2B. Weslaco (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|-------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 101 | 6351 | 6 | 7138 | 113 | 5435 |
| T-E X-8765 | TAYLOR-EVANS SEED COMPANY | 102 | 6341 | — | — | — | — |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 103 | 6334 | — | — | — | — |
| ATx2801 x MR102-2 | Tx. Agri. Exp. Sta. | 104 | 6264 | 90 | 6043 | — | — |
| EX 3142 | GroAgri Seed Company | 105 | 6221 | — | — | — | — |
| T-E X-8767 | TAYLOR-EVANS SEED COMPANY | 106 | 6101 | — | — | — | — |
| RS610 | Tx. Agri. Exp. Sta. | 107 | 5905 | 93 | 5889 | 112 | 5577 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | -- | -- | 1 | 7535 | 73 | 6592 |
| DEKALB DK-49 | DEKALB-PFIZER GENETICS | — | — | 12 | 6997 | 51 | 6861 |
| COKER 7737 | COKER'S PEDIGREED | — | — | 13 | 6987 | 48 | 6893 |
| ATx626 x RTx435 | Tx. Agri. Exp. Sta. | — | — | 14 | 6985 | 79 | 6510 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 17 | 6968 | 16 | 7242 |
| SEEDCO 705 | SEEDCO | — | — | 18 | 6957 | 50 | 6866 |
| ATx630 x 8OC2241 | Tx. Agri. Exp. Sta. | — | — | 36 | 6750 | 23 | 7112 |
| HT126DR | Summit Seed Company | — | — | 40 | 6712 | 53 | 6828 |
| A8201-2 x R3224 | Tx. Agri. Exp. Sta. | — | — | 45 | 6651 | 29 | 7029 |
| ATx630 x 8OC2241 | Tx. Agri. Exp. Sta. | — | — | 48 | 6624 | 31 | 7024 |
| 1330DR | HyPerformer Seed Company | — | — | 49 | 6603 | 56 | 6815 |
| ATX3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 52 | 6576 | 57 | 6786 |
| COKER 7675 | COKER'S PEDIGREED | — | — | 55 | 6568 | 42 | 694.4 |
| 1225DR | HyPerformer Seed Company | — | — | 64 | 6446 | 28 | 7073 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 65 | 6427 | 77 | 6561 |
| SEEDCO 701 | SEEDCO | — | — | 67 | 6412 | 13 | 7269 |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | — | — | 78 | 6246 | 66 | 6645 |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 80 | 6209 | 97 | 6197 |

Table 2B. Weslaco (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|---------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| M-IDEAL | MASTER SEED COMPANY | - | - | 85 | 6166 | 103 | 6071 |
| SEEDCO 710 | SEEDCO | - | - | 94 | 5873 | 72 | 6593 |
| A1 x R4317 | Tx. Agri. Exp. Sta. | - | - | 96 | 5802 | 100 | 6141 |
| A1 x R3224 | Tx. Agri. Exp. Sta. | - | - | 97 | 5708 | 109 | 5653 |
| Number Entries: | | 107 | | 102 | | 113 | |
| Test Mean Yield: | | 7099 | | 6528 | | 6721 | |

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

TABLE 3. AGRONOMIC AND TEST INFORMATION: GREGORY

| | |
|----------------------|---|
| TEST: | 1988 Dryland Grain Sorghum Performance Test |
| LOCATION: | John Hunt's Farm, San Patricio County, Gregory, Texas |
| COOPERATORS: | Kenneth Schaefer, Joseph Vasek , Wesley Schmidt, Dennis Pietsch, Randy Gaas, and Darwin Anderson |
| SOIL TYPE: | Victoria clay |
| ROW WIDTH: | 38" |
| PREVIOUS CROP: | Cotton |
| LAND PREPARATION: | Cut stalks, bedded (4 times) and ran middles prior to planting |
| DATE PLANTED: | 3-4-88 with cone planter |
| PLOT LENGTH: | 36' |
| FERTILIZER: | 200 lb/A of 20-15-0-2 pre-plant + 150 lb/A of liquid 32-0-0 banded on side of bed |
| HERBICIDE: | Broadcast 1 qt/A AAtrex (atrazine), pre-emerge |
| INSECTICIDE: | None |
| RAINFALL: | Rainfall was not recorded at the test site. Although rainfall was below normal for this area, it was still considered to be greater than surrounding areas. |
| IRRIGATIONS: | None |
| DATE HARVESTED: | 7-6&7-88 by plot combine |
| SIZE HARVESTED PLOT: | 1/191 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 96 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 2 |
| MEAN PLANT POP.: | Thinned to approximately 55,000-60,000 plants/A |
| TEST MEAN: | 3,988 lb/A |
| TEST C.V.: | 11.3 percent |

GENERAL INFORMATION: Weather conditions at this test site were not representative of the Coastal Bend Area, therefore caution should be used in interpreting these results. The test block received more rainfall than the surrounding areas, thus accounting for the good yields.

An optimum planting date was secured with excellent seedbed moisture. A period of cold weather in mid-March hampered plant growth, but warm temperatures and a timely rain followed, thus contributing to good plant growth and development. Rapid and continuous plant growth resulted from beneficial rains in May.

Potential yields were probably reduced due to a combination of greenbug damage and moisture stress. High populations of greenbugs resulted in premature plant death and lodging of some hybrids. A greenbug damage rating was taken by Dr. Roy Parker from all three replications and averaged. Results are included in the following table along with the rating key.

The test block was harvested by a plot combine, grain weighed and moisture determined. Bushel weights were not used due to a mechanical error.

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION, INCHES | % STAND | % LODGE | GREEN BUG RATING **** | MOIS- TURE % | GRAIN PER ACRE, lb/A | STAT. SIG., 0.05 ***** |
|-------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|-----------------------------------|------------|------------|--------------------------------|--------------------|-------------------------------|---------------------------------|
| NC+ 572E | NC+ Hybrids | R | M | 76 | 46 | 6 | 96.7 | 1 | 2.1 | 12.6 | 5032 | A |
| DK 775 | Douglass W. King | R | M | 76 | 48 | 6 | 98.3 | 3 | 2.3 | 12.6 | 4921 | A-B |
| KS 780 | Northrup King Co. | R | ML | 75 | 44 | 8 | 98.3 | 2 | 2.7 | 11.0 | 4862 | A-C |
| WAC 686 | SEEDTEC INT. | R | M | 77 | 46 | 7 | 96.7 | 6 | 3.3 | 13.2 | 4706 | A-D |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | M | ML | 79 | 45 | 3 | 95.0 | 4 | 2.2 | 13.0 | 4680 | A-E |
| 2665 | Northrup King Co. | R | ML | 77 | 44 | 6 | 95.0 | 2 | 2.4 | 11.9 | 4640 | A-F |
| S.G. 932 | Garrison Seed & Co. | R | ML | 78 | 49 | 6 | 96.7 | 4 | 2.6 | 12.4 | 4632 | A-G |
| 3308 | SEEDTEC INT. | R | M | 80 | 47 | 3 | 98.3 | 3 | 2.8 | 12.7 | 4597 | A-H |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 81 | 49 | 4 | 98.3 | 7 | 2.5 | 13.6 | 4593 | A-H |
| Check 4 | Tx. Agri. Exp. Sta. | R | | 76 | 48 | 7 | 98.3 | 5 | 3.8 | 12.6 | 4589 | A-H |
| HSC Cherokee | HyPerformer Seed | R | M | 77 | 46 | 7 | 98.3 | 8 | 2.8 | 11.5 | 4507 | A-I |
| ATx378 x GR104-7 | Tx. Agri. Exp. Sta. | R | ML | 76 | 50 | 9 | 91.7 | 9 | 2.6 | 12.4 | 4492 | A-I |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 76 | 47 | 7 | 96.7 | 2 | 3.3 | 12.7 | 4456 | A-J |
| PS 477 | Texas Seed Co. | R | ML | 77 | 48 | 5 | 100.0 | 8 | 2.1 | 13.1 | 4444 | A-J |
| DK 776 | Douglass W. King | R | M | 76 | 45 | 6 | 98.3 | 1 | 2.3 | 10.9 | 4437 | A-J |
| S9750 | Northrup King Co. | R | L | 76 | 48 | 7 | 100.0 | 8 | 2.8 | 11.2 | 4432 | A-J |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 80 | 50 | 5 | 96.7 | 1 | 3.0 | 12.2 | 4408 | A-J |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 77 | 45 | 6 | 96.7 | 7 | 2.3 | 10.2 | 4404 | A-J |
| ORD Baron | ORD Hybrids | R | ML | 80 | 46 | 6 | 88.3 | 8 | 4.5 | 11.9 | 4398 | A-J |
| XS 7711X | Summit Seed Co. | R | M | 76 | 49 | 9 | 95.0 | 6 | 3.3 | 11.2 | 4395 | A-J |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 76 | 50 | 7 | 96.7 | 9 | 3.5 | 13.0 | 4367 | A-K |
| W-851 DR | George Warner Seed | R | ML | 77 | 47 | 7 | 96.7 | 8 | 3.7 | 11.7 | 4365 | A-L |
| XP5017x | ASGROW SEED CO. | R | ML | 78 | 49 | 6 | 93.3 | 22 | 2.9 | 12.0 | 4356 | A-L |
| W-844-E | George Warner Seed | R | M | 76 | 46 | 6 | 95.0 | 4 | 2.7 | 11.7 | 4340 | A-L |
| PS 466 | Texas Seed Co. | R | ML | 77 | 47 | 7 | 96.7 | 9 | 2.8 | 12.5 | 4326 | A-L |
| Wx 88117 | George Warner Seed | R | ML | 77 | 51 | 7 | 93.3 | 10 | 3.5 | 11.8 | 4316 | A-L |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 80 | 49 | 6 | 93.3 | 23 | 3.0 | 12.5 | 4314 | A-L |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 78 | 48 | 8 | 88.3 | 0 | 3.6 | 13.5 | 4310 | A-L |
| DEKALB X-749-X | DEKALB-PFIZER GEN. | R | M | 81 | 48 | 4 | 100.0 | 12 | 2.5 | 13.2 | 4303 | A-L |
| DN 31 | DyNA Seeds | R | M | 76 | 46 | 8 | 98.3 | 6 | 3.6 | 11.0 | 4296 | A-M |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 81 | 52 | 3 | 90.0 | 5 | 3.5 | 13.6 | 4280 | A-M |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 76 | 45 | 10 | 98.3 | 2 | 2.8 | 12.1 | 4267 | A-M |
| Wrangler II | Conlee Seed Co. | M | ML | 78 | 49 | 5 | 91.7 | 12 | 2.5 | 11.7 | 4258 | A-M |
| ATx2752 x GR108-2 | Tx. Agri. Exp. Sta. | M | ML | 77 | 42 | 6 | 95.0 | 1 | 3.0 | 10.8 | 4251 | A-M |
| DR 1125 | Cargill Hybrid | R | ML | 77 | 46 | 8 | 96.7 | 4 | 2.8 | 12.3 | 4245 | A-M |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 78 | 44 | 8 | 96.7 | 2 | 4.0 | 11.6 | 4241 | A-M |
| DK 760 DR | Douglass W. King | R | M | 77 | 48 | 6 | 98.3 | 5 | 3.3 | 13.3 | 4228 | A-M |
| 5572 | Cargill Hybrid | R | ML | 76 | 47 | 8 | 95.0 | 7 | 3.8 | 10.7 | 4201 | A-N |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 79 | 49 | 4 | 88.3 | 13 | 2.5 | 12.6 | 4182 | A-N |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 79 | 51 | 7 | 95.0 | 19 | 3.8 | 13.1 | 4168 | A-N |

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION, INCHES | % STAND | % LODGE | GREEN BUG RATING **** | MOIS- TURE % | GRAIN PER ACRE, lb/A | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|-----------------------------------|------------|------------|--------------------------------|--------------------|-------------------------------|---------------------------------|
| ORD G XTRA | ORD Hybrids | R | ML | 77 | 47 | 6 | 93.3 | 8 | 3.6 | 11.7 | 4162 | A-N |
| DEKALB X-864-X | DEKALB-PFIZER GEN. | R | M | 82 | 48 | 1 | 95.0 | 3 | 2.6 | 11.7 | 4155 | A-N |
| Wx 88116 | George Warner Seed | R | ML | 78 | 48 | 6 | 98.3 | 19 | 3.0 | 12.3 | 4119 | A-O |
| S.G. 922 | Garrison Seed & Co. | R | ML | 75 | 45 | 8 | 96.7 | 6 | 2.6 | 11.0 | 4098 | A-O |
| Maxima | Big Crop Seed, Inc | R | L | 76 | 48 | 7 | 93.3 | 10 | 3.3 | 12.4 | 4092 | A-O |
| EX 3141 | GroAgri Seed Co. | R | M | 76 | 47 | 7 | 98.3 | 1 | 2.4 | 9.6 | 4078 | A-O |
| HT 126DR | Summit Seed Co. | R | M | 78 | 45 | 8 | 93.3 | 4 | 3.1 | 10.8 | 4021 | B-P |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 77 | 44 | 8 | 95.0 | 6 | 3.0 | 11.5 | 4015 | B-P |
| ATx623 x GR105-6 | Tx. Agri. Exp. Sta. | M | ML | 81 | 45 | 1 | 95.0 | 7 | 1.8 | 13.3 | 4015 | B-P |
| T-E Y-77 | TAYLOR-EVANS SEED | R | ML | 78 | 48 | 6 | 93.3 | 18 | 3.1 | 12.0 | 3998 | B-P |
| SS69 | Summit Seed Co. | R | ML | 76 | 47 | 7 | 95.0 | 6 | 3.6 | 12.9 | 3996 | B-P |
| DK 801x | Douglass W. King | R | M | 77 | 49 | 7 | 96.7 | 4 | 3.5 | 10.8 | 3995 | B-P |
| T-E X-8726 | TAYLOR-EVANS SEED | R | M | 76 | 44 | 9 | 96.7 | 9 | 4.3 | 11.8 | 3987 | B-P |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 77 | 46 | 6 | 96.7 | 6 | 3.1 | 11.2 | 3964 | B-P |
| WAC D701G | SEEDTEC INT. | R | ML | 76 | 48 | 7 | 96.7 | 10 | 3.7 | 12.5 | 3961 | B-P |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 79 | 52 | 7 | 96.7 | 6 | 3.7 | 11.8 | 3932 | C-P |
| W-876 DR | George Warner Seed | R | ML | 77 | 50 | 7 | 91.7 | 12 | 3.5 | 11.3 | 3928 | C-P |
| GS 712 | ASGROW SEED CO. | R | ML | 77 | 48 | 6 | 95.0 | 20 | 3.2 | 12.5 | 3900 | C-P |
| W-839 DR | George Warner Seed | R | M | 76 | 45 | 8 | 95.0 | 5 | 2.6 | 11.4 | 3894 | C-P |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 79 | 47 | 4 | 95.0 | 13 | 2.5 | 11.2 | 3873 | D-Q |
| T-E DINERO | TAYLOR-EVANS SEED | R | M | 76 | 44 | 9 | 96.7 | 19 | 3.6 | 10.7 | 3859 | D-Q |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 76 | 54 | 10 | 96.7 | 14 | 4.1 | 11.9 | 3857 | D-Q |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 75 | 50 | 9 | 98.3 | 1 | 3.3 | 11.2 | 3836 | D-Q |
| AB201-2 x R607B | Tx. Agri. Exp. Sta. | R | ML | 80 | 45 | 4 | 93.3 | 7 | 3.5 | 10.8 | 3836 | D-Q |
| XT6770X | Summit Seed Co. | R | M | 78 | 43 | 5 | 93.3 | 8 | 3.4 | 10.8 | 3824 | D-R |
| Rustler | Conlee Seed Co. | R | ML | 76 | 48 | 7 | 98.3 | 7 | 4.2 | 11.1 | 3814 | D-R |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 79 | 55 | 8 | 95.0 | 5 | 4.2 | 9.6 | 3795 | D-S |
| ATx623 x GR109-5 | Tx. Agri. Exp. Sta. | M | ML | 82 | 50 | 4 | 95.0 | 17 | 3.9 | 11.9 | 3789 | D-S |
| AgriPro AP985 | AgriPro Seeds | R | ML | 78 | 48 | 6 | 91.7 | 7 | 3.7 | 11.4 | 3766 | D-T |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 76 | 54 | 10 | 96.7 | 15 | 4.1 | 10.5 | 3752 | D-T |
| ATx2752 x GR105-7 | Tx. Agri. Exp. Sta. | R | ML | 81 | 45 | 6 | 93.3 | 1 | 2.4 | 11.1 | 3752 | D-T |
| Pioneer hybrid 8260 | Pioneer HI-Bred | R | L | 76 | 47 | 8 | 96.7 | 1 | 3.3 | 10.4 | 3734 | D-U |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 80 | 45 | 5 | 95.0 | 12 | 3.1 | 11.9 | 3730 | E-U |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 81 | 51 | 4 | 91.7 | 8 | 3.2 | 12.1 | 3724 | E-U |
| ATx2801 x MR103-2B | Tx. Agri. Exp. Sta. | M | ML | 83 | 47 | 1 | 91.7 | 13 | 3.5 | 9.8 | 3718 | E-U |
| HSC Wings | HyPerformer Seed | R | ML | 79 | 49 | 6 | 91.7 | 17 | 4.1 | 11.9 | 3684 | F-U |
| Pioneer hybrid 835B | Pioneer HI-Bred | R | ML | 78 | 44 | 7 | 96.7 | 2 | 3.7 | 11.0 | 3683 | F-U |
| ATx2752 x GR103-2 | Tx. Agri. Exp. Sta. | M | ML | 77 | 49 | 6 | 93.3 | 24 | 2.3 | 10.9 | 3665 | G-U |
| AgriPro AP965 | AgriPro Seeds | R | ML | 77 | 46 | 8 | 96.7 | 10 | 3.8 | 11.2 | 3629 | H-U |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 82 | 48 | 2 | 93.3 | 23 | 3.9 | 13.9 | 3628 | H-U |

Table 3A. GRAIN SORGHUM PERFORMANCE TEST; GREGORY, TEXAS 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION, INCHES | % STAND | % LODGE | GREEN BUG RATING **** | MOIS- TURE % | GRAIN PER ACRE, lb/A | STAT. SIG., 0.05 ***** |
|---------------------------------------|--|------------------|-------------------------------|-----------------------------|----------------------|-----------------------------------|------------|------------|--------------------------------|--------------------|-------------------------------|---------------------------------|
| ATx2752 x R.8503 6670 | Tx. Agri. Exp. Sta. Cargill Hybrid | R | ML | 76 | 47 | 8 | 90.0 | 19 | 2.7 | 11.2 | 3544 | I-V |
| A8201-2 x R4317 4462 | Tx. Agri. Exp. Sta. Cargill Hybrid | R | ML | 81 | 49 | 6 | 93.3 | 12 | 2.9 | 11.6 | 3488 | J-V |
| ATx2755 x MR101-5 | Tx. Agri. Exp. Sta. | R | M | 75 | 49 | 8 | 96.7 | 10 | 4.2 | 12.4 | 3404 | K-V |
| | | R | ML | 79 | 48 | 6 | 93.3 | 28 | 3.8 | 9.5 | 3394 | L-V |
| WAC 715DR | SEEDTEC INT. | R | ML | 77 | 54 | 9 | 96.7 | 40 | 4.3 | 12.2 | 3327 | M-V |
| A8618 x RTx2817 X62830 | Tx. Agri. Exp. Sta. SEEDTEC INT. | R | M | 81 | 39 | 2 | 96.7 | 3 | 3.2 | 10.5 | 3240 | N-V |
| | | R | L | 85 | 49 | 1 | 95.0 | 21 | 1.5 | 10.1 | 3168 | O-V |
| ATx630 x R3338wx ATx2755 x MR102-4 | Tx. Agri. Exp. Sta. Tx. Agri. Exp. Sta. | W | ML | 81 | 54 | 6 | 90.0 | 22 | 4.0 | 11.6 | 3069 | P-V |
| | | R | ML | 77 | 46 | 6 | 96.7 | 12 | 3.3 | 9.3 | 2935 | Q-V |
| ATx399 x R.8501 ATx631 x RTx435 | Tx. Agri. Exp. Sta. Tx. Agri. Exp. Sta. | R | M | 76 | 44 | 9 | 83.3 | 7 | 4.0 | 10.7 | 2876 | R-V |
| | | W | ML | 81 | 51 | 3 | 93.3 | 18 | 3.9 | 11.5 | 2857 | S-V |
| ATx631 x R.8504 ATx399 x Tx2536 | Tx. Agri. Exp. Sta. Tx. Agri. Exp. Sta. | W | ML | 85 | 47 | 2 | 81.7 | 17 | 3.4 | 13.9 | 2851 | S-V |
| | | R | ML | 76 | 44 | 9 | 90.0 | 17 | 4.6 | 11.0 | 2833 | T-V |
| DEKALB DK-50 | DEKALB-PFIZER GEN. | R | M | 78 | 48 | 4 | 95.0 | 42 | 5.0 | 10.1 | 2795 | U-V |
| EX 3139 | GroAgri Seed Co. | R | M | 77 | 45 | 9 | 93.3 | 23 | 3.3 | 9.8 | 2691 | V |

TEST MEAN= 3988 TEST C.V.=11.3 LSD .05=728.2

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

* Triumph Two 80-D, Pioneer Hybrid 8333, Funks G-522DR and Asgrow Topaz were entered as commercial check hybrids at our discretion. They are intended to be used for comparison purposes only.

** Grain Color : R=Red W=White B=Brown M=Mixed

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

**** Greenbug Damage Rating was taken by Dr. Roy Parker, Extension Entomologist, TAMU Research and Extension Center, Corpus Christi, Texas on June 9, 1988.

Rating Key :

1 = no damage 2 = lower leaves slightly damaged
3 = 1 functional leaf dead or dying 4 = 2 functional leaves dead or dying
5 = 3 functional leaves dead or dying 6 = 4 or more functional leaves dead or dying

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|-------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| NC+ 572E | NC+ Hybrids | 1 | 5032 | — | — | — | — |
| DK 775 | Douglass W. King Company | 2 | 4921 | — | — | — | — |
| KS 780 | Northrup King Company | 3 | 4862 | — | — | — | — |
| WAC 686 | SEEDTEC INTERNATIONAL | 4 | 4706 | 11 | 5557 | — | — |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | 5 | 4680 | — | — | — | — |
| 2665 | Northrup King Company | 6 | 4640 | — | — | — | — |
| SG 932 | Garrison Seed & Company | 7 | 4632 | 22 | 5421 | 12 | 4431 |
| 3308 | SEEDTEC INTERNATIONAL | 8 | 4597 | 63 | 4885 | — | — |
| A1 x R2241 | Tx. Agri. Exp. Sta. | 9 | 4593 | — | — | — | — |
| CHECK 4 | Tx. Agri. Exp. Sta. | 10 | 4589 | — | — | — | — |
| HSC Cherokee | HyPerformer Seed Company | 11 | 4507 | 31 | 5313 | — | — |
| ATx378 x GR104-7 | Tx. Agri. Exp. Sta. | 12 | 4492 | — | — | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 13 | 4456 | 40 | 5171 | 66 | 3917 |
| PS 477 | Texas Seed Company | 14 | 4444 | — | — | — | — |
| DK 776 | Douglass W. King Company | 15 | 4437 | — | — | — | — |
| S 9750 | Northrup King Company | 16 | 4432 | — | — | — | — |
| ATx631 x R3338 wx | Tx. Agri. Exp. Sta. | 17 | 4408 | — | — | — | — |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 18 | 4404 | 4 | 4486 | 50 | 4032 |
| ORO BARON | ORO Hybrids | 19 | 4398 | 7 | 5568 | — | — |
| XS7711X | Summit Seed Company | 20 | 4395 | 8 | 5568 | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 21 | 4367 | 10 | 5561 | — | — |
| W-851 DR | George Warner Seed Company | 22 | 4365 | — | — | — | — |
| XP 5017 X | ASGROW SEED COMPANY | 23 | 4356 | — | — | — | — |
| W-844-E | George Warner Seed Company | 24 | 4340 | 23 | 5421 | — | — |
| PS 466 | Texas Seed Company, Inc. | 25 | 4326 | 14 | 5526 | 56 | 3993 |

Table 3B. Gregory (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|-------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| Wx 88117 | George Warner Seed Company | 26 | 4316 | - | - | - | - |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 27 | 4314 | 38 | 5182 | 11 | 4448 |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | 28 | 4310 | 55 | 5018 | 39 | 4092 |
| DEKALB X-749-X | DEKALB-PFIZER GENETICS | 29 | 4303 | 2 | 5711 | - | - |
| DN 31 | DyNA Seeds | 30 | 4296 | - | - | - | - |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 31 | 4280 | 68 | 4801 | 46 | 4047 |
| CHECK 1 | Tx. Agri. Exp. Sta. | 32 | 4267 | - | - | - | - |
| Wrangler II | Conlee Seed Company, Inc. | 33 | 4258 | - | - | - | - |
| ATx2752 x GR108-2 | Tx. Agri. Exp. Sta. | 34 | 4251 | - | - | - | - |
| DR 1125 | Cargill Hybrid Seeds | 35 | 4245 | 48 | 5100 | 69 | 3886 |
| A4R x Tx 430 | Tx. Agri. Exp. Sta. | 36 | 4241 | 42 | 5164 | 6 | 4539 |
| DK 760 DR | Douglass W. King. Co. | 37 | 4228 | - | - | - | - |
| 5572 | Cargill Hybrid Seeds | 38 | 4201 | 26 | 5390 | 21 | 4272 |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 39 | 4182 | 16 | 5511 | 5 | 4556 |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | 40 | 4168 | - | - | - | - |
| ORO G XTRA | ORO Hybrids | 41 | 4162 | 25 | 5391 | 30 | 4150 |
| DEKALB-X-864-X | DEKALB-PFIZER GENETICS | 42 | 4155 | - | - | - | - |
| Wx 88116 | George Warner Seed Company | 43 | 4119 | - | - | - | - |
| SG 922 | Garrison Seed & Company | 44 | 4098 | 59 | 4953 | 57 | 3979 |
| Maxima | Big Crop Seed, Inc. | 45 | 4092 | - | - | - | - |
| EX 3141 | GroAgri Seed Company | 46 | 4078 | - | - | - | - |
| HT126DR | Summit Seed Company | 47 | 4021 | 57 | 4992 | 68 | 3901 |
| CHECK 3 | Tx. Agri. Exp. Sta. | 48 | 4015 | - | - | - | - |
| ATx623 x GR105-6 | Tx. Agri. Exp. Sta. | 49 | 4015 | - | - | - | - |
| Y-E Y-77 | TAYLOR-EVANS SEED COMPANY | 50 | 3998 | 30 | 5319 | - | - |

Table 3B. Gregory (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| SS69 | Summit Seed Company | 51 | 3996 | 20 | 5438 | — | — |
| DK 801X | Douglass W. King Company | 52 | 3995 | — | — | — | — |
| T-E X-8726 | TAYLOR-EVANS SEED COMPANY | 53 | 3987 | — | — | — | — |
| Check 2 | Tx. Agri. Exp. Sta. | 54 | 3964 | 33 | 5303 | 31 | 4149 |
| WAC D701G | SEEDTEC INTERNATIONAL | 55 | 3961 | 5 | 5578 | 4 | 4583 |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 56 | 3932 | 45 | 5131 | — | — |
| W-876 DR | George Warner Seed Company | 57 | 3928 | 24 | 5406 | 2 | 4611 |
| GS 712 | ASGROW SEED COMPANY | 58 | 3900 | 17 | 5455 | 22 | 4270 |
| W-839 DR | George Warner Seed Company | 59 | 3894 | — | — | — | — |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 60 | 3873 | — | — | — | — |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | 61 | 3859 | 37 | 5220 | 70 | 3880 |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 62 | 3857 | 18 | 5449 | 16 | 4369 |
| RS610 | Tx. Agri. Exp. Sta. | 63 | 3836 | 83 | 3805 | 94 | 3483 |
| A8201-1 x R6078 | Tx. Agri. Exp. Sta. | 64 | 3836 | 52 | 5039 | — | — |
| XT6770X | Summit Seed Company | 65 | 3824 | 61 | 4925 | — | — |
| Rustler | Conlee Seed Company, Inc. | 66 | 3814 | 6 | 5576 | — | — |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 67 | 3795 | 75 | 4601 | 47 | 4046 |
| ATx623 x GR109-5 | Tx. Agri. Exp. Sta. | 68 | 3789 | — | — | — | — |
| AgriPro AP985 | AgriPro Seeds | 69 | 3766 | — | — | — | — |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 70 | 3752 | — | — | — | — |
| ATx2752 x GR105-7 | Tx. Agri. Exp. Sta. | 71 | 3752 | — | — | — | — |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 72 | 3734 | — | — | — | — |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | 73 | 3730 | — | — | — | — |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | 74 | 3724 | — | — | — | — |
| ATx2801 x MR103-2B | Tx. Agri. Exp. Sta. | 75 | 3718 | — | — | — | — |

Table 3B. Gregory (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| HSC Wings | HyPerformer Seed Company | 76 | 3684 | 44 | 5149 | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International, Inc. | 77 | 3683 | — | — | — | — |
| ATx2752 x GR103-2 | Tx. Agri. Exp. Sta. | 78 | 3665 | — | — | — | — |
| AgriPro AP965 | AgriPro Seeds | 79 | 3629 | — | — | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 80 | 3628 | — | — | — | — |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | 81 | 3544 | — | — | — | — |
| 6670 | Cargill Hybrid Seeds | 82 | 3510 | 1 | 5760 | 10 | 4490 |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | 83 | 3488 | 28 | 5364 | 37 | 4104 |
| 4462 | Cargill Hybrid Seeds | 84 | 3404 | 50 | 5074 | 75 | 3825 |
| ATx2755 x MR101-5 | Tx. Agri. Exp. Sta. | 85 | 3394 | — | — | — | — |
| WAC 715DR | SEEDTEC INTERNATIONAL | 86 | 3327 | — | — | — | — |
| A8618 X RTX2817 | Tx. Agri. Exp. Sta. | 87 | 3240 | — | — | — | — |
| X 62830 | SEEDTEC INTERNATIONAL | 88 | 3168 | — | — | — | — |
| ATX630 x R3338wx | Tx. Agri. Exp. Sta. | 89 | 3069 | 79 | 4354 | 41 | 4074 |
| ATx2755 x MR102-4 | Tx. Agri. Exp. Sta. | 90 | 2935 | — | — | — | — |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | 91 | 2876 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 92 | 2857 | 78 | 4431 | 48 | 4043 |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 93 | 2851 | — | — | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 94 | 2833 | 49 | 5077 | 73 | 3858 |
| DEKALB DK50 | DEKALB-PFIZER GENETICS | 95 | 2795 | 27 | 5366 | 7 | 4530 |
| EX 3139 | GroAgri Seed Company | 96 | 2691 | — | — | — | — |
| 1330 DR | HyPerformer Seed Company | — | — | 9 | 5562 | 17 | 4367 |
| COKER 7737 | COKER'S PEDIGREED | — | — | 19 | 5442 | 32 | 4146 |
| 1225 DR | HyPerformer Seed Company | — | — | 34 | 5253 | 60 | 3962 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 35 | 5247 | 67 | 3912 |

Table 3B. Gregory (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| SEEDCO 710 | SEEDCO | — | — | 36 | 5222 | 55 | 4001 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 43 | 5157 | 25 | 4206 |
| DEKALB DK-49 | DEKALB-PFIZER GENETICS | — | — | 47 | 5110 | 8 | 4501 |
| ATx630 x 8OC2241 | Tx. Agri. Exp. Sta. | — | — | 53 | 5032 | 1 | 4657 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 54 | 5025 | 29 | 4170 |
| A1 x R3224 | Tx. Agri. Exp. Sta. | — | — | 62 | 4915 | 87 | 3634 |
| COKER 7675 | COKER'S PEDIGREED | — | — | 67 | 4820 | 26 | 4199 |
| A1 x R4317 | Tx. Agri. Exp. Sta. | — | — | 72 | 4730 | 52 | 4023 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 76 | 4539 | 51 | 4026 |
| Number Entries: | | 96 | | 84 | | 98 | |
| Test Mean Yield: | | | 398.8 | | 509.3 | | 403.3 |

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

TABLE 4. AGRONOMIC AND TEST INFORMATION: HONDO

| | |
|----------------------|---|
| TEST: | 1988 Irrigated Grain Sorghum Performance Test |
| LOCATION: | Vandenburg Farms; Wayne and Pat Stein, Hondo, Texas |
| COOPERATORS: | Wayne Scholtz, Bobby Ainsley, Dennis Pietsch, and Cloyce Coffman |
| SOIL TYPE: | Knippa clay |
| ROW WIDTH: | 38" |
| PREVIOUS CROP: | Corn |
| LAND PREPARATION: | Disked twice, chiseled, and bedded |
| DATE PLANTED: | 3-11-88, by hand using JD80 Planter |
| PLOT LENGTH: | 30' |
| FERTILIZER: | 102-50-0; 200 lb/A of 10-25-0 at bedding; 100 lb/A of 82-0-0 sidedress |
| HERBICIDE: | 1 qt/A of AAtrex (atrazine) when sorghum was 5-6" tall |
| INSECTICIDE: | None |
| RAINFALL: | February = 2.0"; March = 0.00"; April = 0.00"; May = 1.00"; June = 5.30"; July = 0.00"; Total = 8.30" |
| IRRIGATIONS: | 3; approx. 3.0" each |
| DATE HARVESTED: | 7-28&29-88, by hand |
| SIZE HARVESTED PLOT: | 1/750 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 68 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 3 |
| MEAN PLANT POP.: | Plants were thinned to approx. 5-6 plants/foot |
| TEST MEAN: | 5,073 lb/A; yields corrected to 13% moisture |
| TEST C.V.: | 7.7 percent |

GENERAL INFORMATION: Good yields were achieved at this test site although weather conditions probably reduced potential yields. An optimum planting date was secured and good seedbed moisture resulted in rapid seedling emergence. Outstanding plant stands were attained after the April 6 thinning date. The test block received no beneficial rainfall until June, but a timely irrigation schedule insured continuous plant growth and development. Hot and dry weather conditions persisted throughout the growing season, but the test did receive 5.3" of rainfall in June. Heavy rainfall, accompanied by hail and high winds on June 2 resulted in extensive leaf shredding and possibly reduced yields.

Greenbugs were observed in the test, but populations were reduced by the hail storm and did not warrant chemical control. Midge and bird damage was minimal. Lodging was observed in some hybrids probably from the high winds encountered from the June 2 storm.

Table 4A. GRAIN SORGHUM PERFORMANCE TEST; HONDO, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT. IN. | HEAD EXS. IN. | LODGE % | SMUT PER- PLOT **** | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|--------------------|---------------------|------------|------------------------------|---------------------|----------------------|--------------------|------------------|---------------|---------------------------------|
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 86 | 48 | 7 | 0 | 0.0 | 0.0 | 59.5 | 13.3 | 77.1 | 5875 | A |
| WAC 686 | SEEDTEC INT. | R | L | 87 | 47 | 8 | 0 | 0.0 | 0.0 | 60.0 | 13.5 | 78.5 | 5640 | A-B |
| DK 776 | Douglass W. King | R | M | 88 | 46 | 6 | 0 | 0.0 | 0.0 | 59.9 | 13.5 | 77.1 | 5637 | A-B |
| PS 477 | Texas Seed Co. Inc. | R | ML | 87 | 50 | 6 | 0 | 0.0 | 0.0 | 60.5 | 14.1 | 78.7 | 5626 | A-C |
| 5572 | Cargill Hybrid | R | ML | 85 | 45 | 6 | 0 | 0.0 | 0.0 | 56.6 | 13.4 | 76.2 | 5624 | A-C |
| ORO Baron | ORO Hybrids | R | ML | 87 | 49 | 7 | 0 | 0.0 | 0.0 | 59.8 | 13.4 | 77.5 | 5619 | A-C |
| HSC Cherokee | HyPerformer Seed | R | M | 86 | 48 | 5 | 0 | 0.0 | 0.0 | 59.3 | 13.2 | 77.6 | 5605 | A-C |
| DK 775 | Douglass W. King | R | M | 88 | 51 | 4 | 0 | 0.3 | 0.0 | 60.4 | 13.9 | 78.2 | 5591 | A-C |
| Wx88117 | George Warner Seed | R | ML | 87 | 51 | 7 | 0 | 0.0 | 0.0 | 59.8 | 13.5 | 75.2 | 5519 | A-D |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | M | ML | 88 | 47 | 4 | 0 | 0.7 | 0.0 | 58.0 | 14.3 | 74.6 | 5516 | A-E |
| HSC Wings | HyPerformer Seed | R | ML | 87 | 49 | 5 | 2 | 0.3 | 0.0 | 58.6 | 13.9 | 77.5 | 5450 | A-F |
| W-844-E | George Warner Seed | R | M | 87 | 47 | 6 | 0 | 0.0 | 0.0 | 60.1 | 13.6 | 76.8 | 5442 | A-F |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 89 | 50 | 7 | 0 | 0.3 | 0.0 | 57.6 | 14.0 | 73.2 | 5405 | A-F |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 89 | 54 | 8 | 0 | 0.0 | 0.0 | 59.5 | 14.3 | 76.0 | 5394 | A-G |
| DR1125 | Cargill Hybrid | R | ML | 87 | 44 | 5 | 0 | 0.3 | 0.0 | 57.0 | 13.6 | 75.6 | 5370 | A-H |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 89 | 50 | 7 | 0 | 0.0 | 0.0 | 58.4 | 14.4 | 75.4 | 5361 | A-H |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 88 | 47 | 8 | 0 | 0.7 | 0.0 | 59.9 | 15.5 | 74.2 | 5359 | A-H |
| WAC D701G | SEEDTEC INT. | R | ML | 87 | 48 | 6 | 0 | 0.0 | 0.0 | 58.4 | 13.9 | 77.3 | 5354 | A-I |
| XP5017x | ASGROW SEED CO. | R | ML | 91 | 47 | 6 | 0 | 0.0 | 0.0 | 59.6 | 14.6 | 74.3 | 5350 | A-I |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | R | ML | 89 | 57 | 7 | 0 | 2.3 | 0.0 | 57.5 | 13.3 | 77.6 | 5349 | A-I |
| 6670 | Cargill Hybrid | R | ML | 86 | 47 | 4 | 0 | 0.7 | 0.0 | 57.9 | 13.9 | 78.3 | 5335 | A-I |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 87 | 44 | 7 | 0 | 0.7 | 0.0 | 59.3 | 13.8 | 81.6 | 5332 | A-I |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 87 | 45 | 6 | 0 | 2.7 | 0.0 | 60.1 | 13.6 | 77.9 | 5316 | A-I |
| DK 801X | Douglass W. King | R | M | 85 | 47 | 5 | 0 | 0.3 | 0.0 | 59.8 | 14.2 | 75.5 | 5308 | A-I |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 86 | 50 | 6 | 0 | 0.0 | 0.0 | 59.2 | 14.2 | 72.6 | 5249 | A-I |
| 3308 | SEEDTEC INT. | R | M | 88 | 48 | 6 | 0 | 0.0 | 0.0 | 59.5 | 13.4 | 78.1 | 5191 | A-J |
| 2660 | Northrup King Co. | R | ML | 87 | 47 | 7 | 0 | 0.0 | 0.0 | 57.4 | 13.9 | 75.9 | 5189 | A-J |
| S.G. 932 | Garrison Seed & Co. | R | ML | 87 | 47 | 6 | 0 | 0.0 | 0.0 | 58.5 | 13.9 | 77.4 | 5188 | A-J |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 86 | 52 | 7 | 0 | 1.3 | 0.0 | 58.5 | 14.0 | 77.9 | 5180 | A-J |
| A1 x GR108-5 | Tx. Agri. Exp. Sta. | M | ML | 89 | 52 | 6 | 0 | 0.3 | 0.0 | 59.8 | 14.3 | 74.2 | 5176 | A-J |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 87 | 51 | 7 | 0 | 0.7 | 0.0 | 58.6 | 14.4 | 77.2 | 5170 | A-J |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 86 | 47 | 5 | 0 | 0.7 | 0.0 | 58.3 | 13.9 | 76.2 | 5139 | A-J |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 85 | 53 | 10 | 0 | 0.0 | 0.0 | 58.9 | 13.1 | 80.2 | 5129 | A-J |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 86 | 45 | 6 | 0 | 0.7 | 0.0 | 55.8 | 13.7 | 75.5 | 5111 | A-J |
| T-E DINERO | TAYLOR-EVANS SEED | R | M | 85 | 44 | 5 | 0 | 0.0 | 0.0 | 56.4 | 13.4 | 75.6 | 5109 | A-J |
| X62830 | SEEDTEC INT. | R | L | 92 | 55 | 3 | 0 | 0.0 | 0.0 | 59.4 | 13.7 | 72.2 | 5081 | A-J |
| Wrangler II | Conlee Seed Co. | M | ML | 86 | 51 | 6 | 0 | 0.0 | 0.0 | 57.7 | 13.8 | 76.2 | 5062 | B-J |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 88 | 45 | 5 | 0 | 0.0 | 0.0 | 59.6 | 14.2 | 76.1 | 5057 | B-J |
| T-E Y-77 | TAYLOR-EVANS SEED | R | ML | 87 | 47 | 5 | 0 | 0.0 | 0.0 | 58.3 | 13.7 | 78.0 | 5051 | B-J |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 88 | 57 | 8 | 0 | 0.0 | 0.0 | 58.5 | 13.2 | 78.9 | 5032 | B-J |
| GS712 | ASGROW SEED CO. | R | ML | 86 | 47 | 6 | 2 | 0.0 | 0.0 | 57.8 | 13.5 | 76.3 | 5028 | B-J |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 88 | 55 | 8 | 3 | 0.3 | 0.0 | 58.2 | 14.3 | 76.7 | 5014 | B-J |

Table 4A. GRAIN SORGHUM PERFORMANCE TEST; HONDO, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | SMUT PER- PLOT **** | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|------------------------------|---------------------|----------------------|--------------------|------------------|---------------|---------------------------------|
| KS 780 | Northrup King Co. | R | ML | 86 | 43 | 6 | 0 | 0.0 | 0.0 | 56.3 | 13.6 | 76.4 | 5008 | B-J |
| DK 760DR | Douglass W. King | R | M | 87 | 49 | 5 | 0 | 0.3 | 0.0 | 58.8 | 13.9 | 76.0 | 5006 | B-J |
| Challenger XX | BROWNING SEED, INC. | R | ML | 85 | 47 | 5 | 0 | 0.0 | 0.0 | 58.5 | 13.8 | 77.5 | 4985 | B-J |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | W | ML | 91 | 56 | 6 | 0 | 0.7 | 0.0 | 58.7 | 14.4 | 76.0 | 4976 | B-J |
| Rustler | Conlee Seed Co. | R | ML | 88 | 48 | 5 | 0 | 0.0 | 0.0 | 58.3 | 14.2 | 76.1 | 4931 | B-J |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 88 | 46 | 5 | 0 | 0.0 | 0.0 | 59.2 | 14.3 | 72.5 | 4908 | B-J |
| WAC 710DR | SEEDTEC INT. | R | L | 86 | 45 | 7 | 0 | 0.0 | 0.0 | 57.4 | 13.6 | 74.5 | 4904 | B-J |
| S.G. 922 | Garrison Seed & Co. | R | ML | 85 | 42 | 6 | 0 | 0.0 | 0.0 | 56.9 | 13.7 | 75.4 | 4890 | B-J |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 86 | 44 | 6 | 0 | 0.7 | 0.0 | 55.9 | 13.3 | 74.8 | 4879 | B-K |
| S9750 | Northrup King Co. | R | L | 87 | 46 | 5 | 0 | 0.0 | 0.0 | 58.2 | 13.9 | 75.9 | 4862 | B-K |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 85 | 52 | 6 | 0 | 0.3 | 0.0 | 57.4 | 13.3 | 76.1 | 4840 | B-K |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 86 | 55 | 7 | 1 | 1.0 | 0.0 | 55.7 | 13.0 | 78.1 | 4835 | B-K |
| Pioneer hybrid 8230 | Pioneer Hi-Bred | W | L | 85 | 50 | 8 | 0 | 1.7 | 0.0 | 58.8 | 14.2 | 74.8 | 4832 | C-K |
| ORD G XTRA | ORD Hybrids | R | ML | 87 | 46 | 5 | 0 | 0.0 | 0.0 | 58.4 | 14.0 | 76.7 | 4830 | C-K |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 91 | 58 | 7 | 0 | 0.0 | 0.0 | 58.6 | 14.4 | 75.0 | 4763 | D-K |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 91 | 53 | 8 | 0 | 0.3 | 0.0 | 58.5 | 14.2 | 73.4 | 4713 | E-K |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 84 | 41 | 7 | 0 | 0.0 | 0.0 | 56.3 | 13.8 | 74.4 | 4666 | F-K |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 88 | 47 | 4 | 0 | 0.0 | 0.0 | 60.8 | 14.1 | 77.4 | 4594 | G-L |
| DEKALB DK-49 | DEKALB-PFIZER GEN. | R | ML | 86 | 49 | 6 | 18 | 0.0 | 0.0 | 57.0 | 13.9 | 75.3 | 4580 | H-L |
| PS 466 | Texas Seed Co. Inc. | R | ML | 87 | 49 | 5 | 0 | 0.0 | 0.0 | 58.3 | 14.1 | 77.8 | 4567 | H-L |
| T-E X-8727 | TAYLOR-EVANS SEED | R | M | 88 | 41 | 6 | 0 | 0.3 | 0.0 | 57.1 | 13.9 | 76.6 | 4553 | I-L |
| A1 x 77CS2 | Tx. Agri. Exp. Sta. | W | ML | 91 | 47 | 6 | 0 | 1.7 | 0.0 | 59.5 | 14.6 | 73.7 | 4407 | J-L |
| 4462 | Cargill Hybrid | R | M | 81 | 46 | 7 | 3 | 0.7 | 5.0 | 57.8 | 14.5 | 75.1 | 4402 | J-L |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 93 | 54 | 6 | 0 | 0.3 | 0.0 | 58.4 | 14.8 | 72.3 | 4112 | K-M |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 92 | 58 | 7 | 0 | 0.7 | 0.0 | 55.8 | 14.1 | 70.6 | 3865 | L-M |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 79 | 50 | 10 | 0 | 4.0 | 8.3 | 57.0 | 13.7 | 72.8 | 3539 | M |

TEST MEAN= 5073 TEST C.V.= 7.7 LSD .05=62⁸ 4

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

* Asgrow Topaz, DeKalb DK-50, and Funks G-522DR were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

** Grain Color : R=Red W=White B=Brown M=Mixed

*** Maturity classification for hybrids designated by the respective seed companies.

E=Early M=Medium ME=Medium Early ML=Medium Late L=Late

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|-----------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| T-E Y-75 | TAYLOR-EVANS SEED COMANY | 1 | 5875 | 8 | 5130 | 5 | 4495 |
| WAC 686 | SEEDTEC INTERNATIONAL | 2 | 5640 | 29 | 4760 | 10 | 4392 |
| DK 776 | Douglass W. King Company | 3 | 5637 | — | — | — | — |
| PS 477 | Texas Seed Company | 4 | 5626 | — | — | — | — |
| 5572 | Cargill Hybrid Seed | 5 | 5624 | 22 | 4854 | — | — |
| ORO BARON | ORO Hybrids | 6 | 5619 | 11 | 5110 | — | — |
| HSC Cherokee | HyPerformer Seed Company | 7 | 5605 | 17 | 4987 | — | — |
| DK 775 | Douglass W. King Company | 8 | 5591 | — | — | — | — |
| Wx 8817 | George Warner Seed Company | 9 | 5519 | — | — | — | — |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | 10 | 5516 | — | — | — | — |
| HSC Wings | HyPerformer Seed Company | 11 | 5450 | 9 | 5130 | — | — |
| W-844-E | George Warner Seed Company | 12 | 5442 | 7 | 5133 | — | — |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 13 | 5405 | 38 | 4561 | 3 | 4523 |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | 14 | 5394 | — | — | — | — |
| DR 1125 | Cargill Hybrid Seeds | 15 | 5370 | 28 | 4762 | — | — |
| A1 x R2241 | Tx. Agri. Exp. Sta. | 16 | 5361 | — | — | — | — |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | 17 | 5359 | — | — | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 18 | 5354 | 21 | 4864 | 46 | 3993 |
| XP 5017 X | ASGROW SEED COMPANY | 19 | 5350 | — | — | — | — |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | 20 | 5349 | 32 | 4687 | — | — |
| 6670 | Cargill Hybrid Seeds | 21 | 5335 | 16 | 5008 | — | — |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | 22 | 5332 | 5 | 5157 | — | — |
| CHECK 2 | Tx. Agri. Exp. Sta. | 23 | 5316 | 25 | 4780 | 31 | 4143 |
| DK 801 X | Douglass W. King Company | 24 | 5308 | — | — | — | — |
| CHECK 1 | Tx. Agri. Exp. Sta. | 25 | 5249 | 15 | 5024 | — | — |
| 3308 | SEEDTEC INTERNATIONAL | 26 | 5191 | 37 | 4585 | — | — |
| 2660 | Northrup King Company | 27 | 5189 | — | — | — | — |
| SG 932 | Garrison Seed & Company | 28 | 5188 | 30 | 4755 | 27 | 4168 |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 29 | 5180 | 48 | 4204 | 50 | 3876 |

Table 4B. Hondo (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A1 x GR108-5 | Tx. Agri. Exp. Sta. | 30 | 5176 | — | — | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 31 | 5170 | — | — | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 32 | 5139 | 2 | 5268 | — | — |
| A2Tx632 x Tx432 | Tx. Agri. Exp. Sta. | 33 | 5129 | — | — | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 34 | 5111 | 31 | 4751 | 28 | 4159 |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | 35 | 5109 | 3 | 5180 | 35 | 4091 |
| X 62830 | SEEDTEC INTERNATIONAL | 36 | 5081 | — | — | — | — |
| Wrangler II | Conlee Seed Company, Inc. | 37 | 5062 | — | — | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International, Inc | 38 | 5057 | — | — | — | — |
| T-E Y-77 | TAYLOR-EVANS SEED COMPANY | 39 | 5051 | — | — | — | — |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 40 | 5032 | 44 | 4333 | 54 | 3618 |
| GS 712 | ASGROW SEED COMPANY | 41 | 5028 | 10 | 5120 | 42 | 4027 |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 42 | 5014 | — | — | — | — |
| KS 780 | Northrup King Company | 43 | 5008 | — | — | — | — |
| DK 760 DR | Douglass W. King Company | 44 | 5006 | 18 | 4987 | 20 | 4253 |
| Challenger XX | BROWNING SEED, INC. | 45 | 4985 | — | — | — | — |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | 46 | 4976 | — | — | — | — |
| Rustler | Conlee Seed Company, Inc. | 47 | 4931 | 12 | 5088 | 43 | 4025 |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 48 | 4908 | — | — | — | — |
| WAC 715DR | SEEDTEC INTERNATIONAL | 49 | 4904 | 26 | 4778 | 11 | 4387 |
| SG 922 | Garrison Seed & Company | 50 | 4890 | 14 | 5034 | 36 | 4087 |
| CHECK 3 | Tx. Agri. Exp. Sta. | 51 | 4879 | — | — | — | — |
| S9750 | Northrup King Company | 52 | 4862 | — | — | — | — |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 53 | 4840 | 45 | 4323 | 37 | 4083 |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 54 | 4835 | 64 | 3423 | 53 | 3690 |
| Pioneer® hybrid 8230 | Pioneer Hi-Bred International, Inc. | 55 | 4832 | — | — | — | — |
| ORO G XTRA | ORO Hybrids | 56 | 4830 | 13 | 5057 | 18 | 4260 |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 57 | 4763 | 27 | 4772 | 26 | 4169 |

Table 4B. Hondo (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 58 | 4713 | — | — | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 59 | 4666 | 23 | 4785 | 52 | 3693 |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 60 | 4594 | — | — | — | — |
| DEKALB DK-49 | DEKALB-PFIZER GENETICS | 61 | 4580 | 4 | 5167 | 9 | 4396 |
| PS 466 | Texas Seed Company | 62 | 4567 | 1 | 5295 | 21 | 4225 |
| T-E X-8727 | TAYLOR-EVANS SEED COMPANY | 63 | 4553 | 61 | 3820 | — | — |
| A1 x 77CS2 | Tx. Agri. Exp. Sta. | 64 | 4407 | — | — | — | — |
| 4462 | Cargill Hybrid Seeds | 65 | 4402 | 51 | 4151 | — | — |
| ATx631 x 8OC2241 | Tx. Agri. Exp. Sta. | 66 | 4112 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 67 | 3865 | 40 | 4516 | 60 | 3039 |
| RS610 | Tx. Agri. Exp. Sta. | 68 | 3539 | 66 | 3057 | 63 | 2080 |
| 1225 DR | Summit Seed Company | — | — | 33 | 4685 | 48 | 3979 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 42 | 4476 | 1 | 4692 |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 46 | 4286 | 41 | 4063 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 49 | 4201 | 51 | 3775 |
| A1 x R3224 | Tx. Agri. Exp. Sta. | — | — | 53 | 4085 | 6 | 4434 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 56 | 3992 | 16 | 4333 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 60 | 3856 | 34 | 4096 |
| Number Entries: | | 68 | | 67 | | 63 | |
| Test Mean Yield: | | | 5073 | | 4510 | | 4027 |

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

TABLE 5. AGRONOMIC AND TEST INFORMATION: DANEVANG

| | |
|----------------------|---|
| TEST: | 1988 Dryland Grain Sorghum Performance Test |
| LOCATION: | Jimmy Barger Farm - Danevang, Texas |
| COOPERATORS: | Jimmy Barger, Dennis Pietsch, John Cosper, and Benard Mitchell |
| SOIL TYPE: | Lake Charles clay |
| ROW WIDTH: | 40" |
| PREVIOUS CROP: | Cotton |
| LAND PREPARATION: | Shredded stalks, disked, broadcast fertilizer, and bedded |
| DATE PLANTED: | 3-7-88, by hand |
| PLOT LENGTH: | 30' |
| FERTILIZER: | 140 lb/A of 18-46-0 in October '87 and 135 lb/A of anhydrous ammonia in December '87 |
| HERBICIDE: | 1 qt/A of AAtrex (atrazine) in Fall '87 and 1.25 qt/A of Lasso (alachlor) + AAtrex (atrazine) at planting |
| INSECTICIDE: | 5.5 lb/A Counter 15G (terbufos), modified furrow at planting |
| RAINFALL: | A total of 2.3" was recorded from March-June. Rainfall in July totaled 1.5" |
| IRRIGATIONS: | None |
| DATE HARVESTED: | 7-27-88, by hand |
| SIZE HARVESTED PLOT: | 1/500 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 81 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 2 |
| MEAN PLANT POP.: | Estimated to be between 50,000-80,000 plants/A |
| TEST MEAN: | 5,841 lb/A; yields corrected to 13% moisture |
| TEST C.V.: | 11.2 percent |

GENERAL INFORMATION: This test site is located in the southern portion of Wharton County, Upper Coast Region of Texas, and is a major grain sorghum production area. This was the first year a grain sorghum performance test was conducted by the Texas Agricultural Experiment Station in this area.

Outstanding yields were recorded at this site although weather conditions were not ideal during the early part of the growing season. After the test was planted, an extended period of cold and wet weather hampered seedling emergence. An emergence rating was taken from all 3 replications on 3-29 which took into account emergence and vigor. Although rainfall amounts were not large, timely rainfall in May and June enhanced plant growth and development. Additional rainfall between the flower-hard dough stage plus excellent subsoil moisture encouraged grain fill and optimum yields to be obtained.

Thirty-four hybrids in the test produced over 6,000 lb/A. The incidence of smut ranged from 0 to 24.3 plants per plot. Smut counts were taken from the harvest area of all plots and averaged.

Table 5A. GRAIN SORGHUM PERFORMANCE TEST;DANEVANG, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | GRN CLR 2 | MATU- RITY CLASS 3 | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | SMUT PER- PLOT 4 | EMER- GENGE RATING 5 | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., O.05 6 |
|---------------------|-----------------------------|-----------------|-----------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|-------------------------------|----------------------|--------------------|------------------|---------------|-----------------------------|
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 88 | 55 | 4 | 0 | 3.0 | 7.7 | 57.7 | 15.0 | 75.2 | 7095 | A |
| T-E Dinero | TAYLOR-EVANS SEED | R | M | 89 | 48 | 5 | 0 | 2.0 | 7.0 | 55.5 | 14.1 | 75.1 | 6970 | A-B |
| XS7711X | Summit Seed Co. | R | M | 91 | 51 | 4 | 0 | 4.0 | 7.7 | 53.7 | 14.1 | 72.3 | 6906 | A-B |
| W-876DR | George Warner Seed | R | ML | 92 | 50 | 4 | 0 | 1.3 | 6.0 | 58.1 | 15.1 | 75.4 | 6851 | A-C |
| Maxima | Big Crop Seed, Inc. | R | L | 92 | 48 | 3 | 0 | 2.3 | 5.7 | 57.4 | 14.6 | 72.2 | 6733 | A-D |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 92 | 51 | 3 | 0 | 2.0 | 4.7 | 57.9 | 15.0 | 73.2 | 6720 | A-E |
| XP5017x | ASGROW SEED CO. | R | ML | 95 | 56 | 5 | 0 | 0.0 | 5.0 | 59.3 | 15.2 | 68.9 | 6713 | A-E |
| WAC 715DR | SEEDTEC INT. | R | ML | 89 | 53 | 5 | 0 | 4.7 | 7.0 | 57.8 | 14.3 | 73.8 | 6702 | A-F |
| KS 780 | Northrup King Co. | R | ML | 90 | 47 | 4 | 0 | 3.7 | 7.7 | 54.9 | 14.3 | 70.7 | 6658 | A-G |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 95 | 47 | 3 | 0 | 0.5 | 4.5 | 56.3 | 14.7 | 73.6 | 6652 | A-G |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 90 | 46 | 4 | 0 | 0.7 | 6.0 | 55.5 | 13.8 | 72.3 | 6631 | A-G |
| SS69 | Summit Seed Co. | R | ML | 92 | 47 | 3 | 0 | 1.0 | 6.3 | 57.9 | 14.8 | 72.8 | 6622 | A-G |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | R | ML | 91 | 53 | 6 | 0 | 1.3 | 5.7 | 61.2 | 15.3 | 77.2 | 6600 | A-H |
| GS 712 | ASGROW SEED CO. | R | ML | 91 | 47 | 3 | 0 | 3.3 | 8.0 | 58.1 | 14.8 | 73.4 | 6597 | A-H |
| W-851DR | George Warner Seed | R | ML | 91 | 50 | 4 | 0 | 2.3 | 7.0 | 57.8 | 14.9 | 72.4 | 6464 | A-I |
| 4462 | Cargill Hybrid | R | M | 86 | 47 | 4 | 0 | 2.0 | 8.3 | 56.8 | 15.0 | 74.0 | 6451 | A-J |
| 5572 | Cargill Hybrid | R | ML | 93 | 47 | 4 | 0 | 0.7 | 5.7 | 57.4 | 14.5 | 72.0 | 6431 | A-J |
| Rustler | Conlee Seed Co. | R | ML | 91 | 47 | 2 | 0 | 0.7 | 6.3 | 57.7 | 14.6 | 72.4 | 6427 | A-J |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 91 | 47 | 5 | 0 | 4.0 | 6.7 | 59.2 | 14.5 | 75.8 | 6424 | A-J |
| DK775 | Douglass W. King | R | M | 94 | 50 | 0 | 0 | 1.7 | 6.0 | 60.0 | 15.2 | 72.4 | 6370 | A-K |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 93 | 47 | 3 | 0 | 0.0 | 6.0 | 59.9 | 14.6 | 71.8 | 6362 | A-K |
| ATx623 x GR106-1 | Tx. Agri. Exp. Sta. | R | ML | 92 | 53 | 4 | 0 | 0.3 | 6.0 | 59.0 | 14.5 | 77.4 | 6331 | A-L |
| NC+ 174 | NC+ Hybrids | R | M | 93 | 46 | 3 | 0 | 1.7 | 6.0 | 58.1 | 14.9 | 71.3 | 6282 | A-L |
| ORD Baron | ORD Hybrids | R | ML | 90 | 46 | 3 | 0 | 0.0 | 7.0 | 57.9 | 13.6 | 73.8 | 6275 | A-L |
| EAST TEXAS 610 | EAST TEXAS SEED CO. | R | M | 91 | 47 | 2 | 0 | 0.7 | 7.0 | 57.8 | 15.0 | 72.3 | 6234 | A-L |
| AgriPro AP 985 | AgriPro Seeds | R | ML | 93 | 49 | 3 | 0 | 2.0 | 5.7 | 58.2 | 14.9 | 72.0 | 6171 | A-L |
| W-839 DR | George Warner Seed | R | M | 93 | 46 | 4 | 0 | 0.3 | 4.3 | 55.9 | 14.6 | 70.2 | 6133 | A-M |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 93 | 53 | 6 | 0 | 0.0 | 6.3 | 57.9 | 13.2 | 76.3 | 6131 | A-M |
| DEKALB X-864-X | DEKALB-PFIZER GEN. | R | ML | 96 | 52 | 3 | 0 | 3.0 | 5.5 | 54.7 | 14.5 | 67.9 | 6130 | A-M |
| ORO G XTRA | ORD Hybrids | R | ML | 91 | 46 | 2 | 0 | 2.3 | 6.7 | 58.1 | 14.6 | 68.0 | 6103 | A-M |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 91 | 46 | 4 | 0 | 0.0 | 6.3 | 58.2 | 13.8 | 73.8 | 6071 | A-N |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 93 | 47 | 3 | 0 | 1.0 | 5.0 | 54.1 | 14.9 | 71.5 | 6035 | A-N |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 96 | 53 | 4 | 0 | 2.0 | 4.7 | 57.3 | 15.0 | 68.9 | 6024 | A-N |
| DK801X | Douglass W. King | R | M | 90 | 50 | 1 | 0 | 1.7 | 7.0 | 58.7 | 15.0 | 68.2 | 6009 | A-N |
| Wx 88116 | George Warner Seed | R | ML | 90 | 49 | 3 | 0 | 0.7 | 7.7 | 59.8 | 14.9 | 72.9 | 5984 | A-N |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 92 | 48 | 3 | 0 | 0.7 | 6.3 | 59.0 | 15.2 | 71.6 | 5980 | A-N |
| 6670 | Cargill Hybrid | R | ML | 92 | 48 | 3 | 0 | 2.0 | 6.5 | 58.0 | 14.8 | 62.6 | 5966 | A-O |
| EX 3141 | GroAgri Seed Co. | R | M | 91 | 49 | 3 | 0 | 0.0 | 6.3 | 58.2 | 14.1 | 73.0 | 5956 | A-O |
| ATx2752 x GR105-8 | Tx. Agri. Exp. Sta. | R | ML | 95 | 51 | 4 | 0 | 10.3 | 5.0 | 59.5 | 14.9 | 72.7 | 5956 | A-O |
| S9750 | Northrup King Co. | R | L | 92 | 48 | 3 | 0 | 2.7 | 7.0 | 57.7 | 14.6 | 73.5 | 5904 | A-O |

Table 5A. GRAIN SORGHUM PERFORMANCE TEST; DANEVANG, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | GRN CLR 2 | MATU- RITY CLASS 3 | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | SMUT PER- PLOT 4 | EMER- GENCE RATING 5 | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., O.05 6 |
|---------------------|-----------------------------|-----------------|-----------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|-------------------------------|----------------------|--------------------|------------------|---------------|-----------------------------|
| W-844-E | George Warner Seed | R | M | 92 | 47 | 3 | 0 | 0.0 | 6.0 | 58.8 | 14.1 | 73.3 | 5898 | A-0 |
| WAC 686 | SEEDTEC INT. | R | M | 91 | 48 | 4 | 0 | 0.0 | 7.3 | 58.6 | 13.9 | 73.6 | 5864 | A-0 |
| WAC D701G | SEEDTEC INT. | R | ML | 93 | 49 | 3 | 0 | 1.3 | 6.0 | 57.2 | 15.3 | 70.5 | 5855 | A-0 |
| DK76ODR | Douglass W. King | R | M | 91 | 48 | 3 | 0 | 1.3 | 5.3 | 58.1 | 14.5 | 71.2 | 5848 | A-0 |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 96 | 56 | 4 | 0 | 4.0 | 4.7 | 57.2 | 15.2 | 71.3 | 5828 | A-0 |
| 3308 | SEEDTEC INT. | R | M | 92 | 49 | 3 | 0 | 0.0 | 6.0 | 58.4 | 14.8 | 72.7 | 5815 | A-0 |
| T-E X-8727 | TAYLOR-EVANS SEED | R | ML | 91 | 45 | 5 | 0 | 3.3 | 6.3 | 55.7 | 14.3 | 71.7 | 5760 | A-0 |
| X62830 | SEEDTEC INT. | R | L | 95 | 54 | 1 | 0 | 0.0 | 5.0 | 57.2 | 14.2 | 70.2 | 5746 | A-0 |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 93 | 48 | 2 | 0 | 2.7 | 6.3 | 58.3 | 14.9 | 66.3 | 5701 | B-0 |
| Wrangler II | Conlee Seed Co. | M | ML | 91 | 50 | 3 | 0 | 8.0 | 6.3 | 55.8 | 14.3 | 74.6 | 5632 | B-0 |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 95 | 53 | 2 | 0 | 10.3 | 5.0 | 55.4 | 14.7 | 67.4 | 5627 | B-0 |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 90 | 47 | 4 | 0 | 0.0 | 8.0 | 59.1 | 14.6 | 68.5 | 5599 | B-0 |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 93 | 49 | 4 | 0 | 5.0 | 6.3 | 57.8 | 14.9 | 72.9 | 5597 | B-0 |
| 630 | Cargill Hybrid | R | ME | 88 | 43 | 2 | 0 | 1.0 | 5.0 | 56.7 | 15.0 | 70.8 | 5486 | C-P |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 93 | 54 | 4 | 0 | 0.3 | 6.7 | 59.3 | 14.2 | 73.2 | 5480 | C-P |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 90 | 48 | 4 | 0 | 9.0 | 7.7 | 57.2 | 14.6 | 74.3 | 5454 | D-P |
| ATx623 x GR109-5 | Tx. Agri. Exp. Sta. | R | ML | 94 | 51 | 5 | 0 | 4.3 | 5.3 | 58.5 | 15.1 | 73.0 | 5451 | D-P |
| DK776 | Douglass W. King | R | M | 92 | 47 | 3 | 0 | 0.0 | 5.3 | 57.9 | 14.1 | 71.7 | 5444 | D-Q |
| 2665 | Northrup King Co. | R | ML | 94 | 45 | 2 | 0 | 0.7 | 6.0 | 57.8 | 14.8 | 63.9 | 5440 | D-Q |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 96 | 47 | 4 | 0 | 7.0 | 5.3 | 56.1 | 14.9 | 69.5 | 5379 | D-Q |
| ATx399 x GR104-6 | Tx. Agri. Exp. Sta. | M | ML | 95 | 48 | 3 | 0 | 3.7 | 5.3 | 58.7 | 14.3 | 71.0 | 5365 | D-Q |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 91 | 53 | 4 | 0 | 6.0 | 6.7 | 57.6 | 14.3 | 71.7 | 5350 | E-Q |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 95 | 54 | 5 | 0 | 9.0 | 6.0 | 57.0 | 15.3 | 66.4 | 5331 | F-Q |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 91 | 50 | 4 | 0 | 10.3 | 7.3 | 58.5 | 14.7 | 73.8 | 5311 | G-Q |
| ATx2755 x MR102-3 | Tx. Agri. Exp. Sta. | R | ML | 89 | 43 | 2 | 0 | 1.7 | 6.0 | 56.6 | 12.8 | 73.0 | 5298 | G-Q |
| DEKALB DK-50 | DEKALB-PFIZER GEN. | R | M | 92 | 50 | 3 | 0 | 3.0 | 7.0 | 54.3 | 14.7 | 59.6 | 5296 | G-Q |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 91 | 55 | 5 | 0 | 13.7 | 7.0 | 55.4 | 13.5 | 75.4 | 5238 | H-Q |
| 3385 | Cargill Hybrid | R | ME | 89 | 43 | 3 | 0 | 6.0 | 6.7 | 56.0 | 13.8 | 69.8 | 5203 | I-Q |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 92 | 43 | 4 | 0 | 1.0 | 4.0 | 54.3 | 13.5 | 58.5 | 5122 | I-Q |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 98 | 52 | 3 | 0 | 2.0 | 6.3 | 57.8 | 15.6 | 60.7 | 5075 | J-Q |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 94 | 54 | 4 | 0 | 3.0 | 6.5 | 57.4 | 14.2 | 67.4 | 5073 | J-Q |
| ATx2801 x MR102-2 | Tx. Agri. Exp. Sta. | M | ML | 91 | 50 | 4 | 0 | 2.7 | 4.7 | 59.2 | 14.0 | 66.7 | 5015 | K-Q |
| AgriPro AP 965 | AgriPro Seeds | R | ML | 93 | 46 | 3 | 0 | 0.0 | 6.3 | 55.4 | 14.7 | 66.0 | 5011 | K-Q |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | R | ML | 90 | 50 | 4 | 0 | 5.7 | 7.0 | 59.3 | 14.1 | 69.6 | 5010 | K-Q |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 94 | 50 | 3 | 0 | 1.0 | 5.3 | 55.0 | 15.1 | 60.7 | 4961 | L-Q |
| ATx623 x GR109-2 | Tx. Agri. Exp. Sta. | M | ML | 94 | 51 | 4 | 0 | 10.0 | 6.5 | 57.7 | 14.2 | 61.7 | 4793 | M-Q |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 86 | 50 | 6 | 0 | 15.7 | 7.3 | 55.7 | 13.7 | 66.9 | 4784 | M-Q |
| ATx2801 x MR101-4 | Tx. Agri. Exp. Sta. | M | ML | 93 | 49 | 2 | 0 | 3.0 | 4.3 | 59.3 | 13.9 | 68.1 | 4706 | N-Q |
| A1 x R3224(T) | Tx. Agri. Exp. Sta. | R | ML | 97 | 52 | 1 | 0 | 0.7 | 3.7 | 56.5 | 15.7 | 64.0 | 4595 | O-Q |

Table 5A. GRAIN SORGHUM PERFORMANCE TEST;DANEVANG, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | GRN CLR 2 | MATU- RITY CLASS 3 | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | SMUT PER- PLOT 4 | EMER- GENGE RATING 5 | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., 0.05 6 |
|-------------|-----------------------------|-----------------|-----------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|-------------------------------|----------------------|--------------------|------------------|---------------|-----------------------------|
| A1 x Tx433 | Tx. Agri. Exp. Sta. | R | ML | 91 | 51 | 4 | 0 | 24.3 | 7.7 | 56.1 | 14.8 | 65.4 | 4239 | P-Q |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 91 | 47 | 3 | 0 | 14.7 | 6.0 | 56.3 | 14.3 | 67.3 | 4102 | Q |

TEST MEAN= 5841
 TEST C.V.=11.2
 LSD .05=1052

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

1 Garst 5319, Garst 5329 and Funks G-522DR were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

2 Grain Color : R=Red W=White B=Brown M=Mixed

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

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

5 Emergence Rating: Due to a prolonged period of cold and wet conditions after planting, an emergence rating was taken on 3-29 by Dennis Pietsch. The visual rating includes a combination of seedlings emerged and vigor rating. 1=Poor 10=Excellent

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

TABLE 6. AGRONOMIC AND TEST INFORMATION: COLLEGE STATION

| | |
|----------------------|--|
| TEST: | 1988 Irrigated Grain Sorghum Performance Test |
| LOCATION: | Texas A&M University Farm, College Station, Texas |
| COOPERATORS: | F. Miller, T. Dusek, K. Elms, K. Lahr, and D. Pietsch |
| SOIL TYPE: | Miller clay loam |
| ROW WIDTH: | 26 2/3" |
| PREVIOUS CROP: | Grain sorghum |
| LAND PREPARATION: | Shredded, disked, moldboard, disked, bedded, plant |
| DATE PLANTED: | 4-4-88, cone planter |
| PLOT LENGTH: | 19' |
| FERTILIZER: | 160-40-0; applied 100-40-0 preplant and 60-0-0 at layby |
| HERBICIDE: | 2.5 pt/A Milogard 4L (propazine) + 1 gal/A Ramrod 4L (propachlor) at planting |
| INSECTICIDE: | Furadan 15G, 8 oz/1000' row |
| RAINFALL: | January = .84"; February = 1.27"; March = 2.66"; April = .75"; May = 4.14"; June = 1.28"; July = 2.24"; August = 2.27"; Total = 15.45" |
| IRRIGATIONS: | 1 application on 6-15-88 of approximately 3" |
| DATE HARVESTED: | 8-9-88 by hand |
| SIZE HARVESTED PLOT: | 1/1089 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 87 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 3 |
| MEAN PLANT POP.: | Estimated to be between 70,000 and 90,000 plants/A |
| TEST MEAN: | 4,338 lb/A; yields corrected to 13% moisture |
| TEST C.V.: | 13.9 percent |

GENERAL STATEMENT: The College Station Performance Test site was planted on April 4, 1988 with excellent moisture and seedbeds. Stand establishment was good and required hand thinning to create near-equal plant populations for all hybrids. The season was cool and dry throughout. Temperatures were not as hot as normal for this year. Clear skies with very little rainfall caused reduced plant growth and development. Supplemental irrigation was made but not to a full potential yield level. Greenbug and aphid control was adequate until post-flowering when there was damage to most early maturity, susceptible hybrids. The later maturing hybrids, even though susceptible, were not damaged significantly by the greenbugs. Biotype-E resistance was demonstratively effective in this trial. Bushel weight was much reduced in this trial because of the dry conditions and stress caused by the greenbugs. Careful interpretation of this year's results will be required because of the late season greenbug invasion, dry summer conditions and the differential reactions caused by the greenbug x maturity interaction.

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | MATU- RITY | | DAYS TO 50% FLOWER | PLANT HT. IN. | HEAD EXSER- TION IN. | GREEN BUG RAT. 4 | DES. RAT. 5 | % GRN LEAF 6 | SMUT PER PLOT 7 | % LODGE | TEST | | | GRAIN PER ACRE 1b/A | STAT. SIG. O.05 8 |
|--------------------|-----------------------------|---------------|----|-----------------------------|---------------------|-------------------------------|---------------------------|-------------------|-----------------------|--------------------------|------------|--------------|-------------|-----------|------------------------------|----------------------------|
| | | 2 | 3 | | | | | | | | | WT. lb/bu | % MOIST. | THR. % | | |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 69 | 48 | 3 | 3.3 | 1.5 | 50 | 0.0 | 0.0 | 56.3 | 16.0 | 72.0 | 6306 | A |
| HSC Cherokee | HyPerformer Seed | R | M | 77 | 49 | 3 | 3.7 | 1.4 | 55 | 0.3 | 0.0 | 57.8 | 15.7 | 72.8 | 6296 | A |
| X62830 | SEEDTEC INT. | R | L | 75 | 59 | 4 | 3.3 | 1.1 | 60 | 0.0 | 0.0 | 57.5 | 16.1 | 73.1 | 6076 | A-B |
| 3308 | SEEDTEC INT. | R | M | 71 | 49 | 3 | 3.7 | 1.5 | 50 | 0.3 | 0.0 | 57.5 | 15.2 | 73.4 | 6074 | A-B |
| WAC 686 | SEEDTEC INT. | R | M | 70 | 51 | 3 | 3.7 | 1.4 | 55 | 0.0 | 0.0 | 57.1 | 15.7 | 70.9 | 5975 | A-C |
| Wrangler II | Conlee Seed Co. | R | ML | 67 | 51 | 4 | 4.7 | 1.7 | 45 | 2.7 | 3.3 | 55.0 | 15.6 | 72.9 | 5964 | A-C |
| W-844-E | George Warner Seed | R | M | 70 | 50 | 3 | 3.7 | 1.4 | 50 | 0.0 | 0.0 | 57.4 | 15.5 | 71.8 | 5956 | A-C |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 71 | 47 | 3 | 4.0 | 1.5 | 55 | 0.7 | 0.0 | 59.9 | 16.1 | 73.6 | 5867 | A-D |
| X58761EX | Summit Seed Co. | R | M | 69 | 49 | 1 | 3.0 | 1.4 | 55 | 1.3 | 0.0 | 57.3 | 16.3 | 72.3 | 5790 | A-E |
| ORD Baron | ORD Hybrids | R | ML | 70 | 48 | 3 | 4.3 | 1.6 | 55 | 0.0 | 0.0 | 56.2 | 15.9 | 70.8 | 5615 | A-F |
| Wx88117 | George Warner Seed | R | ML | 68 | 54 | 3 | 4.0 | 1.3 | 60 | 0.0 | 0.0 | 57.8 | 15.1 | 73.2 | 5544 | A-G |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 69 | 55 | 6 | 4.0 | 1.8 | 50 | 3.3 | 0.0 | 56.7 | 16.1 | 70.0 | 5516 | A-G |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | R | ML | 71 | 49 | 6 | 5.7 | 1.7 | 30 | 0.7 | 3.3 | 59.7 | 15.8 | 75.8 | 5507 | A-G |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 67 | 51 | 6 | 6.0 | 1.9 | 58 | 0.3 | 0.0 | 55.2 | 17.5 | 68.9 | 5421 | A-H |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | R | ML | 67 | 53 | 5 | 4.0 | 1.5 | 35 | 0.7 | 0.0 | 58.7 | 16.1 | 73.1 | 5283 | A-I |
| ST-3258 | SEEDTEC INT. | R | ME | 69 | 49 | 2 | 4.0 | 1.6 | 40 | 0.0 | 1.7 | 56.8 | 15.1 | 71.6 | 5267 | A-I |
| ATx378 x GR103-2 | Tx. Agri. Exp. Sta. | R | ML | 67 | 59 | 4 | 4.0 | 1.4 | 50 | 2.0 | 0.0 | 54.6 | 14.8 | 70.8 | 5199 | A-J |
| T-E X-8766 | TAYLOR-EVANS SEED | R | ML | 69 | 51 | 3 | 4.7 | 2.3 | 55 | 1.7 | 0.0 | 57.0 | 15.5 | 74.8 | 5149 | A-K |
| ATx2801 x MR103-2A | Tx. Agri. Exp. Sta. | M | ML | 71 | 54 | 3 | 6.3 | 2.5 | 10 | 0.7 | 3.3 | 55.4 | 13.8 | 77.0 | 5130 | A-K |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 71 | 52 | 3 | 5.3 | 1.7 | 25 | 1.7 | 3.3 | 53.3 | 15.8 | 68.0 | 5116 | A-L |
| ATx378 x GR104-7 | Tx. Agri. Exp. Sta. | R | ML | 68 | 52 | 4 | 3.7 | 1.6 | 40 | 5.0 | 0.0 | 56.9 | 16.3 | 72.1 | 5088 | B-L |
| T-E X-8767 | TAYLOR-EVANS SEED | R | L | 72 | 58 | 6 | 4.7 | 1.4 | 25 | 0.7 | 3.3 | 57.9 | 15.4 | 72.1 | 5058 | B-M |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 67 | 54 | 5 | 5.3 | 1.8 | 25 | 0.3 | 0.0 | 55.4 | 14.9 | 71.4 | 5018 | B-M |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 72 | 54 | 4 | 4.7 | 1.4 | 45 | 3.7 | 5.0 | 56.9 | 15.4 | 67.6 | 4914 | B-N |
| ATx623 x GR105-5 | Tx. Agri. Exp. Sta. | M | ML | 68 | 59 | 6 | 3.0 | 1.9 | 65 | 1.3 | 0.0 | 57.5 | 14.9 | 74.8 | 4794 | C-0 |
| ATx2801 x MR101-5 | Tx. Agri. Exp. Sta. | R | ML | 71 | 55 | 5 | 5.7 | 2.4 | 15 | 0.7 | 1.7 | 58.4 | 14.0 | 72.2 | 4794 | C-0 |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 69 | 45 | 3 | 7.0 | 2.7 | 25 | 1.3 | 0.0 | 49.1 | 15.2 | 64.9 | 4702 | D-P |
| XP5017x | ASGROW SEED CO. | R | ML | 73 | 52 | 6 | 4.7 | 1.6 | 50 | 0.0 | 1.7 | 56.5 | 16.6 | 63.0 | 4698 | D-P |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 71 | 58 | 7 | 5.7 | 1.6 | 40 | 1.7 | 0.0 | 55.8 | 15.5 | 68.6 | 4694 | D-P |
| 5572 | Cargill Hybrid | R | ML | 70 | 46 | 4 | 5.0 | 1.9 | 20 | 0.0 | 5.0 | 50.7 | 14.9 | 65.6 | 4693 | D-P |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | R | ML | 69 | 51 | 6 | 5.3 | 1.4 | 55 | 5.7 | 0.0 | 52.3 | 16.8 | 64.4 | 4659 | D-P |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | R | M | 74 | 51 | 6 | 5.7 | 1.4 | 60 | 1.0 | 0.0 | 56.1 | 16.3 | 63.7 | 4642 | E-Q |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 69 | 48 | 6 | 6.3 | 2.6 | 12 | 1.3 | 3.3 | 53.9 | 16.0 | 70.2 | 4612 | E-R |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 71 | 63 | 7 | 6.3 | 1.8 | 35 | 0.0 | 10.0 | 55.4 | 15.2 | 70.9 | 4605 | E-R |
| A1 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 73 | 52 | 5 | 3.7 | 1.3 | 70 | 1.3 | 0.0 | 55.3 | 16.4 | 63.7 | 4577 | E-R |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 72 | 55 | 6 | 6.0 | 1.6 | 40 | 2.0 | 6.7 | 52.9 | 15.4 | 66.1 | 4566 | F-S |
| DEKALB X-749-X | DEKALB-PFIZER GEN. | R | M | 70 | 51 | 5 | 5.3 | 1.5 | 35 | 1.7 | 3.3 | 52.4 | 16.6 | 65.6 | 4559 | F-T |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | R | ML | 71 | 56 | 5 | 5.7 | 1.4 | 50 | 1.3 | 1.7 | 52.0 | 15.7 | 66.9 | 4531 | F-U |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | R | M | 71 | 56 | 9 | 4.7 | 1.3 | 54 | 5.0 | 0.0 | 53.9 | 16.0 | 66.3 | 4510 | F-V |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 73 | 45 | 2 | 4.3 | 1.8 | 60 | 0.7 | 0.0 | 55.4 | 15.8 | 69.3 | 4448 | F-V |

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | MATU- RITY | | DAYS TO 50% FLOWER | PLANT HT. IN. | HEAD EXSER- TION IN. | GREEN BUG RAT. 4 | DES. RAT. 5 | % GRN LEAF 6 | SMUT PER PLOT 7 | TEST % WT. LODGE 1b/bu | % MOIST. | THR. % | GRAIN PER ACRE 1b/A | STAT. SIG. O.05 8 | |
|------------------|-----------------------------|-----------------|------------|-----------------------------|---------------------|-------------------------------|---------------------------|-------------------|-----------------------|--------------------------|------------------------------------|-------------|-----------|------------------------------|----------------------------|------|
| | | GRN CLR 2 | CLASS 3 | | | | | | | | | | | | | |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 74 | 55 | 6 | 5.7 | 1.3 | 50 | 0.7 | 3.3 | 55.9 | 15.4 | 64.9 | 4421 | F-V |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 68 | 52 | 4 | 6.3 | 1.8 | 20 | 3.0 | 5.0 | 51.6 | 15.9 | 71.7 | 4408 | F-W |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 72 | 49 | 3 | 3.7 | 1.6 | 45 | 1.3 | 0.0 | 57.6 | 16.0 | 70.0 | 4381 | G-X |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 69 | 52 | 4 | 5.3 | 1.9 | 40 | 2.7 | 1.7 | 56.2 | 15.6 | 73.3 | 4332 | G-Y |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 70 | 52 | 4 | 5.0 | 2.1 | 45 | 3.7 | 1.7 | 54.8 | 15.9 | 71.7 | 4324 | G-Y |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 74 | 55 | 6 | 5.7 | 1.3 | 55 | 0.3 | 3.3 | 57.4 | 15.4 | 65.5 | 4206 | H-Y |
| ORO G XTRA | ORO Hybrids | R | ML | 71 | 49 | 6 | 6.3 | 2.4 | 20 | 0.3 | 13.3 | 52.3 | 16.1 | 63.9 | 4204 | H-Y |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 73 | 52 | 4 | 6.0 | 1.5 | 45 | 0.3 | 3.3 | 53.8 | 16.4 | 60.2 | 4187 | I-Y |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 69 | 60 | 6 | 6.0 | 1.6 | 50 | 0.7 | 1.7 | 51.5 | 15.9 | 65.2 | 4165 | I-Y |
| F524 | FRONTIER SEED CO. | R | ML | 71 | 51 | 2 | 6.0 | 2.6 | 20 | 0.0 | 10.0 | 54.6 | 15.5 | 64.4 | 4150 | I-Y |
| S.G. 932 | Garrison Seed & Co. | R | ML | 69 | 49 | 3 | 6.7 | 2.4 | 15 | 1.0 | 8.3 | 52.4 | 14.5 | 65.0 | 4078 | I-Z |
| A1 x 77CS2 | Tx. Agri. Exp. Sta. | W | ML | 74 | 51 | 6 | 6.0 | 1.6 | 25 | 7.3 | 1.7 | 58.5 | 15.6 | 67.7 | 4060 | I-Z |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 68 | 54 | 3 | 7.0 | 2.0 | 20 | 1.0 | 53.3 | 47.4 | 16.1 | 66.2 | 4026 | J-Z |
| 630 | Cargill Hybrid | R | ME | 65 | 45 | 3 | 6.0 | 1.9 | 60 | 0.0 | 0.0 | 54.1 | 17.1 | 66.7 | 4012 | J-Z |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 65 | 44 | 4 | 6.3 | 2.8 | 20 | 0.7 | 0.0 | 53.9 | 16.5 | 66.0 | 3949 | K-Z |
| Wx88105 | George Warner Seed | R | ML | 69 | 46 | 1 | 8.3 | 2.7 | 35 | 1.7 | 8.3 | 44.5 | 13.0 | 58.8 | 3888 | L-Z |
| WAC 715DR | SEEDTEC INT. | R | ML | 70 | 58 | 5 | 6.7 | 1.8 | 40 | 1.0 | 26.7 | 48.8 | 15.7 | 64.4 | 3851 | M-AA |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 63 | 49 | 7 | 6.7 | 3.3 | 30 | 3.3 | 0.0 | 49.4 | 14.9 | 67.4 | 3765 | N-BB |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | W | ML | 74 | 56 | 5 | 6.0 | 1.6 | 25 | 0.7 | 10.0 | 54.7 | 15.4 | 62.1 | 3765 | N-BB |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | R | M | 67 | 45 | 6 | 5.7 | 2.2 | 42 | 0.0 | 0.0 | 51.6 | 15.1 | 63.0 | 3755 | N-BB |
| EAST TEXAS 610 | EAST TEXAS SEED CO. | R | M | 71 | 51 | 5 | 8.0 | 2.6 | 15 | 0.0 | 30.0 | 49.4 | 14.9 | 60.8 | 3711 | N-BB |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 69 | 56 | 7 | 7.7 | 1.9 | 25 | 0.0 | 21.7 | 54.4 | 15.0 | 65.2 | 3690 | N-BB |
| Maxima | Big Crop Seed, Inc. | R | L | 71 | 49 | 4 | 6.7 | 2.3 | 15 | 0.0 | 30.0 | 50.9 | 15.8 | 59.2 | 3655 | O-BB |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 70 | 46 | 2 | 7.0 | 3.3 | 5 | 0.3 | 5.0 | 48.6 | 13.3 | 60.6 | 3605 | O-BB |
| 2665 | Northrup King Co. | R | ML | 70 | 44 | 2 | 6.7 | 2.5 | 15 | 0.7 | 3.3 | 52.3 | 15.0 | 62.0 | 3567 | O-BB |
| GS712 | ASGROW SEED CO. | R | ML | 71 | 50 | 4 | 7.7 | 2.5 | 20 | 0.0 | 18.3 | 51.5 | 15.5 | 61.1 | 3547 | P-BB |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 70 | 46 | 4 | 7.0 | 3.0 | 5 | 1.7 | 3.3 | 52.8 | 15.2 | 60.7 | 3527 | P-BB |
| 4462 | Cargill Hybrid | R | M | 68 | 51 | 4 | 7.0 | 2.5 | 15 | 0.0 | 11.7 | 51.1 | 16.7 | 61.0 | 3498 | P-BB |
| S.G. 922 | Garrison Seed & Co. | R | ML | 70 | 43 | 2 | 7.0 | 2.7 | 10 | 0.3 | 5.0 | 46.6 | 13.6 | 61.6 | 3483 | P-BB |
| SS69 | Summit Seed Co. | R | ML | 71 | 50 | 3 | 7.3 | 2.4 | 5 | 1.0 | 21.7 | 51.0 | 14.6 | 60.3 | 3420 | Q-BB |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | R | ML | 71 | 52 | 4 | 6.7 | 1.8 | 38 | 0.7 | 6.7 | 53.9 | 15.1 | 60.0 | 3413 | Q-BB |
| 6670 | Cargill Hybrid | R | ML | 70 | 47 | 3 | 7.7 | 2.5 | 10 | 0.3 | 8.3 | 49.4 | 15.0 | 58.0 | 3407 | Q-BB |
| Rustler | Conlee Seed Co. | R | ML | 75 | 49 | 3 | 8.0 | 2.7 | 15 | 0.3 | 25.0 | 51.6 | 14.9 | 60.4 | 3375 | R-BB |
| T-E X-8768 | TAYLOR-EVANS SEED | R | M | 66 | 47 | 3 | 7.7 | 3.0 | 10 | 0.7 | 8.3 | 50.2 | 15.0 | 61.6 | 3338 | S-BB |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 74 | 60 | 6 | 7.3 | 1.9 | 25 | 0.7 | 41.7 | 51.8 | 15.0 | 61.1 | 3324 | T-BB |
| HSC Wings | HyPerformer Seed | R | ML | 70 | 51 | 4 | 7.3 | 2.5 | 15 | 2.0 | 25.0 | 51.0 | 14.4 | 61.2 | 3306 | U-CC |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 70 | 48 | 2 | 7.7 | 3.3 | 2 | 1.3 | 35.0 | 48.3 | 14.9 | 60.2 | 3291 | V-CC |
| AOK11 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 70 | 47 | 3 | 7.0 | 2.1 | 40 | 0.0 | 3.3 | 51.6 | 15.0 | 59.7 | 3280 | V-CC |
| WAC D701G | SEEDTEC INT. | R | ML | 71 | 47 | 2 | 7.7 | 2.4 | 30 | 1.3 | 45.0 | 49.9 | 15.1 | 60.1 | 3184 | W-CC |
| S9750 | Northrup King Co. | R | L | 70 | 48 | 3 | 7.3 | 2.6 | 10 | 0.7 | 20.0 | 50.9 | 15.3 | 58.0 | 3176 | W-CC |

Table 6A. GRAIN SORGHUM PERFORMANCE TEST; COLLEGE STATION, TEXAS 1988

| HYBRID 1 | COMPANY OR BRAND NAME | MATU- RITY | | DAYS TO 50% FLOWER | PLANT HT. IN. | HEAD EXSER- TION IN. | GREEN BUG DES. RAT. | | % GRN LEAF 6 | SMUT PER PLOT 7 | TEST | | | GRAIN PER ACRE 1b/A | STAT. SIG. 0.05 8 | |
|----------------------------|---------------------------------------|-----------------|--------------------|-----------------------------|---------------------|-------------------------------|------------------------------|--------------|-----------------------|--------------------------|-------------|-----------|------|------------------------------|----------------------------|-------|
| | | GRN CLR 2 | RITY CLASS 3 | | | | % LODGE | WT. lb/bu | | | % MOIST. | THR. % | | | | |
| A.Var x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 73 | 56 | 3 | 7.7 | 2.3 | 30 | 0.0 | 66.7 | 47.4 | 13.3 | 60.3 | 3154 | X-CC |
| ATx2755 x MR103-2B 3385 | Tx. Agri. Exp. Sta. Cargill Hybrid | R | ML | 68 | 51 | 4 | 7.3 | 3.0 | 12 | 1.0 | 25.0 | 49.7 | 13.2 | 61.4 | 3120 | Y-CC |
| AVG1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 66 | 44 | 3 | 7.7 | 4.0 | 5 | 0.7 | 6.7 | 48.6 | 13.7 | 55.4 | 2901 | Z-CC |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | R | M | 74 | 58 | 4 | 7.0 | 1.6 | 45 | 0.0 | 40.0 | 49.2 | 13.5 | 62.2 | 2876 | Z-CC |
| | | R | M | 76 | 45 | 4 | 6.3 | 2.7 | 10 | 6.3 | 5.0 | 55.0 | 15.0 | 56.2 | 2656 | AA-CC |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 69 | 43 | 4 | 8.3 | 4.0 | 20 | 0.0 | 16.7 | 39.6 | 11.0 | 52.7 | 2619 | BB-CC |
| T-E X-8769 | TAYLOR-EVANS SEED | R | L | 73 | 51 | 4 | 8.7 | 2.7 | 10 | 0.0 | 26.7 | 51.5 | 16.3 | 50.9 | 2143 | CC |

TEST MEAN= 4338 TEST C.V.=13.9 LSD .05=969.8

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

1 Pioneer Hybrid 8452, Funks G-522DR and Asgrow Topaz were entered as commercial check hybrids at our discretion and should be used for comparison purposes only.

2 Grain Color : R=Red W=White B=Brown M=Mixed

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

4 Dr. George Teetes, Entomology Department, Texas A&M University, College Station, Texas, made the following greenbug ratings on 7-18-88 from all three replications. Rating scale is as follows: 1= 10% dead leaves (about 1 dead leaf/plant), 2= 20% dead leaves, 3= 30% dead leaves, 4= 40% dead leaves, 5= 50% dead leaves, 6= 60% dead leaves, 7= 70% dead leaves, 8= 80% dead leaves, 9= dead plant (all leaves dead).

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

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

6 % Green leaf retention ratings: visual estimate of proportion of green leaf area remaining at harvest.
100%= all green leaf area remains except basal 5 leaves.
0%= all leaf area dead or necrotic.

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

8 Duncans multiple range test was used at the .05 level.

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 1 | 6306 | 52 | 6280 | 5 | 7468 |
| HSC Cherokee | HyPerformer Seed Company | 2 | 6296 | 9 | 7134 | — | — |
| X 62830 | SEEDTEC INTERNATIONAL | 3 | 6076 | — | — | — | — |
| 3308 | SEEDTEC INTERNATIONAL | 4 | 6074 | 72 | 5589 | — | — |
| WAC 686 | SEEDTEC INTERNATIONAL | 5 | 5975 | 45 | 6447 | 19 | 7039 |
| Wrangler II | Conlee Seed Company, Inc. | 6 | 5964 | — | — | — | — |
| W-844-E | George Warner Seed Company | 7 | 5956 | 20 | 6894 | — | — |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | 8 | 5867 | — | — | — | — |
| XS8761EX | Summit Seed Company | 9 | 5790 | — | — | — | — |
| ORO BARON | ORO Hybrids | 10 | 5615 | 11 | 7062 | — | — |
| Wx 88117 | George Warner Seed Company | 11 | 5544 | — | — | — | — |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | 12 | 5516 | — | — | — | — |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | 13 | 5507 | 27 | 6761 | 55 | 6134 |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | 14 | 5421 | 56 | 6218 | 48 | 6354 |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | 15 | 5283 | — | — | — | — |
| ST-3258 | SEEDTEC INTERNATIONAL | 16 | 5267 | — | — | — | — |
| ATx378 x GR103-2 | Tx. Agri. Exp. Sta. | 17 | 5199 | — | — | — | — |
| T-E X-8766 | TAYLOR-EVANS SEED COMPANY | 18 | 5149 | — | — | — | — |
| ATx2801 x MR103-2A | Tx. Agri. Exp. Sta. | 19 | 5130 | — | — | — | — |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 20 | 5116 | 42 | 6467 | 14 | 7209 |
| ATx378 x GR104-7 | Tx. Agri. Exp. Sta. | 21 | 5088 | — | — | — | — |
| T-E X-8767 | TAYLOR-EVANS SEED COMPANY | 22 | 5058 | — | — | — | — |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | 23 | 5018 | — | — | — | — |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 24 | 4914 | — | — | — | — |
| ATx623 x GR105-3 | Tx. Agri. Exp. Sta. | 25 | 4794 | — | — | — | — |
| ATx2801 x MR101-5 | Tx. Agri. Exp. Sta. | 26 | 4794 | — | — | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 27 | 4702 | 15 | 6955 | 63 | 5936 |
| XP 5017 X | ASGROW SEED COMPANY | 28 | 4698 | — | — | — | — |
| ATxR3338wx | Tx. Agri. Exp. Sta. | 29 | 4694 | — | — | — | — |

Table 6B. College Station (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|----------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| 5572 | Cargill Hybrid Seeds | 30 | 4693 | 58 | 6202 | — | — |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | 31 | 4659 | 51 | 6296 | — | — |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | 32 | 4642 | — | — | — | — |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | 33 | 4612 | 71 | 5723 | 46 | 6399 |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 34 | 4605 | — | — | — | — |
| A1 x R.8505 | Tx. Agri. Exp. Sta. | 35 | 4577 | — | — | — | — |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 36 | 4566 | 40 | 6477 | — | — |
| DEKALB X-749-X | DEKALB-PFIZER GENETICS | 37 | 4559 | — | — | — | — |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | 38 | 4531 | 38 | 6494 | — | — |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | 39 | 4510 | — | — | — | — |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | 40 | 4448 | — | — | — | — |
| ATx631 x 8OC2241 | Tx. Agri. Exp. Sta. | 41 | 4421 | — | — | — | — |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 42 | 4408 | 74 | 5534 | 69 | 5726 |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 43 | 4381 | — | — | — | — |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 44 | 4332 | 69 | 5770 | 34 | 6637 |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 45 | 4324 | — | — | — | — |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 46 | 4206 | 70 | 5767 | 22 | 6889 |
| ORO G XTRA | ORO Hybrids | 47 | 4204 | 3 | 7637 | 8 | 7393 |
| A1 x R2241 | Tx. Agri. Exp. Sta. | 48 | 4187 | 75 | 5470 | — | — |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 49 | 4165 | 55 | 6218 | 31 | 6701 |
| ATx623 x RT104-1 | Tx. Agri. Exp. Sta. | 50 | 4150 | — | — | — | — |
| SG 932 | Garrison Seed & Company | 51 | 4078 | 1 | 7805 | 26 | 6781 |
| A1 x 77CS2 | Tx. Agri. Exp. Sta. | 52 | 4060 | — | — | — | — |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 53 | 4026 | 2 | 7714 | 9 | 7378 |
| 630 | Cargill Hybrid Seeds | 54 | 4012 | — | — | — | — |
| CHECK 1 | Tx. Agri. Exp. Sta. | 55 | 3949 | — | — | — | — |
| Wx 88105 | George Warner Seed Company | 56 | 3888 | — | — | — | — |
| WAC 715 DR | SEEDTEC INTERNATIONAL | 57 | 3851 | — | — | — | — |

Table 6B. College Station (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| RS610 | Tx. Agri. Exp. Sta. | 58 | 3765 | 73 | 5542 | 76 | 5216 |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | 59 | 3763 | — | — | — | — |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | 60 | 3755 | — | — | — | — |
| EAST TEXAS 610 | EAST TEXAS SEED COMPANY | 61 | 3711 | — | — | — | — |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 62 | 3690 | — | — | — | — |
| Maxima | Big Crop Seed, Inc. | 63 | 3655 | — | — | — | — |
| Check 3 | Tx. Agri. Exp. Sta. | 64 | 3605 | — | — | — | — |
| 2665 | Northrup King Company | 65 | 3567 | — | — | — | — |
| GS 712 | ASGROW SEED COMPANY | 66 | 3547 | 76 | 5390 | — | — |
| CHECK 2 | Tx. Agri. Exp. Sta. | 67 | 3527 | 12 | 7031 | 37 | 6575 |
| 4462 | Cargill Hybrid Seeds | 68 | 3498 | 28 | 6742 | — | — |
| SG 922 | Garrison Seed & Company | 69 | 3483 | 44 | 6454 | 39 | 6561 |
| SS69 | Summit Seed Company | 70 | 3420 | 8 | 7232 | — | — |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | 71 | 3413 | — | — | — | — |
| 6670 | Cargill Hybrid Seeds | 72 | 3407 | 18 | 6906 | — | — |
| Rustler | Conlee Seed Company, Inc. | 73 | 3375 | 4 | 7577 | 10 | 7307 |
| T-E X-8768 | TAYLOR-EVANS SEED COMPANY | 74 | 3338 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 75 | 3324 | 77 | 5319 | 42 | 6522 |
| HSC Wings | HyPerformer Seed Company | 76 | 3306 | 53 | 6529 | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 77 | 3291 | 10 | 7074 | — | — |
| AOK11 x R.8505 | Tx. Agri. Exp. Sta. | 78 | 3280 | — | — | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 79 | 3184 | 19 | 6902 | 12 | 7274 |
| S 9750 | Northrup King Company | 80 | 3176 | 34 | 6550 | 4 | 7487 |
| A Var. x RTx435 | Tx. Agri. Exp. Sta. | 81 | 3154 | — | — | — | — |
| ATx2755 x MR103-2B | Tx. Agri. Exp. Sta. | 82 | 3120 | — | — | — | — |
| 3385 | Cargill Hybrid Seeds | 83 | 2901 | — | — | — | — |
| AVG1 x Tx435 | Tx. Agri. Exp. Sta. | 84 | 2876 | — | — | — | — |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | 85 | 2656 | — | — | — | — |

Table 6B. College Station (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 86 | 2619 | 33 | 6561 | 18 | 7070 |
| T-E X-8769 | TAYLOR-EVANS SEED COMPANY | 87 | 2143 | — | — | — | — |
| 1330 DR | Summit Seed Company | — | — | 6 | 7280 | 3 | 7637 |
| COKER 7737 | COKER'S PEDIGREED | — | — | 7 | 7262 | 13 | 7268 |
| GSC 1313 | GroAgri Seed Company | — | — | 16 | 6940 | 40 | 6551 |
| DEKALB DK-49 | DEKALB-PFIZER GENETICS | — | — | 17 | 6921 | 16 | 7158 |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | — | — | 25 | 6776 | 33 | 6645 |
| 1225 DR | Summit Seed Company | — | — | 29 | 6679 | 28 | 6727 |
| DEKALB DK-50 | DEKALB-PFIZER GENETICS | — | — | 30 | 6627 | 1 | 8008 |
| HT126DR | Summit Seed Company | — | — | 36 | 6541 | 50 | 6296 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 50 | 6319 | 44 | 6435 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 61 | 6136 | 54 | 6205 |
| Ranger | Conlee Seed Company, Inc. | — | — | 62 | 6131 | 70 | 5694 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 64 | 6115 | 23 | 6848 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 65 | 6069 | 67 | 5826 |
| COKER 7675 | COKER'S PEDIGREED | — | — | 67 | 5981 | 24 | 6816 |
| A1 x R4317 | Tx. Agri. Exp. Sta. | — | — | 78 | 3352 | 61 | 5957 |
| Number Entries: | | 87 | | 78 | | 76 | |
| Test Mean Yield: | | | 4338 | | 6476 | | 6548 |

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

TABLE 7. AGRONOMIC AND TEST INFORMATION: THRALL

| | |
|----------------------|--|
| TEST: | 1988 Dryland Grain Sorghum Performance Test |
| LOCATION: | Stiles Farm Foundation, Thrall, Texas |
| COOPERATORS: | Dennis Pietsch, Cloyce Coffman, Randy Gaas, and Calvin Rinn |
| SOIL TYPE: | Braynon clay |
| ROW WIDTH: | 38" |
| PREVIOUS CROP: | Corn |
| LAND PREPARATION: | Shredded, disked, chiseled, bedded, and plant |
| DATE PLANTED: | 3-9-88, hand dropped behind a JD7300 Max Emerge 2 |
| PLOT LENGTH: | 30' |
| FERTILIZER: | 460 lb/A of liquid 24-8-0 applied preplant on side of bed |
| HERBICIDE: | 2 pt/A of Bladex (cyanazine) 4L in November, broadcast. 2pt/A Milogard (propazine) + 2pt/A Dual (metolachlor) 8E broadcast at planting. |
| INSECTICIDE: | None |
| RAINFALL: | September 1987 = 2.6"; October 1987 = .40"; November 1987 = 2.40"; December 1987 = 4.2"; January = 1.1"; February = 1.7"; March = 0.90"; April = 1.00"; May = 3.60"; June = 3.40"; July = 1.20"; August = 1.20"; Total = 23.70" (-10.87" from normal yearly rainfall) |
| IRRIGATIONS: | None |
| DATE HARVESTED: | 7-25-88 |
| SIZE HARVESTED PLOT: | 1/500 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 83 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 2 |
| MEAN PLANT POP.: | Estimated to be between 50,000-80,000 plants/A |
| TEST MEAN: | 4,091 lb/A; yields corrected to 13% moisture |
| TEST C. V.: | 13.5 percent |

GENERAL INFORMATION: Nineteen commercial seed companies and the Texas Agricultural Experiment Station entered hybrids into this location which is representative of conditions in the southern Blacklands of Texas. Excellent yields were attained at this test site despite below normal rainfall during the growing season. An excellent seedbed was available for the March 9 planting date. Seedling emergence was good, but a period of cold temperatures in late-March hampered early plant growth. Although periods of hot and dry weather conditions persisted, timely rainfall in May and June ensured continuous plant growth and development.

Johnsongrass was a problem in some portions of Rep III. Roundup was used for spot treatment during the growing season. Some plots were not harvested due to the johnsongrass problem thus, the GLM procedure was used for statistical analysis.

High incidence of MDMV was observed throughout the test and ratings were made by Drs. Toler and Horne of the Department of Plant Pathology and Microbiology, Texas A&M University, College Station, Texas from Rep I.

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER IN. | PLANT HT., IN. | HEAD EXSER- TION, IN. | % STAND | SMUT PER PLOT **** | % DAM- AGE | % LODGE | TEST WT. | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|------------------------------------|----------------------|--------------------------------|------------|-----------------------------|------------------|------------|-------------|--------------------|---------------------|-------------------------------|---------------------------------|
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 91 | 48 | 10 | 96.7 | 0.0 | 0.0 | 0.0 | 59.5 | 13.6 | 75.9 | 5166 | A |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 93 | 55 | 9 | 92.5 | 0.0 | 0.0 | 0.0 | 56.3 | 15.1 | 69.8 | 5104 | A-B |
| GS712 | ASGROW SEED CO. | R | ML | 92 | 50 | 5 | 95.0 | 0.0 | 0.3 | 0.0 | 58.9 | 14.2 | 74.3 | 5010 | A-C |
| Rustler | Conlee Seed Co. | R | ML | 92 | 50 | 6 | 95.0 | 0.0 | 0.7 | 0.0 | 58.9 | 14.4 | 72.0 | 4900 | A-D |
| ORO G XTRA | ORO Hybrids | R | ML | 92 | 50 | 5 | 90.0 | 0.0 | 1.0 | 0.0 | 58.9 | 14.3 | 72.6 | 4888 | A-E |
| W-844-E | George Warner Seed | R | M | 93 | 46 | 6 | 81.7 | 0.0 | 0.0 | 0.0 | 60.2 | 13.6 | 74.8 | 4695 | A-F |
| WAC D701G | SEEDTEC INT. | R | ML | 91 | 48 | 5 | 90.0 | 0.0 | 1.7 | 0.0 | 58.7 | 14.3 | 72.5 | 4681 | A-G |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 90 | 54 | 8 | 93.3 | 0.0 | 0.0 | 1.0 | 57.9 | 13.6 | 74.1 | 4589 | A-H |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 93 | 48 | 7 | 91.7 | 0.0 | 3.3 | 0.0 | 60.7 | 16.7 | 68.4 | 4589 | A-H |
| CHALLENGER XX | BROWNING SEED INC. | R | ML | 91 | 50 | 5 | 95.0 | 0.0 | 0.0 | 0.0 | 59.0 | 13.9 | 73.2 | 4581 | A-H |
| 5572 | Cargill Hybrid | R | ML | 94 | 47 | 5 | 91.7 | 0.0 | 1.0 | 0.0 | 57.6 | 14.4 | 71.4 | 4581 | A-H |
| SG-932 | Garrison Seed & Co. | R | ML | 92 | 49 | 6 | 91.7 | 0.0 | 2.3 | 0.0 | 58.8 | 14.1 | 73.2 | 4574 | A-H |
| HSC Wings | HyPerformer Seed | R | ML | 93 | 48 | 5 | 98.3 | 0.0 | 0.0 | 0.0 | 58.7 | 14.3 | 70.8 | 4573 | A-H |
| HSC Cherokee | HyPerformer Seed | R | M | 92 | 47 | 5 | 96.7 | 0.0 | 0.0 | 0.0 | 60.2 | 13.6 | 75.8 | 4568 | A-H |
| S 9750 | Northrup King Co. | R | L | 92 | 49 | 7 | 90.0 | 0.0 | 0.0 | 0.0 | 59.0 | 14.6 | 73.5 | 4557 | A-H |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 91 | 57 | 10 | 95.0 | 0.0 | 0.0 | 0.0 | 59.0 | 13.0 | 76.0 | 4555 | A-H |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 95 | 52 | 6 | 91.7 | 0.0 | 0.0 | 0.0 | 58.5 | 16.4 | 65.9 | 4535 | A-I |
| SS69 | Summit Seed Co. | R | ML | 92 | 48 | 5 | 95.0 | 0.0 | 0.0 | 0.0 | 58.1 | 13.9 | 70.7 | 4485 | A-J |
| Exp. 3141 | GroAgri Seed Co. | R | M | 92 | 49 | 6 | 91.7 | 0.0 | 0.0 | 0.0 | 60.3 | 13.6 | 73.6 | 4482 | A-J |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 94 | 50 | 6 | 96.7 | 0.0 | 0.7 | 0.0 | 60.4 | 13.8 | 72.9 | 4480 | A-J |
| 2665 | Northrup King Co. | R | ML | 92 | 46 | 5 | 95.0 | 0.0 | 0.0 | 0.0 | 59.9 | 14.3 | 73.4 | 4434 | A-J |
| Wx 88117 | George Warner Seed | R | ML | 92 | 52 | 6 | 90.0 | 0.0 | 1.7 | 0.0 | 60.6 | 13.7 | 74.2 | 4406 | A-J |
| DK 775 | Douglass W. King | R | M | 93 | 49 | 2 | 90.0 | 0.0 | 1.7 | 0.0 | 60.4 | 14.5 | 73.9 | 4350 | A-J |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 93 | 43 | 5 | 91.7 | 0.0 | 0.0 | 0.0 | 59.5 | 13.8 | 72.0 | 4306 | A-K |
| T-E Y75 | TAYLOR-EVANS SEED | R | M | 93 | 47 | 6 | 90.0 | 0.0 | 0.0 | 0.0 | 60.1 | 14.1 | 73.2 | 4290 | A-K |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 92 | 45 | 6 | 91.7 | 0.0 | 0.0 | 0.0 | 57.0 | 13.7 | 70.9 | 4267 | A-K |
| ET 610 | EAST TEXAS SEED CO. | R | M | 94 | 49 | 6 | 91.7 | 0.0 | 0.0 | 0.0 | 58.4 | 13.9 | 68.2 | 4260 | A-K |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 93 | 48 | 5 | 90.0 | 0.0 | 0.0 | 0.0 | 58.2 | 14.1 | 71.1 | 4249 | A-K |
| DK 801X | Douglass W. King | R | M | 91 | 49 | 5 | 90.0 | 0.0 | 0.0 | 0.0 | 59.3 | 14.4 | 71.9 | 4242 | A-K |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 93 | 51 | 4 | 91.7 | 0.0 | 0.0 | 0.0 | 56.1 | 15.9 | 67.1 | 4232 | A-K |
| 6670 | Cargill Hybrid | R | ML | 93 | 49 | 5 | 86.7 | 0.0 | 3.3 | 0.0 | 58.5 | 14.3 | 70.6 | 4215 | A-K |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 91 | 45 | 6 | 86.7 | 0.0 | 0.0 | 0.0 | 56.8 | 13.8 | 69.7 | 4210 | A-K |
| XS 8761 EX | Summit Seed Co. | R | M | 92 | 49 | 4 | 91.7 | 0.0 | 0.0 | 0.0 | 59.7 | 14.3 | 72.4 | 4201 | A-K |
| 4462 | Cargill Hybrid | R | M | 91 | 51 | 6 | 93.3 | 0.0 | 0.0 | 0.0 | 59.6 | 14.2 | 74.8 | 4199 | A-L |
| ORO BARON | ORO Hybrids | R | ML | 92 | 45 | 6 | 88.3 | 0.0 | 0.0 | 0.0 | 59.4 | 13.5 | 72.1 | 4195 | A-L |
| ATx626 x R8503 | Tx. Agri. Exp. Sta. | R | M | 93 | 51 | 7 | 90.0 | 0.0 | 0.0 | 0.0 | 59.4 | 14.2 | 75.4 | 4178 | A-M |
| F-524 | FRONTIER SEED CO. | R | ML | 94 | 45 | 5 | 88.3 | 0.0 | 3.3 | 0.0 | 59.0 | 14.7 | 70.1 | 4175 | A-M |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 93 | 46 | 5 | 93.3 | 0.0 | 0.0 | 0.0 | 60.1 | 14.7 | 72.2 | 4164 | A-M |
| DK 760DR | Douglass W. King | R | M | 92 | 48 | 6 | 92.5 | 0.0 | 0.0 | 0.0 | 58.8 | 14.1 | 70.8 | 4153 | A-M |
| WAC 686 | SEEDTEC INT. | R | M | 95 | 45 | 4 | 88.3 | 0.0 | 0.0 | 0.0 | 60.0 | 14.0 | 71.7 | 4133 | A-M |

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION, IN. | % STAND | SMUT PER PLOT **** | % MIDGE DAM- AGE | % LODGE | TEST WT. | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|--------------------------------|------------|-----------------------------|---------------------------|------------|-------------|--------------------|------------------|-------------------------------|---------------------------------|
| DN 31 | DyNA Seeds | R | M | 92 | 47 | 6 | 91.7 | 0.0 | 7.0 | 0.0 | 57.6 | 14.5 | 68.0 | 4131 | A-M |
| Towhead | Conlee Seed Co. | W | M | 92 | 49 | 8 | 95.0 | 0.0 | 0.0 | 0.0 | 59.4 | 14.7 | 72.9 | 4127 | A-M |
| KS 737 | Northrup King Co. | R | ML | 90 | 47 | 9 | 90.0 | 0.5 | 0.0 | 0.0 | 59.3 | 15.0 | 69.1 | 4127 | A-M |
| T-E Y-77 | TAYLOR-EVANS SEED | R | ML | 93 | 47 | 6 | 90.0 | 0.0 | 6.7 | 0.0 | 57.9 | 14.6 | 68.9 | 4115 | A-M |
| 3385 | Cargill Hybrid | R | ME | 87 | 46 | 7 | 95.0 | 0.0 | 0.0 | 0.0 | 58.6 | 13.6 | 69.9 | 4112 | A-M |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 94 | 53 | 9 | 90.0 | 0.0 | 0.0 | 1.7 | 58.7 | 14.6 | 68.4 | 4095 | A-M |
| ST-3258 | SEEDTEC INT. | R | ME | 93 | 49 | 6 | 90.0 | 0.0 | 0.0 | 0.0 | 60.5 | 14.2 | 71.3 | 4076 | A-M |
| DK 776 | Douglass W. King | R | M | 93 | 46 | 3 | 85.0 | 0.0 | 0.0 | 0.0 | 59.4 | 13.5 | 74.4 | 4074 | A-M |
| T-E Y42 | TAYLOR-EVANS SEED | R | ME | 88 | 45 | 7 | 93.3 | 0.0 | 0.0 | 0.0 | 55.3 | 13.4 | 66.9 | 4053 | A-M |
| SG-922 | Garrison Seed & Co. | R | ML | 94 | 44 | 7 | 88.3 | 0.0 | 0.0 | 0.0 | 56.0 | 13.9 | 68.6 | 4045 | A-M |
| ATx2755 x MR101-5 | Tx. Agri. Exp. Sta. | M | ML | 92 | 50 | 8 | 78.3 | 0.0 | 0.0 | 0.0 | 59.0 | 12.6 | 72.4 | 4040 | A-M |
| ATx629 x R8503 | Tx. Agri. Exp. Sta. | R | M | 91 | 49 | 7 | 88.3 | 1.0 | 0.0 | 0.0 | 57.8 | 14.1 | 75.2 | 4028 | A-M |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 96 | 56 | 7 | 82.5 | 0.0 | 2.5 | 0.0 | 59.0 | 15.6 | 67.2 | 3980 | B-M |
| 3308 | SEEDTEC INT. | R | M | 91 | 47 | 5 | 91.7 | 0.0 | 0.0 | 0.0 | 59.5 | 13.4 | 72.9 | 3970 | B-M |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 94 | 55 | 8 | 83.3 | 0.0 | 0.0 | 0.0 | 56.2 | 13.3 | 74.1 | 3957 | B-M |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 91 | 47 | 6 | 86.7 | 0.0 | 0.0 | 0.0 | 59.8 | 14.4 | 75.1 | 3930 | B-M |
| A1 x R3224 (T) | Tx. Agri. Exp. Sta. | R | ML | 95 | 49 | 5 | 90.0 | 0.0 | 0.0 | 0.0 | 56.2 | 15.2 | 62.7 | 3896 | C-M |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 100 | 54 | 7 | 90.0 | 0.0 | 0.0 | 0.0 | 58.1 | 16.5 | 65.4 | 3886 | C-M |
| Wrangler II | Conlee Seed Co. | M | ML | 92 | 49 | 6 | 85.0 | 0.0 | 0.0 | 0.0 | 57.4 | 14.2 | 70.6 | 3777 | D-M |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 96 | 47 | 6 | 75.0 | 0.0 | 0.0 | 0.0 | 57.6 | 14.8 | 69.2 | 3730 | D-M |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 96 | 55 | 6 | 81.7 | 0.0 | 8.3 | 0.0 | 57.4 | 15.6 | 64.2 | 3713 | E-M |
| DEKALB P-7728-X | DEKALB-PFIZER GEN. | R | M | 96 | 50 | 8 | 90.0 | 0.0 | 6.7 | 0.0 | 59.8 | 15.9 | 66.3 | 3700 | F-M |
| T-E X-8761 | TAYLOR-EVANS SEED | R | ME | 90 | 37 | 4 | 90.0 | 0.0 | 0.0 | 0.0 | 57.6 | 12.9 | 70.6 | 3696 | F-M |
| Pioneer hybrid 8452 | Pioneer Hi-Bred | R | M | 92 | 45 | 7 | 90.0 | 0.0 | 0.0 | 0.3 | 57.5 | 14.9 | 69.3 | 3681 | F-M |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 93 | 62 | 8 | 90.0 | 0.0 | 4.0 | 0.0 | 59.3 | 13.9 | 72.8 | 3678 | F-M |
| Exp. 3142 | GroAgri Seed Co. | R | M | 91 | 37 | 4 | 88.3 | 0.0 | 0.0 | 0.0 | 56.8 | 12.8 | 67.7 | 3649 | F-M |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 93 | 49 | 5 | 85.0 | 0.0 | 0.0 | 0.0 | 57.9 | 14.4 | 70.4 | 3623 | F-M |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 92 | 42 | 6 | 80.0 | 0.0 | 0.7 | 0.0 | 55.9 | 13.9 | 70.0 | 3615 | F-M |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | R | ML | 90 | 53 | 8 | 90.0 | 0.0 | 0.0 | 0.0 | 61.7 | 14.2 | 76.1 | 3591 | F-M |
| 630 | Cargill Hybrid | R | ME | 91 | 45 | 6 | 88.3 | 0.0 | 0.0 | 0.0 | 60.3 | 13.9 | 73.8 | 3581 | F-M |
| XP 4147X | ASGROW SEED CO. | R | ME | 85 | 43 | 9 | 88.3 | 0.0 | 0.0 | 0.0 | 60.3 | 12.9 | 72.7 | 3552 | F-M |
| T-E Dinero | TAYLOR-EVANS SEED | R | M | 92 | 43 | 5 | 91.7 | 0.0 | 0.7 | 0.0 | 57.0 | 14.1 | 68.9 | 3551 | F-M |
| X62830 | SEEDTEC INT. | R | L | 99 | 52 | 1 | 85.0 | 0.0 | 8.3 | 1.0 | 58.8 | 14.6 | 64.8 | 3538 | F-M |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 94 | 47 | 3 | 86.7 | 0.0 | 9.0 | 0.0 | 57.5 | 15.3 | 63.4 | 3511 | G-M |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 92 | 49 | 9 | 93.3 | 0.0 | 0.0 | 0.0 | 59.5 | 15.4 | 70.7 | 3509 | G-M |
| T-E X-8764 | TAYLOR-EVANS SEED | R | ME | 89 | 42 | 6 | 86.7 | 0.0 | 0.0 | 0.0 | 57.4 | 13.6 | 71.4 | 3502 | H-M |
| XP5017X | ASGROW SEED CO. | R | ML | 97 | 50 | 7 | 93.3 | 0.0 | 6.7 | 0.0 | 58.8 | 15.5 | 62.9 | 3464 | H-M |
| A B201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 91 | 51 | 7 | 86.7 | 0.0 | 0.7 | 0.0 | 58.9 | 13.2 | 73.6 | 3458 | H-M |
| Exp. 3139 | GroAgri Seed Co. | R | M | 95 | 45 | 7 | 90.0 | 0.0 | 8.3 | 0.0 | 55.8 | 14.6 | 65.3 | 3371 | I-M |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | R | M | 100 | 40 | 4 | 87.5 | 0.0 | 2.5 | 0.0 | 60.8 | 14.6 | 66.1 | 3340 | J-M |

Table 7A. GRAIN SORGHUM PERFORMANCE TEST; THRALL, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | MATU- RITY | | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION, IN. | % STAND | SMUT PER PLOT **** | % MIDGE | | TEST WT. | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|-----------------|-----------------------------|------------------|------------------|-----------------------------|----------------------|--------------------------------|------------|-----------------------------|-------------|------------|-------------|--------------------|------------------|-------------------------------|---------------------------------|
| | | GRN CLR ** | CLAS S *** | | | | | | DAM- AGE | % LODGE | | | | | |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | R | M | 93 | 45 | 8 | 82.5 | 0.0 | 0.0 | 0.0 | 59.4 | 13.4 | 72.5 | 3134 | K-M |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 100 | 55 | 5 | 83.3 | 0.0 | 10.0 | 0.0 | 55.1 | 16.5 | 61.8 | 3026 | L-M |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 83 | 49 | 10 | 83.3 | 0.3 | 3.3 | 0.0 | 57.7 | 13.3 | 73.4 | 3010 | M |

TEST MEAN= 4091
 TEST C.V.=13.5
 LSD .05= 892.9

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

* Asgrow Topaz, Funks G-522DR and Texas Seed Co. PS 466 were entered as commercial check hybrids at our discretion. They are intended to be used for comparison purposes only.

** Grain Color : R=Red W=White B=Brown M=Mixed

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

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | 1 | 5166 | 45 | 3363 | 53 | 3809 |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 2 | 5104 | 41 | 3374 | — | — |
| GS 712 | ASGROW SEED COMPANY | 3 | 5010 | 22 | 3801 | — | — |
| Rustler | Conlee Seed Company, Inc. | 4 | 4900 | 14 | 3970 | — | — |
| ORO G XTRA | ORO Hybrids | 5 | 4888 | 48 | 3310 | 35 | 3978 |
| W-844-E | George Warner Seed Company | 6 | 4695 | 51 | 3258 | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 7 | 4681 | 70 | 2911 | 7 | 4478 |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 8 | 4589 | 25 | 2762 | 20 | 4149 |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | 9 | 4589 | — | — | — | — |
| Challenger XX | BROWNING SEED, INC. | 10 | 4581 | — | — | — | — |
| 5572 | Cargill Hybrid Seeds | 11 | 4581 | 19 | 3910 | — | — |
| SG 932 | Garrison Seed & Company | 12 | 4574 | 8 | 4276 | 23 | 4103 |
| HSC Wings | HyPerformer Seed Company | 13 | 4573 | 21 | 3833 | — | — |
| HSC Cherokee | HyPerformer Seed Company | 14 | 4568 | 9 | 4269 | — | — |
| S9750 | Northrup King Company | 15 | 4557 | 43 | 3363 | 15 | 4209 |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 16 | 4555 | — | — | — | — |
| A1 x R2241 | Tx. Agri. Exp. Sta. | 17 | 4535 | — | — | — | — |
| SS69 | Summitt Seed Company | 18 | 4485 | — | — | — | — |
| EX 3141 | GroAgri Seed Company | 19 | 4482 | — | — | — | — |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 20 | 4480 | — | — | — | — |
| 2665 | Northrup King Company | 21 | 4434 | — | — | — | — |
| Wx 88117 | George Warner Seed Company | 22 | 4406 | — | — | — | — |
| DK 775 | Douglass W. King Company | 23 | 4350 | — | — | — | — |
| CHECK 2 | Tx. Agri. Exp. Sta. | 24 | 4306 | 56 | 3134 | 55 | 3771 |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 25 | 4290 | 1 | 4983 | 54 | 3794 |
| CHECK 3 | Tx. Agri. Exp. Sta. | 26 | 4267 | 31 | 3632 | — | — |
| ET 610 | EAST TEXAS SEED COMPANY | 27 | 4260 | — | — | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 28 | 4249 | 2 | 4970 | — | — |
| DK 801 X | Douglass W. King Company | 29 | 4242 | — | — | — | — |

Table 7B. Thrall (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 30 | 4232 | 82 | 2146 | 6 | 4511 |
| 6670 | Cargill Hybrid Seeds | 31 | 4215 | 12 | 4120 | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 32 | 4210 | 73 | 2829 | 50 | 3843 |
| XS8761Ex | Summit Seed Company | 33 | 4201 | — | — | — | — |
| 4462 | Cargill Hybrid Seeds | 34 | 4199 | 37 | 3456 | 78 | 3445 |
| ORO BARON | ORO Hybrids | 35 | 4195 | 6 | 4335 | — | — |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 36 | 4178 | 54 | 3149 | 13 | 4245 |
| F-524 | FRONTIER SEED COMPANY | 37 | 4175 | — | — | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International, Inc. | 38 | 4164 | — | — | — | — |
| DK 760 DR | Douglass W. King Company | 39 | 4153 | — | — | — | — |
| WAC 686 | SEEDTEC INTERNATIONAL | 40 | 4133 | 3 | 4651 | 59 | 3706 |
| DN 31 | DyNA Seeds | 41 | 4131 | — | — | — | — |
| Towhead | Conlee Seed Company, Inc. | 42 | 4127 | — | — | — | — |
| KS 737 | Northrup King Company | 43 | 4127 | — | — | — | — |
| T-E Y-77 | TAYLOR-EVANS SEED COMPANY | 44 | 4115 | — | — | — | — |
| 3385 | Cargill Hybrid Seeds | 45 | 4112 | — | — | 82 | 3393 |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | 46 | 4095 | — | — | — | — |
| ST-3258 | SEEDTEC INTERNATIONAL | 47 | 4076 | — | — | — | — |
| DK 776 | Douglass W. King Company | 48 | 4074 | — | — | — | — |
| T-E Y-42 | TAYLOR-EVANS SEED COMPANY | 49 | 4053 | — | — | — | — |
| SG 922 | Garrison Seed & Company | 50 | 4045 | 29 | 3657 | 52 | 3812 |
| ATx2755 x MR101-5 | Tx. Agri. Exp. Sta. | 51 | 4040 | — | — | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 52 | 4028 | — | — | — | — |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 53 | 3980 | 42 | 3369 | 5 | 4616 |
| 3308 | SEEDTEC INTERNATIONAL | 54 | 3970 | 63 | 2995 | — | — |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 55 | 3957 | 75 | 2751 | 49 | 3858 |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | 56 | 3930 | — | — | — | — |
| A1 x R3224 (T) | Tx. Agri. Exp. Sta. | 57 | 3896 | — | — | — | — |

Table 7B. Thrall (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | 58 | 3886 | — | — | — | — |
| Wrangler II | Conlee Seed Company, Inc. | 59 | 3777 | — | — | — | — |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | 60 | 3730 | — | — | — | — |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 61 | 3713 | — | — | — | — |
| DEKALB P-7728-X | DEKALB-PFIZER GENETICS | 62 | 3700 | — | — | — | — |
| T-E X-8761 | TAYLOR-EVANS SEED COMPANY | 63 | 3696 | — | — | — | — |
| Pioneer® hybrid 8452 | Pioneer Hi-Bred International | 64 | 3681 | — | — | — | — |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 65 | 3678 | 68 | 2939 | 63 | 3677 |
| EX 3142 | GroAgri Seed Company | 66 | 3649 | — | — | — | — |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 67 | 3623 | — | — | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 68 | 3615 | 20 | 3851 | 39 | 3927 |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | 69 | 3591 | — | — | — | — |
| 630 | Cargill Hybrid Seeds | 70 | 3581 | — | — | — | — |
| XP 4147 X | ASGROW SEED COMPANY | 71 | 3552 | — | — | — | — |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | 72 | 3551 | 53 | 3174 | 70 | 3564 |
| X62830 | SEEDTEC INTERNATIONAL | 73 | 3538 | — | — | — | — |
| CHECK 1 | Tx. Agri. Exp. Sta. | 74 | 3511 | — | — | — | — |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | 75 | 3509 | 74 | 2808 | 18 | 4154 |
| T-E X-8764 | TAYLOR-EVANS SEED COMPANY | 76 | 3502 | — | — | — | — |
| XP 5017 X | ASGROW SEED COMPANY | 77 | 3464 | — | — | — | — |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | 78 | 3458 | — | — | — | — |
| EX 3139 | GroAgri Seed Company | 79 | 3371 | — | — | — | — |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | 80 | 3340 | — | — | — | — |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | 81 | 3134 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 82 | 3026 | 49 | 3298 | 1 | 4832 |
| RS610 | Tx. Agri. Exp. Sta. | 83 | 3010 | 83 | 1819 | 90 | 2902 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 4 | 4566 | 57 | 3748 |
| COKER 7737 | COKER'S PEDIGREED | — | — | 5 | 4420 | 36 | 3949 |

Table 7B. Thrall (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|--------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| GSC 1313 | GroAgri Seed Company | — | — | 7 | 4312 | 42 | 3896 |
| 1225DR | HyPerformer Seed Company | — | — | 10 | 4185 | 10 | 4282 |
| T45 | Summit Seed Company | — | — | 11 | 4166 | 56 | 3753 |
| COKER 7675 | COKER'S PEDIGREED | — | — | 30 | 3643 | 19 | 4152 |
| SEEDCO 705 | SEEDCO | — | — | 33 | 3563 | 25 | 2096 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 35 | 3538 | 22 | 4116 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 36 | 3522 | 31 | 4012 |
| A8201-2 | Tx. Agri. Exp. Sta. | — | — | 52 | 3221 | 61 | 3685 |
| 1022 | Cargill Hybrid Seeds | — | — | 55 | 3149 | 58 | 3720 |
| MUSTANG | ASGROW SEED COMPANY | — | — | 58 | 3153 | 80 | 3429 |
| DEKALB DK-49 | DEKALB-PFIZER GENETICS | — | — | 59 | 3051 | 3 | 4668 |
| ATx630 x 8OC2241 | Tx. Agri. Exp. Sta. | — | — | 66 | 2949 | 14 | 4228 |
| SEEDCO 710 | SEEDCO | — | — | 67 | 2947 | 32 | 3998 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 72 | 2847 | 24 | 4099 |
| A1 x R3224 | Tx. Agri. Exp. Sta. | — | — | 76 | 2675 | 74 | 3473 |
| A35 x Tx7078 | Tx. Agri. Exp. Sta. | — | — | 77 | 2582 | 83 | 3316 |
| Number Entries: | | 83 | | 90 | | 90 | |
| Test Mean Yield: | | | 4091 | | 3432 | | 3844 |

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

TABLE 8. AGRONOMIC AND TEST INFORMATION: McKINNEY

| | |
|----------------------|---|
| TEST: | 1988 Dryland Grain Sorghum Performance Test |
| LOCATION: | Jerry Standerfer Farm |
| COOPERATORS: | Jerry Standerfer, Ken White, Dennis Pietsch, and Cloyce Coffman |
| SOIL TYPE: | Houston black clay |
| ROW WIDTH: | 30" |
| PREVIOUS CROP: | Wheat |
| LAND PREPARATION: | Chiseled, disked (2), field cultivated |
| DATE PLANTED: | 4-4-88, by hand |
| PLOT LENGTH: | 30' |
| FERTILIZER: | 120 lb/A of 82% anhydrous ammonia in March |
| HERBICIDE: | 2/3 qt/A of Prowl (pendimethalin) + 1/3 pt/A of 2, 4-D amine applied last week of April |
| INSECTICIDE: | 6 lb/A of Counter 15G (terbufos) in seedbed at planting |
| RAINFALL: | April = 1.2"; May = 0.0"; June = 3.9"; July = 3.5"; August = 0.00"; Total = 8.6" |
| IRRIGATIONS: | None |
| DATE HARVESTED: | 8-15&16-88, by hand |
| SIZE HARVESTED PLOT: | 1/500 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 84 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 2 |
| MEAN PLANT POP.: | plants were thinned to approximately 4 plants/foot |
| TEST MEAN: | 5,465 lb/A; yields corrected to 13% moisture |
| TEST C.V.: | 7.2 percent |

GENERAL INFORMATION: This was the first year a grain sorghum performance test was conducted at McKinney. Excellent yields were achieved despite the drought conditions that persisted throughout the growing season.

Rapid seedling emergence resulted from excellent soil moisture at planting and outstanding plant stands were achieved after thinning. Plant growth was briefly retarded in late April and early May due to a combination of dry weather and herbicide damage. An "over the top" herbicide was applied for weed control but due to dry soil conditions, a "buggy whip" appearance occurred thus causing profuse tillering of plants. Rainfall in early June enabled plants to recover and timely rains in June and July ensured continuous plant growth and development.

Charcoal rot and sugarcane rootstock weevil damage was observed in the test block thus accounting for lodging. Midge and bird damage was not observed in the test block

Due to late season rainfall, late maturing hybrids were able to utilize the moisture and express their yield potential whereas the early maturing hybrids potential had already been met.

Table 8A. GRAIN SORGHUM PERFORMANCE TEST; MCKINNEY, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., O.05 **** |
|---------------------|--|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|------------------|---------------|--------------------------------|
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 83 | 53 | 7 | 13 | 0.0 | 0.0 | 56.2 | 12.5 | 71.4 | 6527 | A |
| A1 x Tx430 2665 | Tx. Agri. Exp. Sta. Northrup King Co. | W R | ML L | 81 81 | 51 46 | 4 3 | 33 8 | 0.0 0.0 | 0.0 0.0 | 58.3 60.2 | 13.1 13.0 | 70.5 69.9 | 6300 6278 | A-B A-C |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 77 | 50 | 9 | 7 | 0.0 | 0.0 | 59.5 | 14.7 | 69.6 | 6267 | A-C |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 80 | 54 | 8 | 33 | 0.0 | 0.0 | 60.1 | 11.7 | 77.1 | 6231 | A-C |
| W-844-E | George Warner Seed | R | M | 83 | 47 | 5 | 2 | 0.0 | 0.0 | 59.2 | 12.1 | 75.1 | 6212 | A-C |
| X62830 | SEEDTEC INT. | R | M | 85 | 53 | 3 | 22 | 0.0 | 0.0 | 59.1 | 12.2 | 74.7 | 6199 | A-C |
| WAC 686 | SEEDTEC INT. | R | M | 83 | 48 | 5 | 3 | 0.0 | 0.0 | 59.0 | 12.2 | 72.8 | 6144 | A-D |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 85 | 48 | 4 | 0 | 0.0 | 0.0 | 59.7 | 12.4 | 69.9 | 6099 | A-E |
| Towhead | Conlee Seed Co. | W | M | 84 | 50 | 5 | 3 | 0.0 | 0.0 | 59.8 | 13.2 | 71.8 | 6093 | A-E |
| Rustler | Conlee Seed Co. | R | ML | 82 | 48 | 3 | 18 | 0.0 | 0.0 | 58.1 | 12.5 | 71.4 | 6092 | A-E |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 87 | 53 | 6 | 18 | 0.0 | 0.0 | 60.6 | 12.8 | 71.6 | 6087 | A-E |
| ATx2752 x GR101-5 | Tx. Agri. Exp. Sta. | R | ML | 82 | 52 | 5 | 15 | 0.0 | 0.0 | 61.3 | 12.7 | 74.0 | 6087 | A-E |
| Pioneer hybrid 8452 | Pioneer Hi-Bred | R | M | 81 | 44 | 6 | 2 | 0.0 | 0.0 | 59.2 | 13.1 | 69.7 | 6072 | A-E |
| East Texas 610 | EAST TEXAS SEED CO. | R | M | 82 | 48 | 4 | 17 | 0.0 | 0.0 | 59.4 | 12.8 | 69.5 | 6061 | A-E |
| ATx378 x GR103-2 | Tx. Agri. Exp. Sta. | R | ML | 79 | 51 | 4 | 17 | 0.0 | 0.0 | 57.5 | 12.0 | 70.5 | 6056 | A-E |
| WAC D701G | SEEDTEC INT. | R | ML | 83 | 47 | 4 | 23 | 0.0 | 0.0 | 59.1 | 13.0 | 69.9 | 6037 | A-F |
| Osage | ASGROW SEED CO. | R | ML | 82 | 49 | 5 | 6 | 0.0 | 0.0 | 59.2 | 11.9 | 74.9 | 6036 | A-F |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 81 | 53 | 5 | 20 | 0.0 | 0.0 | 58.6 | 12.2 | 74.0 | 6035 | A-F |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 82 | 61 | 6 | 47 | 0.0 | 0.0 | 58.0 | 12.1 | 75.1 | 6017 | A-G |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 85 | 50 | 4 | 20 | 0.0 | 0.0 | 59.4 | 13.7 | 67.8 | 5989 | A-H |
| W-632-W | George Warner Seed | W | M | 83 | 50 | 6 | 5 | 0.0 | 0.0 | 59.9 | 13.6 | 69.4 | 5947 | A-H |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 83 | 46 | 4 | 6 | 0.0 | 0.0 | 60.7 | 12.7 | 73.5 | 5887 | A-I |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 84 | 54 | 7 | 18 | 0.0 | 0.0 | 58.6 | 12.3 | 74.9 | 5866 | A-J |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 80 | 46 | 6 | 12 | 0.0 | 0.0 | 60.0 | 12.2 | 74.0 | 5837 | A-K |
| EX 3141 | GroAgri Seed Co. | R | M | 83 | 47 | 5 | 5 | 0.0 | 0.0 | 59.3 | 12.2 | 74.0 | 5827 | A-K |
| Challenger XX | BROWNING SEED, INC. | R | ML | 82 | 48 | 3 | 18 | 0.0 | 0.0 | 59.2 | 12.4 | 69.3 | 5794 | A-K |
| ATx399 x GR104-6 | Tx. Agri. Exp. Sta. | R | ML | 84 | 48 | 5 | 3 | 0.0 | 0.0 | 60.7 | 12.6 | 74.8 | 5786 | A-K |
| ORO Baron | ORO Hybrids | R | ML | 82 | 48 | 5 | 7 | 0.0 | 0.0 | 59.6 | 12.2 | 73.9 | 5785 | A-K |
| GS712 | ASGROW SEED CO. | R | ML | 83 | 49 | 3 | 8 | 0.0 | 0.0 | 58.7 | 12.4 | 71.1 | 5757 | A-L |
| 5572 | Cargill Hybrid | R | ML | 86 | 47 | 4 | 10 | 0.0 | 0.0 | 58.3 | 12.5 | 68.4 | 5727 | A-M |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 88 | 54 | 5 | 37 | 0.0 | 0.0 | 59.5 | 12.8 | 69.7 | 5726 | A-M |
| Check 2 | Tx. Agri. Exp. Sta. | R | ML | 84 | 46 | 5 | 3 | 0.0 | 0.0 | 56.6 | 12.3 | 68.7 | 5689 | B-N |
| 6670 | Cargill Hybrid | R | ML | 84 | 49 | 4 | 18 | 0.0 | 0.0 | 58.9 | 12.5 | 70.4 | 5675 | B-N |
| AgriPro AP 965 | AgriPro Seeds | R | ML | 83 | 45 | 4 | 7 | 0.0 | 0.0 | 57.6 | 12.2 | 68.7 | 5654 | B-N |
| 4462 | Cargill Hybrid | R | M | 80 | 51 | 6 | 8 | 0.0 | 0.0 | 59.1 | 13.1 | 70.4 | 5630 | B-O |
| W-695-E | George Warner Seed | R | ME | 78 | 51 | 5 | 23 | 0.0 | 0.0 | 59.2 | 11.7 | 74.6 | 5608 | B-P |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 82 | 50 | 6 | 22 | 0.0 | 0.0 | 59.6 | 12.6 | 70.0 | 5601 | B-P |
| AgriPro AP 985 | AgriPro Seeds | R | ML | 83 | 48 | 3 | 12 | 0.0 | 0.0 | 58.9 | 12.7 | 70.0 | 5587 | B-P |
| Check 1 | Tx. Agri. Exp. Sta. | R | ML | 77 | 50 | 8 | 22 | 0.0 | 0.0 | 58.1 | 12.2 | 72.0 | 5534 | B-Q |
| DEKALB X-832-X | DEKALB-PFIZER GEN. | W | ME | 77 | 45 | 6 | 40 | 0.0 | 0.0 | 58.5 | 13.5 | 69.0 | 5498 | B-Q |

Table 8A. GRAIN SORGHUM PERFORMANCE TEST; MCKINNEY, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT., IN. | HEAD EXS., IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. SIG., O.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|---------------------|---------------|--------------------------------|
| KS 737 | Northrup King Co. | R | ML | 82 | 46 | 6 | 5 | 0.0 | 0.0 | 58.1 | 13.1 | 64.7 | 5481 | C-Q |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | M | M | 80 | 48 | 6 | 20 | 0.0 | 0.0 | 59.7 | 12.9 | 72.4 | 5471 | C-Q |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 83 | 47 | 3 | 15 | 0.0 | 0.0 | 58.5 | 12.6 | 69.6 | 5467 | C-Q |
| 3308 | SEEDTEC INT. | R | L | 81 | 48 | 5 | 8 | 0.0 | 0.0 | 58.5 | 12.1 | 73.2 | 5378 | D-R |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 83 | 42 | 5 | 3 | 0.0 | 0.0 | 54.7 | 12.0 | 67.5 | 5377 | D-R |
| Mustang | ASGROW SEED CO. | R | ML | 83 | 43 | 6 | 2 | 0.0 | 0.0 | 58.6 | 12.8 | 68.8 | 5356 | D-R |
| Pioneer hybrid 8493 | Pioneer Hi-Bred | R | M | 79 | 45 | 6 | 5 | 0.0 | 0.0 | 57.8 | 12.6 | 71.5 | 5350 | D-R |
| SS69 | Summit Seed Co. | R | ML | 84 | 47 | 4 | 38 | 0.0 | 0.0 | 58.7 | 12.7 | 66.6 | 5347 | D-R |
| Topaz | ASGROW SEED CO. | R | ML | 83 | 46 | 5 | 4 | 0.0 | 0.0 | 59.7 | 12.3 | 70.1 | 5327 | E-R |
| ATx399 x GR101-4 | Tx. Agri. Exp. Sta. | M | ML | 85 | 45 | 7 | 5 | 0.0 | 0.0 | 58.5 | 12.0 | 71.1 | 5295 | E-S |
| ATx2752 x GR105-8 | Tx. Agri. Exp. Sta. | R | ML | 84 | 52 | 7 | 17 | 0.0 | 0.0 | 60.6 | 12.5 | 68.9 | 5290 | E-S |
| Wrangler II | Conlee Seed Co. | M | ML | 79 | 51 | 5 | 43 | 0.0 | 0.0 | 57.9 | 12.1 | 72.2 | 5285 | E-S |
| XP5017x | ASGROW SEED CO. | R | ML | 86 | 49 | 7 | 3 | 0.0 | 0.0 | 59.4 | 13.2 | 68.1 | 5240 | F-T |
| DN 31 | DyNA Seeds | R | M | 82 | 46 | 6 | 7 | 0.0 | 0.0 | 58.1 | 12.2 | 68.3 | 5237 | F-T |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 80 | 50 | 5 | 27 | 0.0 | 0.0 | 58.8 | 12.9 | 71.8 | 5213 | G-T |
| S734GR | Northrup King Co. | R | ML | 84 | 45 | 5 | 6 | 0.0 | 0.0 | 58.3 | 12.7 | 66.9 | 5199 | H-T |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 83 | 45 | 5 | 0 | 0.0 | 0.0 | 60.1 | 12.9 | 69.0 | 5112 | I-U |
| Wx88152 | George Warner Seed | R | ME | 79 | 48 | 6 | 13 | 0.0 | 0.0 | 57.9 | 12.0 | 71.2 | 5101 | I-U |
| ORO Exp.8801Yx | ORO Hybrids | W | ML | 84 | 46 | 6 | 13 | 0.0 | 0.0 | 56.0 | 12.5 | 68.2 | 5096 | I-U |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 81 | 48 | 5 | 13 | 0.0 | 0.0 | 59.7 | 12.9 | 71.8 | 5094 | I-U |
| ORO Exp.8704x | ORO Hybrids | R | M | 81 | 43 | 6 | 5 | 0.0 | 0.0 | 57.4 | 12.3 | 68.0 | 5079 | I-U |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 77 | 51 | 6 | 27 | 0.0 | 0.0 | 58.5 | 12.0 | 73.3 | 5077 | I-U |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | R | ML | 81 | 48 | 6 | 37 | 0.0 | 0.0 | 61.0 | 12.4 | 75.4 | 5070 | J-U |
| 3385 | Cargill Hybrid | R | ME | 75 | 45 | 5 | 3 | 0.0 | 0.0 | 58.1 | 12.6 | 66.9 | 5039 | K-U |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 79 | 57 | 7 | 33 | 0.0 | 0.0 | 58.8 | 12.2 | 71.6 | 5027 | K-U |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | R | M | 82 | 41 | 6 | 0 | 0.0 | 0.0 | 58.8 | 11.9 | 71.2 | 4969 | L-U |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 73 | 47 | 8 | 18 | 0.0 | 0.0 | 55.5 | 11.5 | 71.4 | 4961 | L-U |
| 630 | Cargill Hybrid | R | ME | 75 | 46 | 5 | 43 | 0.0 | 0.0 | 58.6 | 13.1 | 69.0 | 4926 | M-U |
| 2244 | Northrup King Co. | R | M | 73 | 39 | 8 | 28 | 0.0 | 0.0 | 57.0 | 11.4 | 72.5 | 4920 | M-U |
| T45 | Summit Seed Co. | R | ME | 79 | 43 | 7 | 8 | 0.0 | 0.0 | 56.9 | 13.3 | 64.4 | 4880 | N-U |
| XP4147x | ASGROW SEED CO. | R | ME | 74 | 40 | 10 | 5 | 0.0 | 0.0 | 60.1 | 12.2 | 69.4 | 4877 | N-U |
| DEKALB DK-37 | DEKALB-PFIZER GEN. | R | ME | 75 | 47 | 7 | 47 | 0.0 | 0.0 | 56.7 | 12.5 | 69.0 | 4840 | O-U |
| T-E TUFF | TAYLOR-EVANS SEED | R | ME | 78 | 37 | 6 | 0 | 0.0 | 0.0 | 54.5 | 12.0 | 64.5 | 4812 | P-U |
| T-E X-8761 | TAYLOR-EVANS SEED | R | ME | 77 | 37 | 5 | 0 | 0.0 | 0.0 | 55.9 | 11.6 | 67.7 | 4807 | P-U |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 81 | 49 | 6 | 58 | 0.0 | 0.0 | 56.2 | 11.7 | 74.2 | 4771 | Q-U |
| T-E 35 | TAYLOR-EVANS SEED | R | ME | 74 | 38 | 8 | 3 | 0.0 | 0.0 | 56.3 | 11.7 | 70.0 | 4652 | R-U |
| T-E 42 | TAYLOR-EVANS SEED | R | ME | 76 | 41 | 7 | 3 | 0.0 | 0.0 | 56.4 | 12.4 | 64.5 | 4595 | R-U |
| T-E Y-50 | TAYLOR-EVANS SEED | W | ME | 75 | 43 | 6 | 5 | 0.0 | 0.0 | 54.9 | 12.1 | 64.4 | 4581 | R-U |
| GSC 1153 | GroAgri Seed Co. | R | E | 74 | 42 | 8 | 12 | 0.0 | 0.0 | 57.6 | 12.2 | 68.6 | 4496 | S-U |
| EX 3137 | GroAgri Seed Co. | R | ME | 75 | 38 | 5 | 1 | 0.0 | 0.0 | 58.4 | 11.5 | 69.4 | 4489 | S-U |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 82 | 44 | 4 | 5 | 0.0 | 0.0 | 57.1 | 12.2 | 59.2 | 4463 | T-U |

Table 8A. GRAIN SORGHUM PERFORMANCE TEST; MCKINNEY, TEXAS 1988

| HYBRID * | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLT. HT.. IN. | HEAD EXS.. IN. | LODGE % | MIDGE DAM- AGE % | BIRD DAMAGE % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | YIELD lb/A | STAT. |
|-----------------|-----------------------------|------------------|-------------------------------|-----------------------------|---------------------|----------------------|------------|---------------------------|---------------------|----------------------|--------------------|------------------|---------------|-----------------------|
| | | | | | | | | | | | | | | SIG., 0.05 **** |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 79 | 47 | 4 | 40 | 0.0 | 0.0 | 59.1 | 12.3 | 73.3 | 4379 | U |
| A8618 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 82 | 44 | 7 | 38 | 0.0 | 0.0 | 58.0 | 12.4 | 69.3 | 4369 | U |

TEST MEAN= 5466 TEST C.V.= 7.2 LSD .05=638.4

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

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

** Grain Color : R=Red W=White B=Brown M=Mixed

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

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

TABLE 9. AGRONOMIC AND TEST INFORMATION: LUBBOCK-IRRIGATED

| | |
|----------------------|---|
| TEST: | 1988 Irrigated Grain Sorghum Performance Test |
| LOCATION: | Texas A&M University Agricultural Research and Extension Center, Lubbock, Texas |
| COOPERATORS: | Darrell Rosenow and Charles Woodfin |
| SOIL TYPE: | Olton loam |
| ROW WIDTH: | 40" |
| PREVIOUS CROP: | Cotton |
| LAND PREPARATION: | disked, chiseled, and bedded |
| DATE PLANTED: | 5-13-88, cone planter |
| PLOT LENGTH: | 16' |
| FERTILIZER: | 120-40-0 preplant |
| HERBICIDE: | 1.5 lb/A A.I.Milogard (propazine) pre-emerge |
| INSECTICIDE: | Applied 7 lb/A of Counter 15G (terbufos) at planting for greenbug control |
| RAINFALL: | April = 1.41"; May = 2.29"; June = 1.56", July = 3.35"; August = .42"; September = 2.48"; Total = 11.51 |
| IRRIGATIONS: | 5-2-88: 5" (preplant); 6-28-88: 4"; 8-1-88: 5" |
| DATE HARVESTED: | 10-5-88 by plot combine |
| SIZE HARVESTED PLOT: | Harvested middle row of each plot or 1/817 acre - 1 row, 16' in length |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 96 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 3 |
| MEAN PLANT POP.: | Thinned June 7 to 3" spacing = 52,000 plants/A |
| TEST MEAN: | 6,671 lb/A |
| TEST C. V.: | 11.8 percent |

GENERAL INFORMATION: Generally a good test with good stands and good yield expression. A few plots along the west side had some stand problems, apparently due to herbicide carry-over accentuated by cool, wet weather in the two weeks after planting. The incidence of bird damage was minimal with some of the early maturing hybrids having damage. There was essentially no midge or greenbug damage. Rainfall during the growing season was near normal, but distribution was not ideal. The test block received 3 rain periods: 1.67" on May 28, 29, 30; 4.54" between June 26 and July 10; and 1.60" in early September, with dry periods between. There was very little lodging, with only a few plots showing some moisture stress type lodging. All plots were combine harvested and lodged plants were not harvested.

Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST:LUBBOCK,TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | MIDGE DAM- AGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A | STAT. SIG., O.05 **** |
|--------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|---------------------------|----------------------|--------------------|------------------------------|--------------------------------|
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 73 | 55 | 3 | 0.0 | 0.0 | 58.1 | 10.5 | 8329 | A |
| AP 965 | AgriPro Seeds | R | ML | 72 | 45 | 2 | 0.0 | 0.0 | 55.4 | 10.8 | 8085 | A-B |
| WAC 715DR | SEEDTEC INT. | R | ML | 73 | 56 | 3 | 0.0 | 0.0 | 56.9 | 10.5 | 8056 | A-C |
| S9750 | Northrup King Co. | R | L | 74 | 52 | 1 | 0.0 | 0.0 | 57.6 | 10.9 | 7996 | A-D |
| SG 922 | Garrison Seed & Co. | R | ML | 71 | 48 | 2 | 0.0 | 0.0 | 56.8 | 10.5 | 7986 | A-E |
| A1 x R8505 | Tx. Agri. Exp. Sta. | W | ML | 72 | 52 | 3 | 1.7 | 0.0 | 60.2 | 11.2 | 7920 | A-F |
| A1 x GR108-4 | Tx. Agri. Exp. Sta. | R | ML | 70 | 54 | 3 | 0.0 | 3.3 | 59.2 | 11.2 | 7915 | A-F |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 68 | 48 | 7 | 0.0 | 1.0 | 59.8 | 10.7 | 7914 | A-F |
| SG 932 | Garrison Seed & Co. | R | ML | 73 | 50 | 2 | 0.0 | 0.0 | 57.9 | 10.8 | 7807 | A-G |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 74 | 54 | 6 | 0.0 | 0.0 | 60.2 | 11.0 | 7740 | A-H |
| 1022 | Cargill Hybrid | R | ME | 64 | 45 | 5 | 3.3 | 3.3 | 61.8 | 11.0 | 7674 | A-I |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 73 | 49 | 2 | 0.0 | 0.0 | 58.5 | 10.8 | 7441 | A-J |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 68 | 51 | 3 | 1.7 | 0.0 | 57.3 | 10.8 | 7436 | A-K |
| 2665 | Northrup King Co. | R | ML | 75 | 44 | 1 | 0.0 | 0.0 | 56.9 | 10.6 | 7333 | A-L |
| ATx399 x Tx2737 | Tx. Agri. Exp. Sta. | R | ML | 74 | 44 | 3 | 0.0 | 0.0 | 58.2 | 10.9 | 7312 | A-L |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 70 | 41 | 4 | 0.0 | 0.0 | 55.8 | 10.0 | 7308 | A-L |
| AP 985 | AgriPro Seeds | R | ML | 73 | 47 | 2 | 0.0 | 0.0 | 58.6 | 10.7 | 7302 | A-L |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | W | ML | 70 | 52 | 5 | 0.0 | 0.0 | 59.8 | 11.2 | 7271 | A-M |
| ORD G XTRA | ORD Hybrids | R | ML | 73 | 48 | 2 | 0.0 | 0.0 | 60.0 | 10.9 | 7251 | A-M |
| A.Var x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 73 | 54 | 5 | 0.0 | 0.0 | 55.2 | 10.6 | 7214 | A-M |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 73 | 58 | 6 | 0.0 | 0.0 | 56.5 | 10.5 | 7211 | A-M |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 73 | 48 | 2 | 0.0 | 0.0 | 59.9 | 11.2 | 7150 | A-N |
| Check 1 | Tx. Agri. Exp. Sta. | R | | 67 | 48 | 7 | 5.0 | 0.0 | 60.6 | 10.9 | 7130 | A-N |
| ATx623 x GR105-6 | Tx. Agri. Exp. Sta. | R | ML | 73 | 46 | 3 | 0.0 | 0.0 | 58.6 | 10.9 | 7127 | A-N |
| ORD Baron | ORD Hybrids | R | ML | 76 | 46 | 2 | 0.0 | 0.0 | 58.3 | 10.8 | 7099 | A-N |
| GS 712 | ASGROW SEED CO. | R | ML | 74 | 48 | 2 | 0.0 | 0.0 | 58.6 | 10.9 | 7097 | A-N |
| DR 1125 | Cargill Hybrid | R | ML | 73 | 43 | 3 | 0.0 | 0.0 | 55.4 | 10.7 | 7046 | A-N |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 71 | 46 | 1 | 0.0 | 0.0 | 55.9 | 10.5 | 7000 | A-N |
| XS 8761EX | Summit Seed Co. | R | M | 73 | 50 | 1 | 0.0 | 0.0 | 58.1 | 10.9 | 6990 | A-N |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 70 | 54 | 5 | 0.0 | 0.0 | 56.7 | 11.1 | 6956 | A-N |
| Check 2 | Tx. Agri. Exp. Sta. | W | | 75 | 47 | 3 | 0.0 | 0.0 | 60.2 | 10.7 | 6937 | A-N |
| Osage | ASGROW SEED CO. | R | ML | 72 | 48 | 2 | 0.0 | 0.0 | 58.6 | 11.2 | 6853 | A-O |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | R | ML | 75 | 54 | 5 | 0.0 | 0.0 | 57.2 | 10.8 | 6838 | A-O |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 68 | 54 | 5 | 5.0 | 0.0 | 55.8 | 10.7 | 6773 | A-O |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 68 | 52 | 6 | 6.7 | 1.7 | 59.4 | 10.9 | 6749 | A-O |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 71 | 57 | 5 | 0.0 | 0.0 | 56.5 | 10.7 | 6733 | A-O |
| T-E X-8762 | TAYLOR-EVANS SEED | W | M | 75 | 49 | 2 | 0.0 | 0.0 | 56.7 | 10.4 | 6733 | A-O |
| KS 737 | Northrup King Co. | R | ML | 74 | 45 | 1 | 0.0 | 0.0 | 57.4 | 10.3 | 6733 | A-O |
| Rustler | Conlee Seed Co. | R | ML | 74 | 47 | 3 | 0.0 | 0.0 | 58.1 | 10.8 | 6714 | A-O |

Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | MIDGE DAM- AGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A | STAT. SIG., O.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|---------------------------|----------------------|--------------------|------------------------------|--------------------------------|
| T-E X-8727 | TAYLOR-EVANS SEED | R | M | 71 | 47 | 4 | 0.0 | 0.0 | 55.6 | 10.3 | 6710 | A-0 |
| Wx 88105 | George Warner Seed | R | ML | 73 | 46 | 1 | 0.0 | 0.0 | 57.0 | 10.7 | 6689 | B-0 |
| 70 | Cargill Hybrid | R | M | 74 | 42 | 3 | 0.0 | 0.0 | 60.8 | 10.9 | 6681 | B-0 |
| 630 | Cargill Hybrid | R | ME | 64 | 44 | 5 | 6.7 | 3.3 | 59.5 | 11.0 | 6681 | B-0 |
| ATx378 x GR107-3 | Tx. Agri. Exp. Sta. | R | ML | 73 | 43 | 1 | 0.0 | 0.0 | 57.0 | 10.7 | 6665 | B-0 |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 68 | 55 | 5 | 0.0 | 0.0 | 58.7 | 10.8 | 6654 | B-0 |
| 6670 | Cargill Hybrid | R | ML | 73 | 47 | 1 | 0.0 | 0.0 | 58.3 | 11.2 | 6634 | B-0 |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 75 | 55 | 3 | 0.0 | 0.0 | 58.2 | 11.7 | 6622 | B-0 |
| XP 3137x | ASGROW SEED CO. | R | M | 67 | 44 | 9 | 7.7 | 0.0 | 60.6 | 11.0 | 6613 | B-0 |
| Pioneer hybrid 8452 | Pioneer Hi-Bred | R | M | 68 | 43 | 7 | 0.0 | 0.0 | 59.0 | 10.9 | 6605 | B-0 |
| X 62830 | SEEDTEC INT. | R | L | 74 | 55 | 2 | 0.0 | 0.0 | 59.0 | 11.5 | 6566 | B-0 |
| A1 x Tx434 | Tx. Agri. Exp. Sta. | R | ML | 71 | 56 | 6 | 0.0 | 2.7 | 58.2 | 11.0 | 6566 | B-0 |
| A1 x R4317 | Tx. Agri. Exp. Sta. | R | ML | 72 | 54 | 2 | 0.0 | 0.0 | 60.6 | 11.4 | 6546 | B-0 |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | R | ML | 71 | 48 | 2 | 0.0 | 0.0 | 59.7 | 10.9 | 6538 | B-0 |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | R | ML | 68 | 53 | 6 | 12 | 1.7 | 59.2 | 10.8 | 6534 | B-0 |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 68 | 50 | 2 | 0.0 | 5.0 | 58.7 | 10.9 | 6510 | B-0 |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 67 | 50 | 5 | 6.7 | 0.0 | 58.9 | 10.7 | 6484 | B-0 |
| XP 5017x | ASGROW SEED CO. | R | ML | 76 | 50 | 4 | 0.0 | 0.0 | 57.9 | 10.9 | 6465 | B-0 |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | W | ML | 74 | 52 | 4 | 0.0 | 0.0 | 58.6 | 10.9 | 6457 | B-P |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 78 | 50 | 4 | 0.0 | 0.0 | 56.8 | 10.8 | 6442 | C-P |
| 3308 | SEEDTEC INT. | R | M | 71 | 47 | 2 | 0.0 | 0.0 | 59.1 | 11.0 | 6435 | C-P |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | R | ML | 72 | 52 | 3 | 0.0 | 0.0 | 59.8 | 10.9 | 6376 | D-P |
| Wx 88117 | George Warner Seed | R | ML | 74 | 51 | 2 | 0.0 | 0.0 | 59.8 | 11.8 | 6366 | D-P |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 68 | 49 | 4 | 5.0 | 1.0 | 59.5 | 11.2 | 6357 | E-P |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 73 | 46 | 2 | 0.0 | 0.0 | 59.5 | 11.0 | 6343 | F-P |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | W | ML | 68 | 48 | 3 | 1.7 | 0.0 | 58.3 | 11.2 | 6325 | F-P |
| ATx399 x GR104-8 | Tx. Agri. Exp. Sta. | R | ML | 70 | 47 | 2 | 0.0 | 0.0 | 59.2 | 10.8 | 6322 | F-P |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 70 | 49 | 3 | 0.0 | 1.0 | 59.5 | 11.1 | 6269 | G-P |
| 40 | Cargill Hybrid | R | ME | 67 | 43 | 4 | 0.0 | 0.0 | 58.5 | 10.5 | 6266 | G-P |
| Towhead | Conlee Seed Co. | W | M | 75 | 49 | 3 | 0.0 | 0.0 | 58.0 | 10.7 | 6243 | G-P |
| XP 4147x | ASGROW SEED CO. | R | ME | 68 | 42 | 5 | 1.7 | 0.0 | 59.9 | 10.7 | 6217 | G-P |
| A1 x GR108-5 | Tx. Agri. Exp. Sta. | R | ML | 69 | 51 | 3 | 3.3 | 1.7 | 59.2 | 11.1 | 6208 | G-P |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 74 | 48 | 5 | 0.0 | 0.0 | 59.0 | 10.8 | 6208 | G-P |
| A1 x R3224 | Tx. Agri. Exp. Sta. | R | ML | 70 | 46 | 1 | 0.0 | 0.0 | 59.5 | 10.8 | 6187 | G-P |
| ATx399 x GR108-5 | Tx. Agri. Exp. Sta. | R | ML | 72 | 47 | 3 | 0.0 | 0.0 | 57.6 | 10.9 | 6174 | H-P |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | R | M | 70 | 55 | 3 | 5.0 | 0.0 | 57.0 | 10.5 | 6155 | H-P |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | R | ML | 69 | 52 | 5 | 0.0 | 1.3 | 59.8 | 10.8 | 6154 | H-P |
| W-844-E | George Warner Seed | R | M | 73 | 51 | 3 | 0.0 | 0.0 | 60.0 | 10.9 | 6151 | H-P |

Table 9A. IRRIGATED GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | MIDGE DAM- AGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A' | STAT. SIG., 0.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|---------------------------|----------------------|--------------------|-------------------------------|--------------------------------|
| AB201-2 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 64 | 53 | 5 | 1.7 | 0.0 | 57.2 | 10.7 | 6139 | H-P |
| ATx2752 x GR107-4 | Tx. Agri. Exp. Sta. | R | ML | 76 | 48 | 2 | 0.0 | 0.0 | 59.5 | 11.3 | 6136 | H-P |
| Pioneer hybrid 8230 | Pioneer Hi-Bred | W | L | 74 | 48 | 3 | 0.0 | 0.0 | 59.8 | 11.0 | 6088 | I-P |
| T-E Y-101-G | TAYLOR-EVANS SEED | R | M | 73 | 41 | 5 | 0.0 | 0.0 | 57.5 | 10.6 | 6076 | I-P |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | R | M | 76 | 48 | 3 | 0.0 | 0.0 | 57.9 | 10.8 | 6054 | I-P |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 76 | 48 | 1 | 0.0 | 0.0 | 59.8 | 10.8 | 6035 | J-P |
| WAC D7Q1G | SEEDTEC INT. | R | M | 74 | 46 | 1 | 0.0 | 0.0 | 56.3 | 10.7 | 6022 | J-P |
| A1 x TAM428 | Tx. Agri. Exp. Sta. | W | ML | 70 | 53 | 3 | 0.0 | 1.7 | 58.0 | 11.0 | 6020 | J-P |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 63 | 52 | 10 | 10 | 0.0 | 57.6 | 10.7 | 5959 | J-P |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 76 | 46 | 1 | 0.0 | 0.0 | 58.4 | 10.9 | 5900 | J-P |
| Wrangler II | Conlee Seed Co. | R | ML | 69 | 50 | 4 | 0.0 | 1.0 | 55.4 | 10.8 | 5895 | J-P |
| Wx 88116 | George Warner Seed | R | ML | 76 | 51 | 2 | 0.0 | 0.0 | 58.4 | 11.0 | 5815 | J-P |
| ATx2752 x GR105-6 | Tx. Agri. Exp. Sta. | W | ML | 70 | 53 | 3 | 0.0 | 0.0 | 56.2 | 10.5 | 5807 | K-P |
| ATx623 x GR107-4 | Tx. Agri. Exp. Sta. | R | ML | 70 | 53 | 4 | 0.0 | 0.0 | 60.8 | 11.0 | 5802 | L-P |
| ATx2752 x GR108-2 | Tx. Agri. Exp. Sta. | R | ML | 74 | 43 | 3 | 0.0 | 0.0 | 60.4 | 11.0 | 5754 | L-P |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 69 | 54 | 7 | 0.0 | 2.7 | 60.4 | 10.9 | 5656 | M-P |
| ATx623 x GR108-5 | Tx. Agri. Exp. Sta. | R | ML | 73 | 49 | 4 | 0.0 | 0.0 | 61.5 | 11.2 | 5568 | N-P |
| ATx623 x GR107-3 | Tx. Agri. Exp. Sta. | R | ML | 70 | 41 | 2 | 0.0 | 1.7 | 59.8 | 11.2 | 5233 | O-P |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | R | M | 77 | 43 | 5 | 0.0 | 0.0 | 57.2 | 10.9 | 4842 | P |

TEST MEAN= 6671
 TEST C.V.=11.8
 LSD .05=1268.0

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

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

** Grain Color: R=Red W=White B=Brown

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 1 | 8329 | 1 | 6437 | 6 | 6845 |
| AP 865 | AgriPro Seeds | 2 | 8085 | — | — | — | — |
| WAC 715 DR | SEEDTEC INTERNATIONAL | 3 | 8056 | — | — | — | — |
| S9750 | Northrup King Company | 4 | 7996 | — | — | — | — |
| SG 922 | Garrison Seed & Company | 5 | 7986 | 20 | 5706 | 42 | 5979 |
| A1 x R8505 | Tx. Agri. Exp. Sta. | 6 | 7920 | 38 | 5491 | — | — |
| A1 x GR108-4 | Tx. Agri. Exp. Sta. | 7 | 7915 | — | — | — | — |
| A4R x Tx430 | Tx. Agri. Exp. Sta. | 8 | 7914 | 8 | 5970 | 19 | 6397 |
| SG 932 | Garrison Seed & Company | 9 | 7807 | 17 | 5762 | 31 | 6196 |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 10 | 7740 | 59 | 5188 | 2 | 7042 |
| 1022 | Cargill Hybrid Seeds | 11 | 7674 | 61 | 5106 | — | — |
| ATx2752 x TX430 | Tx. Agri. Exp. Sta. | 12 | 7441 | 15 | 5795 | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 13 | 7436 | — | — | — | — |
| 2665 | Northrup King Company | 14 | 7333 | — | — | — | — |
| ATx399 x Tx2737 | Tx. Agri. Exp. Sta. | 15 | 7312 | 37 | 5505 | 32 | 6164 |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 16 | 7308 | 36 | 5536 | 13 | 6521 |
| AP 985 | AgriPro Seeds | 17 | 7302 | — | — | — | — |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 18 | 7271 | — | — | — | — |
| ORO G XTRA | ORO Hybrids | 19 | 7251 | 22 | 5657 | 3 | 7022 |
| A.Var x RTx435 | Tx. Agri. Exp. Sta. | 20 | 7214 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 21 | 7211 | 50 | 5354 | 46 | 5930 |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 22 | 7150 | 58 | 5226 | 15 | 6497 |
| CHECK 1 | Tx. Agri. Exp. Sta. | 23 | 7130 | 5 | 6073 | — | — |
| ATx623 x GR105-6 | Tx. Agri. Exp. Sta. | 24 | 7127 | — | — | — | — |
| ORO BARON | ORO Hybrids | 25 | 7099 | 70 | 4957 | — | — |

Table 9B. Lubbock - Irrigated (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| GS 712 | ASGROW SEED COMPANY | 26 | 7097 | 76 | 4836 | - | - |
| DR 1125 | Cargill Hybrid Seeds | 27 | 7046 | 29 | 5603 | - | - |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 28 | 7000 | 31 | 5583 | 73 | 5188 |
| XS8761EX | Summit Seed Company | 29 | 6990 | - | - | - | - |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 30 | 6956 | 7 | 6008 | - | - |
| CHECK 2 | Tx. Agri. Exp. Sta. | 31 | 6937 | - | - | - | - |
| OSAGE | ASGROW SEED COMPANY | 32 | 6853 | 49 | 5357 | - | - |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | 33 | 6838 | 13 | 5836 | - | - |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 34 | 6773 | 12 | 5850 | 66 | 5589 |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | 35 | 6749 | 19 | 5727 | - | - |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 36 | 6733 | - | - | - | - |
| T-E X-8762 | TAYLOR-EVANS SEED COMPANY | 37 | 6733 | - | - | - | - |
| KS 737 | Northrup King Company | 38 | 6733 | - | - | - | - |
| Rustler | Conlee Seed Company, Inc. | 39 | 6714 | 21 | 5678 | 4 | 6921 |
| T-E X-8727 | TAYLOR-EVANS SEED COMPANY | 40 | 6710 | - | - | - | - |
| Wx88105 | George Warner Seed Company | 41 | 6689 | - | - | - | - |
| 70 | Cargill Hybrid Seeds | 42 | 6681 | - | - | 39 | 6016 |
| 630 | Cargill Hybrid Seeds | 43 | 6681 | - | - | - | - |
| ATx378 x GR107-3 | Tx. Agri. Exp. Sta. | 44 | 6665 | - | - | - | - |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | 45 | 6665 | - | - | - | - |
| 6670 | Cargill Hybrid Seeds | 46 | 6634 | 48 | 5360 | - | - |
| ATx631 x 8OC2241 | Tx. Agri. Exp. Sta. | 47 | 6622 | - | - | - | - |
| XP 3137 X | ASGROW SEED COMPANY | 48 | 6613 | - | - | - | - |
| Pioneer® hybrid 8452 | Pioneer Hi-Bred International, Inc. | 49 | 6605 | - | - | - | - |
| X 62830 | SEEDTEC INTERNATIONAL | 50 | 6566 | - | - | - | - |

Table 9B. Lubbock - Irrigated (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------------|--|----------|--------------|---------|-----------|--------|--------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A1 x Tx434 | Tx. Agri. Exp. Sta. | 51 | 6566 | — | — | — | — |
| A1 x R4317 | Tx. Agri. Exp. Sta. | 52 | 6546 | 3 | 6199 | 9 | 6620 |
| A8201-2 x R6078 | Tx. Agri. Exp. Sta. | 53 | 6538 | — | — | — | — |
| A1 x Tx433 | Tx. Agri. Exp. Sta. | 54 | 6534 | 34 | 5558 | — | — |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 55 | 6510 | 10 | 5914 | 51 | 5855 |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 56 | 6484 | 75 | 4872 | 58 | 5760 |
| XP 5017 X | ASGROW SEED COMPANY | 57 | 6465 | — | — | — | — |
| ATx631 x R.8511 | Tx. Agri. Exp. Sta. | 58 | 6457 | — | — | — | — |
| A2Tx632 x RTx432 3308 | Tx. Agri. Exp. Sta. SEEDTEC INTERNATIONAL | 59 60 | 6442 6435 | — 55 | — 5303 | — — | — — |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | 61 | 6376 | — | — | — | — |
| Wx 88117 | George Warner Seed Company | 62 | 6366 | — | — | — | — |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | 63 | 6357 | 54 | 5323 | 71 | 5335 |
| ATx2752 x R.8503 | Tx. Agri. Exp. Sta. | 64 | 6343 | — | — | — | — |
| A1 x GR105-6 | Tx. Agri. Exp. Sta. | 65 | 6325 | — | — | — | — |
| ATx399 x GR104-8 | Tx. Agri. Exp. Sta. | 66 | 6322 | — | — | — | — |
| A1 x R8507 | Tx. Agri. Exp. Sta. | 67 | 6269 | 26 | 5637 | — | — |
| 40 | Cargill Hybrid Seeds | 68 | 6266 | — | — | — | — |
| Twohead | Conlee Seed Company, Inc. | 69 | 6243 | — | — | — | — |
| AP 4147 X | ASGROW SEED COMPANY | 70 | 6217 | — | — | — | — |
| A1 X GR108-5 | Tx. Agri. Exp. Sta. | 71 | 6208 | — | — | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International | 72 | 6208 | — | — | — | — |
| A1 x R3224 | Tx. Agri. Exp. Sta. | 73 | 6187 | 39 | 5489 | 60 | 5704 |
| ATx399 x GR108-5 | Tx. Agri. Exp. Sta. | 74 | 6174 | — | — | — | — |
| ATx629 x R.8604 | Tx. Agri. Exp. Sta. | 75 | 6155 | — | — | — | — |

Table 9B. Lubbock - Irrigated (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| A8201-2 x R4317 | Tx. Agri. Exp. Sta. | 76 | 6154 | — | — | — | — |
| W-844-E | George Warner Seed Company | 77 | 6151 | 81 | 4063 | — | — |
| A8201-2 x Tx430 | Tx. Agri. Exp. Sta. | 78 | 6139 | — | — | — | — |
| ATx2752 x GR107-4 | Tx. Agri. Exp. Sta. | 79 | 6136 | — | — | — | — |
| Pioneer® hybrid 8230 | Pioneer Hi-Bred International, Inc. | 80 | 6088 | — | — | — | — |
| T-E Y-101-G | TAYLOR-EVANS SEED COMPANY | 81 | 6076 | — | — | — | — |
| A8618 X R.8505 | Tx. Agri. Exp. Sta. | 82 | 6054 | — | — | — | — |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 83 | 6035 | — | — | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 84 | 6022 | 41 | 5460 | 28 | 6260 |
| A1 x TAM 428 | Tx. Agri. Exp. Sta. | 85 | 6020 | 32 | 5568 | — | — |
| RS610 | Tx. Agri. Exp. Sta. | 86 | 5959 | 82 | 4020 | 78 | 4894 |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | 87 | 5900 | — | — | — | — |
| Wrangler II | Conlee Seed Company, Inc. | 88 | 5895 | — | — | — | — |
| Wx 88116 | George Warner Seed Company | 89 | 5815 | — | — | — | — |
| ATx2752 x GR105-6 | Tx. Agri. Exp. Sta. | 90 | 5807 | — | — | — | — |
| ATx623 x GR107-4 | Tx. Agri. Exp. Sta. | 91 | 5802 | — | — | — | — |
| ATx2752 x GR108-2 | Tx. Agri. Exp. Sta. | 92 | 5754 | — | — | — | — |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 93 | 5656 | 56 | 5243 | 68 | 5570 |
| ATx630 x GR108-5 | Tx. Agri. Exp. Sta. | 94 | 5568 | — | — | — | — |
| ATx623 x GR107-3 | Tx. Agri. Exp. Sta. | 95 | 5233 | — | — | — | — |
| A8618 x RTx2817 | Tx. Agri. Exp. Sta. | 96 | 4842 | — | — | — | — |
| TOPAZ | ASGROW SEED COMPANY | — | — | 2 | 6386 | 22 | 6328 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 27 | 5612 | 61 | 5670 |
| T-48 | Summit Seed Company | — | — | 40 | 5476 | 18 | 6455 |
| T-45 | Summit Seed Company | — | — | 45 | 5396 | 47 | 5923 |

Table 9B. Lubbock - Irrigated (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|-----------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 47 | 5384 | 55 | 5799 |
| GSC 1313 | GroAgri Seed Company | — | — | 52 | 5333 | 54 | 5808 |
| HT-126DR | Summit Seed Company | — | — | 63 | 5064 | 37 | 6037 |
| WAC 686 | SEEDTEC INTERNATIONAL | — | — | 64 | 5035 | 36 | 6042 |
| ATx630 x 8OC2241 | Tx. Agri. Exp. Sta. | — | — | 66 | 5012 | 7 | 6782 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 72 | 4940 | 53 | 5839 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 80 | 4331 | 79 | 4808 |
| Number Entries: | | 96 | | 82 | | 80 | |
| Test Mean Yield: | | | 6671 | | 5401 | | 6012 |

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

TABLE 10. AGRONOMIC AND TEST INFORMATION: LUBBOCK-DRYLAND

| | |
|----------------------|--|
| TEST: | 1988 Dryland Grain Sorghum Performance Test |
| LOCATION: | Texas A&M University Agricultural Research and Extension Center, Lubbock, Texas |
| COOPERATOR: | G. C. Peterson and J. W. Jones |
| SOIL TYPE: | Amarillo fine sandy loam |
| ROW WIDTH: | 40" |
| PREVIOUS CROP: | Sorghum |
| LAND PREPARATION: | Shredded sorghum stalks from previous year, chiseled between rows, used sweeps between rows for weed control, disc-bedded on top of old beds |
| DATE PLANTED: | 6-15-88, cone planter |
| PLOT LENGTH: | 17' |
| FERTILIZER: | Applied 80-40-0 per acre before planting |
| HERBICIDE: | 1.6 lb/A Milogard (propazine) |
| INSECTICIDE: | 7.0 lb/A Counter 15G (terbufos) at planting. Aerial application of Lorsban for midge control, 1 pint/A |
| RAINFALL: | April = 1.41"; May = 2.29"; June = 1.56"; July = 3.35"; August = .42"; September = 2.48" Total = 11.51" |
| IRRIGATIONS: | None - continuous dryland sorghum for the past 3 years |
| DATE HARVESTED: | 11-8-88, by hand |
| SIZE HARVESTED PLOT: | 1/1,000 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 86 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 2 |
| MEAN PLANT POP.: | 26,000 plants/A |
| TEST MEAN: | 2,530 lb/A |
| TEST C. V.: | 19.5 percent |

GENERAL INFORMATION: Below normal rainfall was a contributing factor that resulted in below average yield in 1988. Rapid seedling emergence resulted from excellent soil moisture at planting. Although the test block received 3.35" of rainfall in early-July, distribution was not ideal. The test received no beneficial rains in August thus resulting in moisture stress.

The test mean yield was 2,530 lb/A which is 1,451 lb/A less than the 1987 yield of 3,981 lb/A and 816 pounds less than the past three-year average of 3,346 lb/A. Lodging was observed in all but 18 hybrids and can probably be attributed to the dry moisture conditions in August. Bird damage was observed in the test with high incidence occurring in some of the earlier maturing hybrids. Greenbugs were not a problem and midge were controlled with an insecticide.

TABLE 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST:LUBBOCK, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | LODGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A | STAT. SIG., O.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|------------|----------------------|--------------------|------------------------------|--------------------------------|
| Pioneer hybrid 8452 | Pioneer Hi-Bred | R | M | 55 | 35 | 2 | 5.0 | 10.0 | 58.0 | 9.3 | 3129 | A |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 61 | 40 | 0 | 1.7 | 1.7 | 53.7 | 9.5 | 3085 | A-B |
| 3308 | SEEDTEC INT. | R | M | 67 | 38 | 1 | 6.7 | 0.0 | 57.7 | 9.1 | 3014 | A-C |
| Towhead | Conlee Seed Company | W | M | 56 | 37 | 2 | 3.3 | 1.7 | 58.3 | 9.6 | 2980 | A-C |
| T-E Y-60 | TAYLOR-EVANS SEED | W | M | 55 | 37 | 2 | 13.3 | 30.0 | 58.7 | 9.3 | 2931 | A-C |
| XS 8761EX | Summit Seed Co. | R | M | 60 | 38 | 1 | 13.3 | 15.0 | 59.0 | 9.4 | 2930 | A-C |
| Check 1 | Tx. Agri. Exp. Sta. | W | | 59 | 36 | 0 | 3.3 | 3.3 | 58.0 | 9.3 | 2918 | A-C |
| W-632-W | George Warner Seed | W | M | 56 | 39 | 1 | 3.3 | 8.3 | 57.7 | 9.8 | 2912 | A-C |
| 5511 | Garst Seed Co. | R | M | 56 | 34 | 1 | 8.3 | 30.0 | 57.7 | 9.5 | 2908 | A-C |
| Rustler | Conlee Seed Company | R | ML | 61 | 36 | 0 | 1.7 | 0.0 | 56.7 | 9.6 | 2906 | A-C |
| OSAGE | ASGROW SEED CO. | R | ML | 61 | 36 | 1 | 8.3 | 0.0 | 57.7 | 9.5 | 2888 | A-C |
| ATx399 x Tx2737 | Tx. Agri. Exp. Sta. | R | ML | 56 | 33 | 1 | 5.0 | 18.3 | 57.0 | 9.2 | 2881 | A-C |
| X62830 | SEEDTEC INT. | R | L | 68 | 40 | 1 | 3.3 | 0.0 | 56.0 | 9.2 | 2867 | A-C |
| DR 1125 | Cargill Hybrid | R | ML | 58 | 33 | 1 | 13.3 | 5.0 | 55.0 | 9.5 | 2865 | A-C |
| 2656 | Northrup King Co. | R | ML | 56 | 33 | 0 | 5.0 | 16.7 | 56.0 | 9.6 | 2831 | A-D |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 63 | 44 | 1 | 6.7 | 1.7 | 53.0 | 9.3 | 2824 | A-D |
| 6670 | Cargill Hybrid | R | ML | 58 | 35 | 0 | 15.0 | 16.7 | 57.0 | 9.3 | 2798 | A-E |
| SG 922 | Garrison Seed & Co. | R | ML | 60 | 34 | 1 | 5.0 | 6.7 | 55.0 | 9.8 | 2793 | A-E |
| ORD G XTRA | ORD Hybrids | R | ML | 58 | 39 | 1 | 6.7 | 1.7 | 55.3 | 9.2 | 2792 | A-E |
| WAC 686 | SEEDTEC INT. | R | M | 62 | 37 | 0 | 6.7 | 6.7 | 58.0 | 9.4 | 2785 | A-E |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 61 | 38 | 1 | 5.0 | 1.7 | 56.7 | 9.5 | 2771 | A-E |
| T-E 35 | TAYLOR-EVANS SEED | R | ME | 56 | 32 | 2 | 8.3 | 21.7 | 57.3 | 9.3 | 2768 | A-E |
| ATx2801 x MR101-4 | Tx. Agri. Exp. Sta. | W | ML | 62 | 39 | 1 | 8.3 | 5.0 | 55.7 | 9.6 | 2751 | A-E |
| ATx399 x RTx432 | Tx. Agri. Exp. Sta. | R | M | 59 | 37 | 2 | 5.0 | 3.3 | 57.3 | 9.4 | 2708 | A-E |
| ATx2755 x MR103-4 | Tx. Agri. Exp. Sta. | R | ML | 59 | 37 | 1 | 3.3 | 13.3 | 56.3 | 9.5 | 2705 | A-E |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | W | ML | 61 | 39 | 2 | 8.3 | 0.0 | 52.3 | 9.4 | 2698 | A-E |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | W | ML | 63 | 37 | 1 | 3.3 | 5.0 | 57.0 | 9.2 | 2695 | A-E |
| ATx2755 x MR102-3 | Tx. Agri. Exp. Sta. | R | ML | 61 | 36 | 1 | 5.0 | 1.7 | 54.7 | 9.1 | 2695 | A-E |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 60 | 42 | 2 | 1.7 | 25.0 | 54.3 | 9.4 | 2694 | A-E |
| Wrangler II | Conlee Seed Company | R | ML | 61 | 37 | 0 | 8.3 | 5.0 | 56.3 | 9.2 | 2685 | A-E |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 58 | 35 | 1 | 6.7 | 8.3 | 58.0 | 9.7 | 2675 | A-E |
| Grande | Big Crop Seed, Inc. | R | M | 55 | 33 | 1 | 8.3 | 10.0 | 57.7 | 9.4 | 2669 | A-E |
| W-844-E | George Warner Seed | R | M | 61 | 36 | 1 | 6.7 | 5.0 | 57.0 | 9.4 | 2664 | A-E |
| ORO Baron | ORO Hybrids | R | ML | 61 | 35 | 0 | 3.3 | 8.3 | 57.7 | 9.4 | 2651 | A-E |
| 40 | Cargill Hybrid | R | ME | 56 | 32 | 1 | 8.3 | 41.7 | 56.3 | 9.4 | 2642 | A-E |
| ATx626 x R.8507 | Tx. Agri. Exp. Sta. | R | M | 62 | 38 | 1 | 6.7 | 1.7 | 55.7 | 9.5 | 2635 | A-E |
| A1 x GR108-3 | Tx. Agri. Exp. Sta. | R | ML | 62 | 41 | 1 | 6.7 | 0.0 | 56.7 | 9.0 | 2635 | A-E |
| ATx2755 x MR107-1 | Tx. Agri. Exp. Sta. | R | ML | 62 | 34 | 0 | 5.0 | 0.0 | 52.3 | 9.4 | 2602 | A-E |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | R | M | 62 | 40 | 1 | 13.3 | 3.3 | 56.3 | 9.2 | 2595 | A-E |

TABLE 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST: LUBBOCK, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | LODGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A | STAT. SIG., O.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|------------|----------------------|--------------------|------------------------------|--------------------------------|
| W-695-E | George Warner Seed | R | ME | 61 | 37 | 1 | 3.3 | 6.7 | 57.7 | 9.6 | 2584 | A-E |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 66 | 38 | 1 | 3.3 | 0.0 | 58.3 | 9.7 | 2584 | A-E |
| A1 x R3224T | Tx. Agri. Exp. Sta. | R | ML | 60 | 36 | 0 | 3.3 | 1.7 | 56.0 | 9.8 | 2581 | A-E |
| ATx2801 x MR103-1B | Tx. Agri. Exp. Sta. | W | ML | 61 | 39 | 2 | 5.0 | 1.7 | 53.7 | 9.7 | 2575 | A-E |
| A1 x Tx7078 | Tx. Agri. Exp. Sta. | R | M | 56 | 35 | 1 | 10.0 | 11.7 | 57.7 | 9.5 | 2572 | A-E |
| Pronto II | Conlee Seed Company | R | ME | 53 | 38 | 2 | 18.3 | 40.0 | 55.7 | 9.5 | 2554 | A-E |
| XP 5017x | ASGROW SEED CO. | R | ML | 63 | 39 | 2 | 6.7 | 0.0 | 56.7 | 9.9 | 2534 | A-E |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 62 | 41 | 1 | 13.3 | 1.7 | 58.0 | 9.5 | 2523 | A-E |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 61 | 38 | 1 | 3.3 | 6.7 | 57.3 | 9.3 | 2517 | A-E |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | R | ME | 55 | 40 | 1 | 18.3 | 18.3 | 56.7 | 9.5 | 2513 | A-E |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 61 | 38 | 2 | 3.3 | 1.7 | 57.3 | 9.4 | 2501 | A-E |
| WAC D701G | SEEDTEC INT. | R | ML | 61 | 36 | 0 | 5.0 | 16.7 | 57.3 | 9.7 | 2492 | A-E |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | R | ML | 60 | 40 | 1 | 3.3 | 0.0 | 56.3 | 9.4 | 2482 | A-E |
| Pioneer hybrid 8493 | Pioneer Hi-Bred | R | M | 57 | 37 | 1 | 20.0 | 3.3 | 56.3 | 9.8 | 2455 | A-E |
| A8201-2 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 60 | 38 | 0 | 3.3 | 16.7 | 54.7 | 9.5 | 2437 | A-E |
| Rawhide | Conlee Seed Company | R | M | 57 | 33 | 0 | 1.7 | 15.0 | 56.7 | 9.4 | 2413 | A-E |
| SG 688 | Garrison Seed & Co. | R | ME | 53 | 39 | 2 | 15.0 | 33.3 | 57.0 | 9.8 | 2401 | A-E |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | R | M | 58 | 33 | 2 | 5.0 | 5.0 | 57.3 | 9.7 | 2395 | A-E |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 59 | 32 | 0 | 11.7 | 13.3 | 57.7 | 9.4 | 2385 | A-E |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 61 | 43 | 2 | 6.7 | 0.0 | 56.3 | 9.5 | 2374 | A-E |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 60 | 37 | 1 | 8.3 | 0.0 | 58.3 | 9.4 | 2369 | A-E |
| ATx3042 x Tx2737 | Tx. Agri. Exp. Sta. | R | ME | 55 | 37 | 3 | 21.7 | 31.7 | 56.7 | 9.4 | 2354 | A-E |
| A35 x GR108-2 | Tx. Agri. Exp. Sta. | R | ML | 67 | 37 | 1 | 5.0 | 1.7 | 57.0 | 9.1 | 2354 | A-E |
| T-E 42 | TAYLOR-EVANS SEED | R | M | 55 | 31 | 2 | 5.0 | 43.3 | 55.0 | 9.5 | 2346 | A-E |
| XP 3137x | ASGROW SEED CO. | R | M | 52 | 35 | 1 | 13.3 | 28.3 | 57.0 | 9.5 | 2345 | A-E |
| A35 x Tx435 | Tx. Agri. Exp. Sta. | R | ML | 61 | 39 | 3 | 3.3 | 0.0 | 57.7 | 9.8 | 2332 | A-E |
| ORD Exp. 8801YX | ORD Hybrids | W | ML | 61 | 36 | 0 | 6.7 | 1.7 | 51.7 | 9.8 | 2330 | A-E |
| A8618 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 68 | 36 | 1 | 3.3 | 0.0 | 54.3 | 9.7 | 2308 | A-E |
| T45 | Summit Seed Co. | R | ME | 57 | 36 | 1 | 5.0 | 30.0 | 55.7 | 9.4 | 2277 | A-E |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | R | M | 61 | 38 | 1 | 6.7 | 0.0 | 54.3 | 9.4 | 2275 | A-E |
| 2030 | Northrup King Co. | R | E | 51 | 32 | 2 | 8.3 | 10.0 | 55.3 | 9.5 | 2250 | A-E |
| T-E X-8761 | TAYLOR-EVANS SEED | R | ME | 56 | 29 | 0 | 3.3 | 3.3 | 56.3 | 9.6 | 2216 | A-E |
| 70 | Cargill Hybrid | R | M | 55 | 34 | 1 | 11.7 | 38.3 | 55.3 | 9.6 | 2216 | A-E |
| T-E TUFF | TAYLOR-EVANS SEED | R | M | 54 | 29 | 2 | 13.3 | 13.3 | 55.3 | 9.2 | 2202 | A-E |
| XP 2057x | ASGROW SEED CO. | R | E | 52 | 31 | 3 | 11.7 | 33.3 | 53.0 | 9.2 | 2175 | A-E |
| ATx2801 x MR102-2 | Tx. Agri. Exp. Sta. | W | ML | 60 | 38 | 1 | 8.3 | 20.0 | 52.3 | 9.6 | 2173 | A-E |
| XP 4147x | ASGROW SEED CO. | R | ME | 54 | 33 | 2 | 8.3 | 26.7 | 56.0 | 9.5 | 2159 | A-E |
| 1022 | Cargill Hybrid | R | ME | 55 | 36 | 1 | 10.0 | 25.0 | 55.7 | 9.9 | 2130 | A-E |

TABLE 10A. DRYLAND GRAIN SORGHUM PERFORMANCE TEST:LUBBOCK, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXSER- TION INCHES | BIRD DAM- AGE % | LODGE % | TEST WT. lb/bu | MOIS- TURE % | GRAIN PER ACRE lb/A | STAT. SIG., 0.05 **** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------------------|--------------------------|------------|----------------------|--------------------|------------------------------|--------------------------------|
| Wx 88152 | George Warner Seed | R | ME | 55 | 37 | 1 | 26.7 | 18.3 | 55.0 | 9.4 | 2129 | A-E |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | W | ML | 61 | 39 | 1 | 10.0 | 1.7 | 52.7 | 9.4 | 2114 | A-E |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 62 | 38 | 1 | 13.3 | 0.0 | 55.7 | 9.4 | 2113 | A-E |
| 5517 | Garst Seed Co. | R | ME | 55 | 36 | 0 | 8.3 | 53.3 | 57.0 | 10.0 | 2086 | B-E |
| 630 | Cargill Hybrid | R | ME | 55 | 33 | 1 | 8.3 | 36.7 | 55.7 | 9.5 | 2038 | C-E |
| A1 x R8507 | Tx. Agri. Exp. Sta. | R | ML | 66 | 38 | 1 | 3.3 | 0.0 | 55.0 | 9.8 | 2019 | C-E |
| Exp. 473 | Conlee Seed Company | R | ME | 52 | 33 | 1 | 15.0 | 70.0 | 55.0 | 9.5 | 1824 | D-E |
| ATx2801 x MR102-3 | Tx. Agri. Exp. Sta. | W | ML | 61 | 37 | 0 | 5.0 | 1.7 | 55.0 | 9.6 | 1791 | E |
| A8618 x RTx432 | Tx. Agri. Exp. Sta. | R | M | 65 | 37 | 2 | 3.3 | 0.0 | 54.7 | 9.6 | 1789 | E |

TEST MEAN= 2530

TEST C.V.=19.5

LSD .05=793.9

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

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

** Grain Color: R=Red W=White B=Brown

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| Pioneer® hybrid 8452 | Pioneer Hi-bred International, Inc. | 1 | 3129 | — | — | — | — |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 2 | 3085 | 10 | 4335 | 7 | 4052 |
| 3308 | SEEDTEC INTERNATIONAL | 3 | 3014 | 62 | 3769 | — | — |
| Towhead | Conlee Seed Compoany, Inc. | 4 | 2980 | — | — | — | — |
| T-E Y-60 | TAYLOR-EVANS SEED | 5 | 2931 | 3 | 4634 | 4 | 4112 |
| XS 8761EX | Summit Seed Company | 6 | 2930 | — | — | — | — |
| Check 1 | Tx. Agri. Exp. Sta. | 7 | 2918 | — | — | — | — |
| W-632-W | George Warner Seed Company | 8 | 2912 | — | — | — | — |
| 5511 | Garst Seed Company | 9 | 2908 | — | — | — | — |
| Rustler | Conlee Seed Company, Inc. | 10 | 2906 | — | — | — | — |
| OSAGE | ASGROW SEED COMPANY | 11 | 2888 | 31 | 4070 | — | — |
| ATx399 x Tx2737 | Tx. Agri. Exp. Sta. | 12 | 2881 | 20 | 4172 | 9 | 4007 |
| X 62830 | SEEDTEC INTERNATIONAL | 13 | 2867 | — | — | — | — |
| DR 1125 | Cargill Hybrid Seeds | 14 | 2865 | 27 | 4097 | — | — |
| 2656 | Northrup King Company | 15 | 2831 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 16 | 2824 | 59 | 3793 | 13 | 3937 |
| 6670 | Cargill Hybrid Seeds | 17 | 2798 | — | — | — | — |
| SG 922 | Garrison Seed & Company | 18 | 2793 | 39 | 3963 | 18 | 3793 |
| ORO G XTRA | ORO Hybrids | 19 | 2792 | 23 | 4148 | 60 | 2908 |
| WAC 686 | SEEDTEC INTERNATIONAL | 20 | 2785 | 16 | 4284 | 73 | 1996 |
| A35 x Tx430 | Tx. Agri. Exp. Sta. | 21 | 2771 | 48 | 3885 | 45 | 3178 |
| T-E 35 | TAYLOR-EVANS SEED | 22 | 2768 | — | — | — | — |
| ATx2801 x MR101-4 | Tx. Agri. Exp. Sta. | 23 | 2751 | — | — | — | — |
| ATx399 x RTx432 | Tx. Agri. Exp. Sta. | 24 | 2708 | — | — | — | — |
| ATx2755 x MR103-4 | Tx. Agri. Exp. Sta. | 25 | 2705 | — | — | — | — |
| A1 x Tx435 | Tx. Agri. Exp. Sta. | 26 | 2698 | 21 | 4171 | — | — |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | 27 | 2695 | — | — | — | — |
| ATx2755 x MR102-3 | Tx. Agri. Exp. Sta. | 28 | 2695 | — | — | — | — |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 29 | 2694 | — | — | — | — |
| Wrangler II | Conlee Seed Company, Inc. | 30 | 2685 | — | — | — | — |

Table 10B. Lubbock-Dryland (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx2752 x Tx430 Grande | Tx. Agri. Exp. Sta. | 31 | 2675 | — | — | — | — |
| W-844-E | Big Crop Seed, Inc. | 32 | 2669 | — | — | — | — |
| ORO Baron | George Warner Seed Company | 33 | 2664 | — | — | — | — |
| 40 | ORO Hybrids | 34 | 2651 | 69 | 3637 | — | — |
| | Cargill Hybrid Seeds | 35 | 2642 | 15 | 4286 | — | — |
| ATx626 x R.8507 | Tx. Agri. Exp. Sta. | 36 | 2635 | — | — | — | — |
| A1 x GR108-3 | Tx. Agri. Exp. Sta. | 37 | 2635 | — | — | — | — |
| ATx2755 x MR107-1 | Tx. Agri. Exp. Sta. | 38 | 2602 | — | — | — | — |
| ATx626 x R.8504 | Tx. Agri. Exp. Sta. | 39 | 2595 | — | — | — | — |
| W-695-E | George Warner Seed Comapny | 40 | 2584 | 56 | 3839 | — | — |
| A35 x GR104-1 | Tx. Agri. Exp. Sta. | 41 | 2584 | — | — | — | — |
| A1 x R3224T | Tx. Agri. Exp. Sta. | 42 | 2581 | 60 | 3774 | 32 | 3504 |
| ATx2801 x MR103-1 | Tx. Agri. Exp. Sta. | 43 | 2575 | — | — | — | — |
| A1 x Tx7078 | Tx. Agri. Exp. Sta. | 44 | 2572 | 6 | 4463 | — | — |
| Pronto II | Conlee Seed Company, Inc. | 45 | 2554 | — | — | — | — |
| XP 5017X | ASGROW SEED COMPANY | 46 | 2534 | — | — | — | — |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 47 | 2523 | 74 | 3510 | 39 | 3315 |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 48 | 2517 | 57 | 3835 | 5 | 4112 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | 49 | 2513 | 22 | 4168 | 54 | 3072 |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 50 | 2501 | — | — | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 51 | 2492 | — | — | — | — |
| A8201-2 x R3338wx | Tx. Agri. Exp. Sta. | 52 | 2482 | — | — | — | — |
| Pioneer® hybrid 8493 | Pioneer Hi-bred International, Inc. | 53 | 2455 | — | — | — | — |
| A8201-2 x Tx430 | Tx. Agri. Exp. Sta. | 54 | 2437 | — | — | — | — |
| Rawhide | Conlee Seed Company | 55 | 2413 | 75 | 3489 | — | — |
| SG 688 | Garrison Seed Company | 56 | 2401 | 24 | 4145 | 37 | 3330 |
| ATx399 x R.8501 | Tx. Agri. Exp. Sta. | 57 | 2395 | — | — | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 58 | 2385 | 14 | 4296 | 44 | 3184 |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 59 | 2374 | 33 | 4049 | 64 | 2761 |
| Check 2 | Tx. Agri. Exp. Sta. | 60 | 2369 | 70 | 3633 | — | — |

Table 10B. Lubbock-Dryland (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx3042 x Tx2737 | Tx. Agri. Exp. Sta. | 61 | 2354 | 49 | 3882 | 49 | 3111 |
| A35 x GR108-2 | Tx. Agri. Exp. Sta. | 62 | 2354 | — | — | — | — |
| T-E 42 | TAYLOR-EVANS SEED | 63 | 2346 | — | — | — | — |
| XP 3137x | ASGROW SEED COMPANY | 64 | 2345 | — | — | — | — |
| A35 x Tx435 | Tx. Agri. Exp. Sta. | 65 | 2332 | 73 | 3532 | 55 | 2999 |
| ORO Exp. 8801YX | ORO Hybrids | 66 | 2330 | — | — | — | — |
| A8618 x RTx433 | Tx. Agri. Exp. Sta. | 67 | 2308 | — | — | — | — |
| T45 | Summit Seed Company | 68 | 2277 | 11 | 4334 | 10 | 4006 |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 69 | 2275 | — | — | — | — |
| 2030 | Northrup King Company | 70 | 2250 | — | — | — | — |
| T-E X-8761 | TAYLOR-EVANS SEED | 71 | 2216 | — | — | — | — |
| 70 | Cargill Hybrid Seeds | 72 | 2216 | — | — | 2 | 4207 |
| T-E TUFF | TAYLOR-EVANS SEED | 73 | 2202 | 77 | 3371 | 57 | 2944 |
| XP 2057x | ASGROW SEED COMPANY | 74 | 2175 | — | — | — | — |
| ATx2801 x MR102-2 | Tx. Agri. Exp. Sta. | 75 | 2173 | — | — | — | — |
| XP 4147x | ASGROW SEED COMPANY | 76 | 2159 | — | — | — | — |
| 1022 | Cargill Hybrid Seeds | 77 | 2130 | 5 | 4495 | — | — |
| Wx 88152 | George Warner Seed Company | 78 | 2129 | — | — | — | — |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 79 | 2114 | 36 | 3998 | 74 | 1890 |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International, Inc. | 80 | 2113 | — | — | — | — |
| 5517 | Garst Seed Company | 81 | 2086 | 25 | 4144 | — | — |
| 630 | Cargill Hybrid Seeds | 82 | 2038 | — | — | — | — |
| A1 x R.8507 | Tx. Agri. Exp. Sta. | 83 | 2019 | 72 | 3533 | — | — |
| Exp. 473 | Conlee Seed Company | 84 | 1824 | — | — | — | — |
| ATx2801 x MR102-3 | Tx. Agri. Exp. Sta. | 85 | 1791 | 9 | 4339 | — | — |
| A8618 x RTx432 | Tx. Agri. Exp. Sta. | 86 | 1789 | — | — | — | — |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 8 | 4381 | 3 | 4154 |
| F-270 G | Frontier Seed Company | — | — | 12 | 4314 | 20 | 3781 |
| HT 124 | Summit Seed Company | — | — | 26 | 4110 | 17 | 3796 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 28 | 4082 | 61 | 2856 |

Table 10B. Lubbock-Dryland (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|-----------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| T48 | Summit Seed Company | — | — | 30 | 4076 | 26 | 3637 |
| RS610 | Tx. Agri. Exp. Sta. | — | — | 34 | 4044 | 22 | 3693 |
| S 9736 | Northrup King Company | — | — | 42 | 3918 | 67 | 2654 |
| F-300 G | Frontier Seed Company | — | — | 43 | 3909 | 29 | 3555 |
| A1 x 87PR749 | Tx. Agri. Exp. Sta. | — | — | 44 | 3904 | 33 | 3498 |
| ATx626 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 50 | 3874 | 69 | 2390 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 51 | 3865 | 1 | 4265 |
| A35 x Tx7078 | Tx. Agri. Exp. Sta. | — | — | 53 | 3858 | 21 | 3700 |
| ATx630 x 80C2241 | Tx. Agri. Exp. Sta. | — | — | 61 | 3771 | 72 | 2019 |
| Number Entries: | | 86 | | 79 | | 77 | |
| Test Mean Yield: | | | 2530 | | 3981 | | 3255 |

Note: Hybrids with same yields were ranked by computer.

TABLE 11. AGRONOMIC AND TEST INFORMATION: DUMAS

| | |
|----------------------|--|
| TEST: | 1988 Irrigated Grain Sorghum Performance Test |
| LOCATION: | Joe Cox Farm |
| COOPERATORS: | Joe Cox, Kenneth Holloway, Doug Steele, Dennis Pietsch, Randy Gaas, and Cloyce Coffman |
| SOIL TYPE: | Sherman silty clay loam |
| ROW WIDTH: | 30" |
| PREVIOUS CROP: | Wheat |
| LAND PREPARATION: | disked, chiseled, disked, and bedded |
| DATE PLANTED: | 5-18-88, by hand |
| PLOT LENGTH: | 30' |
| FERTILIZER: | Applied 200 lb/A anhydrous ammonia + 150 lb/A of 10-34-0 |
| HERBICIDE: | Applied 1.5 lb/A of Milogard (propazine) preplant |
| INSECTICIDE: | Applied Comite (propargite) at label rate in early August for spider mite control |
| RAINFALL: | No records were kept but estimated to be approximately 8" during growing season. |
| IRRIGATIONS: | 3 irrigations of approximately 4"/irrigation |
| DATE HARVESTED: | 10-6&7-88, by hand |
| SIZE HARVESTED PLOT: | 1/1,000 acre |
| TEST DESIGN: | Randomized block |
| NUMBER ENTRIES: | 80 |
| NUMBER REPLICATIONS: | 3 |
| NUMBER ROWS/PLOT: | 3 |
| MEAN PLANT POP.: | Estimated to be between 80,000 - 90,000 plants/A |
| TEST MEAN: | 7,395 lb/A; yields corrected to 13% moisture |
| TEST C. V.: | 8.4 percent |

GENERAL INFORMATION: This test site replaced the grain sorghum test that was previously conducted on the North Plains Research Field near Etter for the past 14 years. Good yields were attained although a portion of the test received drift from an aerial application of a herbicide applied to an adjacent field which reduced potential yields in Replication III. The grain sorghum test was in the flowering stage when the incident occurred.

An optimum planting date was achieved and outstanding plant stands were secured after thinning. Good plant growth and development resulted from rainfall and a timely irrigation schedule.

The test mean yield was 7,395 lb/A which is 1,107 lb/A greater than the past 10 year average of 6,288 lb/A. Midge and lodging were not observed in the test and smut was minimal. Severe bird damage was observed in the early maturing hybrids thus reducing potential yields of these hybrids. A visual estimate was taken and presented in the following table.

Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXS., IN. | SMUT PER PLOT **** | BIRD DAMAGE % | STAND % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------|-----------------------------|---------------------|------------|----------------------|--------------------|------------------|-------------------------------|---------------------------------|
| ATx631 x R8505 | Tx. Agri. Exp. Sta. | W | ML | 78 | 57 | 6 | 0.0 | 1.0 | 96.7 | 56.6 | 18.0 | 77.3 | 8524 | A |
| W-844-E | George Warner Seed | R | M | 76 | 53 | 5 | 0.0 | 2.3 | 96.7 | 58.3 | 17.5 | 79.0 | 8348 | A-B |
| DeKalb DK-66 | DEKALB-PFIZER GEN. | R | ML | 79 | 56 | 3 | 0.0 | 1.7 | 93.3 | 57.2 | 18.8 | 78.3 | 8281 | A-C |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | R | ML | 79 | 49 | 3 | 0.0 | 0.0 | 96.7 | 59.4 | 19.3 | 78.4 | 8250 | A-C |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | R | ML | 76 | 51 | 6 | 0.0 | 1.7 | 98.3 | 58.1 | 17.3 | 76.3 | 8202 | A-C |
| ATx631 x R8511 | Tx. Agri. Exp. Sta. | W | ML | 78 | 55 | 7 | 0.0 | 0.0 | 95.0 | 56.2 | 17.9 | 77.1 | 8171 | A-C |
| OSAGE | ASGROW SEED CO. | R | ML | 76 | 53 | 6 | 0.0 | 2.7 | 100.0 | 58.2 | 17.8 | 78.6 | 8125 | A-D |
| Wx88117 | George Warner Seed | R | ML | 76 | 56 | 4 | 0.0 | 4.3 | 98.3 | 58.9 | 17.1 | 79.0 | 8122 | A-D |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | R | L | 79 | 50 | 1 | 0.0 | 0.0 | 100.0 | 58.5 | 18.2 | 76.1 | 8117 | A-E |
| WAC 686 | SEEDTEC INT. | R | M | 76 | 53 | 6 | 0.0 | 0.7 | 98.3 | 57.7 | 17.6 | 77.3 | 8095 | A-E |
| SS69 | Summit Seed Co. | R | ML | 77 | 52 | 4 | 0.0 | 0.0 | 96.7 | 56.0 | 17.0 | 77.9 | 8041 | A-F |
| ORD Baron | ORD Hybrids | R | ML | 76 | 52 | 5 | 0.0 | 1.7 | 98.3 | 57.9 | 17.5 | 78.1 | 8004 | A-G |
| Pioneer hybrid 8230 | Pioneer Hi-Bred | W | L | 77 | 52 | 6 | 0.0 | 1.0 | 98.3 | 56.5 | 18.5 | 75.4 | 7931 | A-H |
| T-E X-8682 | TAYLOR-EVANS SEED | R | M | 75 | 56 | 5 | 1.0 | 11.7 | 91.7 | 58.7 | 17.1 | 79.7 | 7898 | A-H |
| WAC D701G | SEEDTEC INT. | R | ML | 77 | 50 | 5 | 0.0 | 1.7 | 93.3 | 54.8 | 17.1 | 77.0 | 7895 | A-H |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | R | ML | 79 | 55 | 5 | 0.3 | 0.7 | 91.7 | 53.7 | 18.4 | 76.8 | 7889 | A-H |
| ATx399 x GR104-8 | Tx. Agri. Exp. Sta. | R | ML | 76 | 50 | 6 | 0.0 | 3.3 | 95.0 | 57.8 | 18.0 | 77.9 | 7883 | A-H |
| Check 3 | Tx. Agri. Exp. Sta. | R | | 77 | 52 | 5 | 0.0 | 0.0 | 100.0 | 55.5 | 17.2 | 76.9 | 7880 | A-H |
| TOPAZ | ASGROW SEED CO. | R | ML | 76 | 50 | 8 | 0.0 | 1.0 | 100.0 | 56.9 | 16.8 | 76.3 | 7871 | A-H |
| XS 8761 EX | Summit Seed Co. | R | L | 77 | 55 | 3 | 0.0 | 3.3 | 100.0 | 58.2 | 18.0 | 77.1 | 7857 | A-H |
| Wx88116 | George Warner Seed | R | ML | 78 | 55 | 5 | 0.0 | 0.0 | 95.0 | 57.8 | 18.0 | 76.5 | 7820 | A-H |
| EX 3141 | GroAgri Seed Co. | R | M | 77 | 51 | 6 | 0.0 | 0.0 | 98.3 | 58.4 | 17.7 | 77.7 | 7813 | A-H |
| Rustler | Conlee Seed Co. | R | ML | 77 | 53 | 5 | 0.0 | 0.0 | 100.0 | 57.0 | 16.9 | 76.3 | 7811 | A-H |
| Check 2 | Tx. Agri. Exp. Sta. | R | | 77 | 53 | 4 | 0.0 | 0.7 | 93.3 | 56.4 | 17.7 | 76.6 | 7800 | A-H |
| 6670 | Cargill Hybrid | R | ML | 77 | 50 | 4 | 0.0 | 0.3 | 96.7 | 56.2 | 16.7 | 76.7 | 7770 | A-I |
| T-E Y-75 | TAYLOR-EVANS SEED | R | M | 76 | 51 | 4 | 0.0 | 0.7 | 96.7 | 58.2 | 17.5 | 78.0 | 7747 | A-I |
| ATx2752 x GR105-6 | Tx. Agri. Exp. Sta. | M | ML | 77 | 50 | 5 | 0.0 | 0.0 | 95.0 | 57.1 | 17.3 | 78.2 | 7741 | A-I |
| Towhead | Conlee Seed Co. | W | M | 77 | 51 | 6 | 0.0 | 0.0 | 100.0 | 57.0 | 17.3 | 76.5 | 7732 | A-I |
| ATx631 x BOC2241 | Tx. Agri. Exp. Sta. | W | ML | 78 | 54 | 6 | 0.0 | 0.0 | 100.0 | 56.3 | 17.3 | 76.8 | 7729 | A-I |
| WAC 710DR | SEEDTEC INT. | R | M | 77 | 49 | 5 | 0.0 | 0.0 | 98.3 | 54.5 | 16.7 | 75.9 | 7725 | A-I |
| X62830 | SEEDTEC INT. | R | L | 76 | 59 | 6 | 0.0 | 4.3 | 100.0 | 57.4 | 17.8 | 77.1 | 7709 | A-I |
| KS 737 | Northrup King Co. | R | ML | 76 | 49 | 6 | 1.3 | 0.0 | 96.7 | 57.0 | 17.0 | 75.5 | 7706 | A-I |
| XP5017x | ASGROW SEED CO. | R | ML | 79 | 52 | 6 | 0.0 | 0.0 | 95.0 | 56.9 | 17.6 | 75.0 | 7674 | A-I |
| AB618 x R8505 | Tx. Agri. Exp. Sta. | R | M | 79 | 48 | 5 | 0.3 | 0.0 | 96.7 | 55.9 | 17.5 | 76.9 | 7642 | A-J |
| 2665 | Northrup King Co. | R | ML | 77 | 47 | 3 | 0.7 | 0.0 | 96.7 | 57.9 | 17.0 | 76.5 | 7631 | A-J |
| 688 | Hoegemeyer Hybrids | R | ML | 77 | 51 | 5 | 0.0 | 0.7 | 98.3 | 55.7 | 16.9 | 76.5 | 7618 | A-J |
| SG 922 | Garrison Seed & Co. | R | ML | 75 | 49 | 5 | 0.0 | 0.0 | 98.3 | 52.2 | 16.2 | 74.6 | 7616 | A-J |
| 40 | Cargill Hybrid | R | ME | 71 | 45 | 7 | 0.0 | 5.0 | 98.3 | 55.9 | 16.0 | 75.4 | 7613 | A-J |
| GS 712 | ASGROW SEED CO. | R | ML | 77 | 50 | 5 | 0.0 | 1.0 | 96.7 | 56.9 | 17.2 | 76.6 | 7559 | A-J |

Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXS., IN. | SMUT PER PLOT **** | BIRD DAMAGE % | STAND % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|---------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------|-----------------------------|---------------------|------------|----------------------|--------------------|------------------|-------------------------------|---------------------------------|
| AgriPro AP 965 | AgriPro Seeds | R | ML | 76 | 51 | 6 | 0.0 | 0.0 | 96.7 | 52.2 | 16.6 | 75.8 | 7547 | A-J |
| S9750 | Northrup King Co. | R | L | 78 | 51 | 5 | 0.0 | 1.7 | 98.3 | 55.7 | 17.6 | 76.9 | 7544 | A-J |
| 662 | Hoegemeyer Hybrids | R | ME | 76 | 48 | 7 | 0.0 | 0.0 | 95.0 | 54.4 | 16.7 | 74.9 | 7532 | A-J |
| DN 31 | DyNA Seeds | R | M | 76 | 48 | 6 | 0.0 | 0.0 | 96.7 | 54.3 | 16.5 | 76.8 | 7524 | A-J |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 76 | 49 | 6 | 0.0 | 0.0 | 95.0 | 55.2 | 16.7 | 76.7 | 7522 | A-J |
| ORO G XTRA | ORD Hybrids | R | ML | 77 | 52 | 5 | 0.0 | 0.0 | 100.0 | 56.8 | 16.8 | 77.5 | 7500 | A-K |
| XP 4147x | ASGROW SEED CO. | R | ME | 74 | 46 | 8 | 0.3 | 3.3 | 96.7 | 56.3 | 16.1 | 76.2 | 7492 | A-K |
| Pioneer hybrid 8452 | Pioneer Hi-Bred | R | M | 73 | 44 | 8 | 0.7 | 8.7 | 96.7 | 57.6 | 17.7 | 76.9 | 7491 | A-K |
| SG 932 | Garrison Seed & Co. | R | ML | 77 | 51 | 6 | 0.0 | 0.7 | 98.3 | 57.2 | 17.3 | 76.6 | 7489 | A-K |
| ATx631 x R8504 | Tx. Agri. Exp. Sta. | W | ML | 74 | 55 | 6 | 0.0 | 3.3 | 91.7 | 56.1 | 16.7 | 74.5 | 7462 | A-K |
| T-E Y-77 | TAYLOR-EVANS SEED | R | ML | 78 | 52 | 4 | 0.0 | 0.0 | 93.3 | 57.3 | 17.3 | 77.1 | 7459 | A-K |
| 70 | Cargill Hybrid | R | M | 78 | 45 | 5 | 1.0 | 0.0 | 96.7 | 56.6 | 17.4 | 75.0 | 7395 | A-L |
| 671 | Hoegemeyer Hybrids | W | ML | 78 | 51 | 5 | 0.0 | 0.0 | 98.3 | 56.7 | 17.3 | 76.3 | 7363 | A-L |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | R | ML | 77 | 52 | 5 | 0.0 | 8.7 | 100.0 | 56.5 | 17.2 | 75.8 | 7340 | A-L |
| DR 1125 | Cargill Hybrid | R | ML | 77 | 51 | 6 | 0.0 | 0.0 | 96.7 | 54.0 | 16.5 | 74.9 | 7317 | A-L |
| T-E Y-101-G | TAYLOR-EVANS SEED | R | ML | 77 | 46 | 5 | 0.0 | 0.0 | 96.7 | 54.9 | 17.1 | 76.7 | 7315 | A-L |
| 630 | Cargill Hybrid | R | ME | 70 | 46 | 6 | 0.0 | 3.3 | 98.3 | 58.8 | 16.6 | 76.5 | 7300 | A-L |
| 3308 | SEEDTEC INT. | R | M | 73 | 51 | 6 | 2.0 | 6.7 | 96.7 | 58.4 | 17.2 | 77.3 | 7294 | A-L |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | R | ML | 76 | 59 | 7 | 0.0 | 5.0 | 98.3 | 55.7 | 16.4 | 75.2 | 7281 | A-L |
| Superior | Big Crop Seed, Inc. | R | ML | 77 | 51 | 7 | 0.7 | 0.7 | 91.7 | 56.8 | 17.0 | 74.6 | 7254 | A-L |
| Maxima | Big Crop Seed, Inc. | R | L | 77 | 51 | 5 | 0.0 | 0.0 | 98.3 | 57.0 | 17.7 | 75.9 | 7244 | A-L |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | W | M | 77 | 56 | 8 | 0.0 | 2.3 | 96.7 | 56.1 | 16.2 | 78.3 | 7180 | B-L |
| ATx629 x R8503 | Tx. Agri. Exp. Sta. | R | M | 72 | 52 | 6 | 0.0 | 13.3 | 98.3 | 56.2 | 17.0 | 76.4 | 7164 | B-L |
| AgriPro AP 985 | AgriPro Seeds | R | ML | 77 | 51 | 5 | 0.0 | 0.3 | 96.7 | 56.3 | 17.4 | 76.3 | 7086 | B-L |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | R | ML | 75 | 46 | 5 | 0.0 | 0.0 | 96.7 | 51.8 | 15.9 | 75.0 | 7048 | C-M |
| A1 x R2241 | Tx. Agri. Exp. Sta. | W | ML | 77 | 56 | 6 | 0.0 | 0.3 | 93.3 | 56.0 | 18.1 | 72.1 | 7042 | C-M |
| T-E Dinero | TAYLOR-EVANS SEED | R | M | 76 | 50 | 6 | 0.0 | 0.0 | 98.3 | 53.5 | 16.6 | 74.7 | 6871 | D-M |
| T-E X-8727 | TAYLOR-EVANS SEED | R | M | 76 | 49 | 5 | 0.3 | 0.0 | 96.7 | 52.5 | 16.2 | 74.8 | 6834 | E-M |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 74 | 54 | 6 | 0.0 | 10.0 | 96.7 | 55.2 | 16.9 | 77.0 | 6805 | F-M |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | W | ML | 73 | 65 | 9 | 0.0 | 10.0 | 96.7 | 54.2 | 17.0 | 76.2 | 6767 | F-N |
| 1022 | Cargill Hybrid | R | ME | 70 | 46 | 6 | 0.0 | 15.0 | 93.3 | 58.2 | 16.8 | 74.1 | 6751 | G-N |
| XP 3137x | ASGROW SEED CO. | R | M | 70 | 43 | 7 | 0.0 | 11.7 | 93.3 | 57.0 | 16.3 | 73.1 | 6677 | H-N |
| Check 1 | Tx. Agri. Exp. Sta. | R | M | 77 | 52 | 5 | 0.0 | 0.0 | 98.3 | 56.5 | 17.0 | 74.8 | 6514 | I-O |
| ATx378 x R8504 | Tx. Agri. Exp. Sta. | R | ML | 77 | 54 | 9 | 0.0 | 0.0 | 91.7 | 57.0 | 17.5 | 76.0 | 6383 | J-O |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | W | ML | 77 | 59 | 8 | 0.0 | 0.3 | 95.0 | 50.3 | 15.9 | 73.4 | 6253 | K-O |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | W | ML | 73 | 54 | 6 | 0.0 | 20.0 | 100.0 | 54.4 | 17.0 | 69.2 | 6185 | L-O |
| ATx626 x R8503 | Tx. Agri. Exp. Sta. | R | M | 72 | 52 | 6 | 0.0 | 26.7 | 93.3 | 57.2 | 17.1 | 74.5 | 6174 | L-O |
| Wrangler II | Conlee Seed Co. | R | ML | 71 | 55 | 8 | 0.0 | 36.7 | 98.3 | 51.0 | 16.2 | 72.1 | 5854 | M-O |

Table 11A. GRAIN SORGHUM PERFORMANCE TEST: DUMAS, TEXAS, 1988

| HYBRID (*) | COMPANY OR BRAND NAME | GRN CLR ** | MATU- RITY CLASS *** | DAYS TO 50% FLOWER | PLANT HT., IN. | HEAD EXS., IN. | SMUT PER PLOT **** | BIRD DAMAGE % | STAND % | TEST WT. lb/bu | MOIS- TURE % | THRESH- ING % | GRAIN PER ACRE, LBS. | STAT. SIG., 0.05 ***** |
|--------------------|-----------------------------|------------------|-------------------------------|-----------------------------|----------------------|----------------------|-----------------------------|---------------------|------------|----------------------|--------------------|------------------|-------------------------------|---------------------------------|
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | R | M | 73 | 57 | 8 | 0.0 | 30.0 | 96.7 | 52.9 | 16.7 | 73.6 | 5599 | N-0 |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | B | M | 74 | 61 | 7 | 0.0 | 1.7 | 96.7 | 51.4 | 16.5 | 72.4 | 5349 | 0 |
| RS610 | Tx. Agri. Exp. Sta. | R | ME | 68 | 47 | 8 | 3.0 | 56.7 | 96.7 | 55.0 | 15.6 | 59.6 | 3535 | P |

TEST MEAN= 7395 TEST C.V.= 8.4 LSD .05= 999.7

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

* Funks G-1711, Frontier F-524 and Golden Harvest H-514B were entered as check hybrids at our discretion. They are intended to be used for comparison purposes only.

** Grain Color: R=Red W=White B=Brown M=Mixed

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

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

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

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

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|----------------------|-------------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx631 x R.8505 | Tx. Agri. Exp. Sta. | 1 | 8524 | 1 | 7480 | 5 | 7953 |
| W-844-E | George Warner Seed Company | 2 | 8348 | 41 | 6500 | — | — |
| DEKALB DK-66 | DEKALB-PFIZER GENETICS | 3 | 8281 | — | — | — | — |
| ATx2752 x GR104-1 | Tx. Agri. Exp. Sta. | 4 | 8250 | — | — | — | — |
| Pioneer® hybrid 8358 | Pioneer Hi-Bred International | 5 | 8202 | — | — | — | — |
| ATx631 x R8511 | Tx. Agri. Exp. Sta. | 6 | 8171 | — | — | — | — |
| OSAGE | ASGROW SEED COMPANY | 7 | 8125 | 53 | 6372 | — | — |
| Wx 88117 | George Warner Seed Company | 8 | 8122 | — | — | — | — |
| Pioneer® hybrid 8260 | Pioneer Hi-Bred International | 9 | 8117 | — | — | — | — |
| WAC 686 | SEEDTEC INTERNATIONAL | 10 | 8095 | 26 | 6714 | 22 | 7362 |
| SS69 | Summit Seed Company | 11 | 8041 | 16 | 6856 | — | — |
| ORO Baron | ORO Hybrids | 12 | 8004 | 37 | 6557 | — | — |
| Pioneer® hybrid 8230 | Pioneer Hi-Bred International | 13 | 7931 | — | — | — | — |
| T-E X-8682 | TAYLOR-EVANS SEED COMPANY | 14 | 7898 | — | — | — | — |
| WAC D701G | SEEDTEC INTERNATIONAL | 15 | 7895 | 15 | 6880 | 17 | 7473 |
| ATx378 x RTx434 | Tx. Agri. Exp. Sta. | 16 | 7889 | 48 | 6410 | — | — |
| ATx399 x GR104-8 | Tx. Agri. Exp. Sta. | 17 | 7883 | — | — | — | — |
| Check 3 | Tx. Agri. Exp. Sta. | 18 | 7880 | — | — | — | — |
| TOPAZ | ASGROW SEED COMPANY | 19 | 7871 | — | — | — | — |
| XS 8761EX | Summit Seed Company | 20 | 7857 | — | — | — | — |
| Wx 88116 | George Warner Seed Company | 21 | 7820 | — | — | — | — |
| EX 3141 | GroAgri Seed Company | 22 | 7813 | — | — | — | — |
| Rustler | Conlee Seed Company | 23 | 7811 | 20 | 6732 | 40 | 6820 |
| Check 2 | Tx. Agri. Exp. Sta. | 24 | 7800 | 3 | 7387 | 19 | 7413 |
| 6670 | Cargill Hybrid Seeds | 25 | 7770 | 25 | 6714 | — | — |

Table 11B. Dumas (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------------------|--|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| T-E Y-75 | TAYLOR-EVANS SEED COMPANY | 26 | 7747 | 44 | 6450 | 12 | 7644 |
| ATx2752 x GR105-6 Towhead | Tx. Agri. Exp. Sta. Conlee Seed Company | 27 | 7741 | — | — | — | — |
| ATx631 x 80C2241 | Tx. Agri. Exp. Sta. | 28 | 7732 | — | — | — | — |
| WAC 710DR | SEEDTEC INTERNATIONAL | 29 | 7729 | — | — | — | — |
| | | 30 | 7725 | — | — | 16 | 7597 |
| X 62830 | SEEDTEC INTERNATIONAL | 31 | 7709 | — | — | — | — |
| KS 737 | Northrup King Company | 32 | 7706 | — | — | — | — |
| XP 5017 X | ASGROW SEED COMPANY | 33 | 7674 | — | — | — | — |
| A8618 x R.8505 | Tx. Agri. Exp. Sta. | 34 | 7642 | — | — | — | — |
| 2665 | Northrup King Company | 35 | 7631 | 14 | 6888 | — | — |
| 688 | Hoegemeyer Hybrids, Inc. | 36 | 7618 | 7 | 7221 | 15 | 7522 |
| SG 922 | Garrison Seed & Co., Inc. | 37 | 7616 | 42 | 6470 | 23 | 7346 |
| 40 | Cargill Hybrid Seeds | 38 | 7613 | 78 | 5562 | — | — |
| GS 712 | ASGROW SEED COMPANY | 39 | 7559 | — | — | — | — |
| AgriPro AP965 | AgriPro Seeds | 40 | 7547 | — | — | — | — |
| S 9750 | Northrup King Company | 41 | 7544 | 4 | 7319 | 4 | 7983 |
| 662 | Hoegemeyer Hybrids, Inc. | 42 | 7532 | 31 | 6642 | 20 | 7372 |
| DN 31 | DyNA Seeds | 43 | 7524 | — | — | — | — |
| ATx399 x RTx430 | Tx. Agri. Exp. Sta. | 44 | 7522 | 27 | 6712 | 14 | 7595 |
| ORO G XTRA | ORO Hybrids | 45 | 7500 | 12 | 6938 | 7 | 7841 |
| XP 4147 X | ASGROW SEED COMPANY | 46 | 7492 | — | — | — | — |
| Pioneer® hybrid 8452 | Pioneer Hi-Bred International | 47 | 7491 | — | — | — | — |
| SG 932 | Garrison Seed & Co., Inc. | 48 | 7489 | 22 | 6728 | 13 | 7609 |
| ATx631 x R.8504 | Tx. Agri. Exp. Sta. | 49 | 7462 | — | — | — | — |
| T-E Y-77 | TAYLOR-EVANS SEED COMPANY | 50 | 7459 | — | — | 8 | 7757 |

Table 11B. Dumas (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|------------------|---------------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| 70 | Cargill Hybrid Seeds | 51 | 7395 | 55 | 6350 | 49 | 6542 |
| 671 | Hoegemeyer Hybrids, Inc. | 52 | 7363 | 54 | 6359 | — | — |
| ATx2752 x Tx430 | Tx. Agri. Exp. Sta. | 53 | 7340 | 10 | 7021 | 88 | 3165 |
| DR 1125 | Cargill Hybrid Seeds | 54 | 7317 | 82 | 5047 | — | — |
| T-E Y-101-G | TAYLOR-EVANS SEED COMPANY | 55 | 7315 | 52 | 6385 | 28 | 7226 |
| 630 | Cargill Hybrid Seeds | 56 | 7300 | — | — | — | — |
| 3308 | SEEDTEC INTERNATIONAL | 57 | 7294 | 57 | 6327 | — | — |
| ATx378 x RTx430 | Tx. Agri. Exp. Sta. | 58 | 7281 | 11 | 6989 | 45 | 6632 |
| Superior | Big Crop Seed, Inc. | 59 | 7254 | — | — | — | — |
| Maxima | Big Crop Seed, Inc. | 60 | 7244 | — | — | — | — |
| A2Tx632 x RTx432 | Tx. Agri. Exp. Sta. | 61 | 7180 | — | — | — | — |
| ATx629 x R.8503 | Tx. Agri. Exp. Sta. | 62 | 7164 | — | — | — | — |
| AgriPro AP985 | AgriPro Seeds | 63 | 7086 | — | — | — | — |
| ATx399 x Tx2536 | Tx. Agri. Exp. Sta. | 64 | 7048 | 66 | 6178 | 55 | 6399 |
| A1 x R2241 | Tx. Agri. Exp. Sta. | 65 | 7042 | 17 | 6813 | — | — |
| T-E DINERO | TAYLOR-EVANS SEED COMPANY | 66 | 6871 | 30 | 6657 | 21 | 7371 |
| T-E X-8727 | TAYLOR-EVANS SEED COMPANY | 67 | 6834 | — | — | — | — |
| ATx631 x R3338wx | Tx. Agri. Exp. Sta. | 68 | 6805 | — | — | — | — |
| ATx630 x R3338wx | Tx. Agri. Exp. Sta. | 69 | 6767 | 65 | 6205 | 75 | 5509 |
| 1022 | Cargill Hybrid Seeds | 70 | 6751 | 72 | 6042 | — | — |
| XP 3137 X | ASGROW SEED COMPANY | 71 | 6677 | — | — | — | — |
| CHECK 1 | Tx. Agri. Exp. Sta. | 72 | 6514 | — | — | — | — |
| ATx378 x R.8504 | Tx. Agri. Exp. Sta. | 73 | 6383 | — | — | — | — |
| ATx631 x RTx435 | Tx. Agri. Exp. Sta. | 74 | 6253 | 32 | 6624 | 64 | 6153 |
| A1 x Tx430 | Tx. Agri. Exp. Sta. | 75 | 6185 | 45 | 6438 | — | — |

Table 11B. Dumas (Continued)

| HYBRID | COMPANY | 1988 | | 1987 | | 1986 | |
|--------------------|----------------------|------|-------|------|-------|------|-------|
| | | Rank | Yield | Rank | Yield | Rank | Yield |
| ATx626 x R.8503 | Tx. Agri. Exp. Sta. | 76 | 6174 | 21 | 6728 | 68 | 6018 |
| Wrangler II | Conlee Seed Company | 77 | 5854 | — | — | — | — |
| ATx626 x RTx433 | Tx. Agri. Exp. Sta. | 78 | 5599 | 79 | 5500 | 81 | 5062 |
| A28602 x SC103-12E | Tx. Agri. Exp. Sta. | 79 | 5349 | — | — | — | — |
| RS610 | Tx. Agri. Exp. Sta. | 80 | 3535 | 83 | 4993 | 85 | 4420 |
| ATx630 x 80C2241 | Tx. Agri. Exp. Sta. | — | — | 9 | 7087 | 32 | 7107 |
| 606 | Jacques Seed Company | — | — | 23 | 6723 | 6 | 7850 |
| A1 x Tx434 | Tx. Agri. Exp. Sta. | — | — | 34 | 6598 | 73 | 5725 |
| GSC 1313 | GroAgri Seed Company | — | — | 35 | 6593 | 24 | 7342 |
| ATx629 x RTx434 | Tx. Agri. Exp. Sta. | — | — | 36 | 6585 | 74 | 5559 |
| ATx626 x Tx434 | Tx. Agri. Exp. Sta. | — | — | 49 | 6406 | 70 | 5826 |
| ATx3042 x Tx430 | Tx. Agri. Exp. Sta. | — | — | 58 | 6326 | 82 | 4969 |
| 505 | Jacques Seed Company | — | — | 59 | 6286 | 48 | 6593 |
| 1091 | Cargill Hybrid Seeds | — | — | 62 | 6241 | 27 | 7276 |
| ATx399 x Tx2737 | Tx. Agri. Exp. Sta. | — | — | 63 | 6239 | 34 | 6962 |
| ATx626 x RTx430 | Tx. Agri. Exp. Sta. | — | — | 70 | 6092 | 65 | 6118 |
| T48 | Summit Seed Company | — | — | 71 | 6092 | 43 | 6671 |
| 411 | Jacques Seed Company | — | — | 75 | 5883 | 44 | 6643 |
| T45 | Summit Seed Company | — | — | 80 | 5446 | 83 | 4930 |
| Number Entries: | | 80 | | 83 | | 88 | |
| Test Mean Yield: | | | 7395 | | 6469 | | 6622 |

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

SUPPLEMENT

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

TABLE S1. GRAIN SORGHUM AGRONOMIC AND TEST INFORMATION, 1988

| | | | |
|--------------------|--|---------------------------------|---|
| LOCATION: | Beaumont, Texas | Beaumont ratoon crop | Eagle Lake, Texas |
| SOIL TYPE: | Bernard-Morey silt loam | Bernard-Morey silt loam | Nada fine sandy loam |
| ROW WIDTH: | 32 inches | 32 inches | 32 inches |
| PREVIOUS CROP: | winter wheat | not applicable | fallow |
| DATE PLANTED: | March 22 | not applicable | March 25 |
| PLOT LENGTH: | 20 feet | 20 feet | 20 feet |
| NUMBER ROWS/PLOT: | 2 | 2 | 2 |
| FERTILIZER: | 160-40-24 preplant on March 11 | 100-0-0 topdress on August 3 | 42-50-50 preplant |
| HERBICIDE: | 2.0 pt/A Dual 8E and 3.0 pt/A AAtrex 4L on March 22 | none | 2.0 pt/A Dual 8E and 2.4 pt/A AAtrex 4L on March 25 |
| INSECTICIDE: | 10 lb/A Furadan 15G on March 22 2.0 lb A.I./A Sevin XLR on June 23 for webworm and midge 1.0 lb A.I./A Sevin XLR on June 29 for midge | none | 10 lb/A Furadan 15G on March 25 |
| RAINFALL (inches): | Feb. = 3.04, Mar. = 4.40, Apr. = 1.53 May = 0.93, June = 3.50, July = 4.82 Aug. = 4.40, Sept. = 6.57, Oct. = 2.85 | | Feb. = 0.96, Mar. = 4.48 Apr. = 2.40, May = 2.72 June = 0.89, July = 4.58 |
| DATE HARVESTED: | July 22 | November 7 | July 13 |
| MEAN PLANT POP./A: | 70,000 | 70,000 | 70,000 |
| TEST MEAN (lb/A): | 6,160 | 1,860 | 3,230 |
| TEST CV: | 8.6 | 21.9 | 18.6 |

TABLE S2. GRAIN SORGHUM PERFORMANCE TEST, BEAUMONT, 1988

| ENTRY | COMPANY OR BRAND NAME | DAYS TO 50% FLOWER | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | BIRD DAMAGE (%) | DESIR. RATING (1-5) * | TEST WEIGHT (lb/bu) | YIELD (lb/A) |
|---------------------|-----------------------------|--------------------------|-------------------------|-------------------------|---------------------------|-----------------------|-----------------------------|---------------------------|-----------------|
| A2Tx632 x SC103-12E | TAES | 82 | 57 | 3 | 12 | 3 | 1.8 | 56.8 | 7360 |
| ATx2752 x SC103-12 | TAES | 80 | 56 | 6 | 10 | 2 | 1.3 | 58.8 | 7210 |
| A83E x RTx430 | TAES | 84 | 68 | 6 | 11 | 12 | 2.8 | 54.1 | 7000 |
| ATx626 x IA28 | TAES | 79 | 57 | 3 | 12 | 5 | 2.0 | 56.5 | 6950 |
| Topaz | Asgrow Seed | 79 | 47 | 4 | 10 | 5 | 2.8 | 55.7 | 6920 |
| ATx631 x RTx435 | TAES | 82 | 58 | 4 | 13 | 8 | 1.3 | 55.0 | 6840 |
| ATx626 x R4244 | TAES | 78 | 62 | 6 | 12 | 5 | 2.5 | 57.6 | 6810 |
| DK-66 | Dekalb-Pfizer | 86 | 55 | 1 | 10 | 13 | 2.5 | 60.0 | 6790 |
| ATx626 x R8503 | TAES | 79 | 54 | 4 | 11 | 5 | 1.5 | 59.0 | 6720 |
| WAC 710DR | SeedTec Int. | 80 | 46 | 2 | 11 | 7 | 2.7 | 51.2 | 6600 |
| A8602 x SC103-12 | TAES | 74 | 60 | 8 | 10 | 3 | 2.2 | 56.1 | 6590 |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | 80 | 48 | 3 | 11 | 8 | 2.2 | 59.6 | 6590 |
| A2Tx632 x SC599-11E | TAES | 81 | 55 | 4 | 12 | 2 | 1.8 | 56.8 | 6580 |
| AKS5 x RTx434 | TAES | 75 | 66 | 10 | 10 | 7 | 2.7 | 58.6 | 6430 |
| S.G. 932 | Garrison Seed | 79 | 49 | 3 | 10 | 3 | 2.3 | 55.3 | 6430 |
| WAC 686 | SeedTec Int. | 80 | 48 | 3 | 10 | 3 | 2.3 | 57.4 | 6340 |
| ATx378 x IA28 | TAES | 80 | 54 | 2 | 12 | 8 | 2.7 | 56.5 | 6310 |
| WAC D701G | SeedTec Int. | 80 | 48 | 1 | 10 | 3 | 2.2 | 56.2 | 6260 |
| T-E Y-75 | Taylor-Evans | 80 | 48 | 1 | 10 | 13 | 2.7 | 57.0 | 6220 |
| ATx399 x RTx435 | TAES | 84 | 45 | 2 | 10 | 5 | 2.7 | 54.2 | 6160 |
| Wrangler II | Conlee Seed | 76 | 52 | 3 | 11 | 3 | 2.5 | 55.9 | 6090 |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | 80 | 47 | 3 | 10 | 10 | 2.5 | 59.3 | 6080 |
| NC+ 572E | NC+ Hybrids | 81 | 47 | 2 | 10 | 3 | 2.8 | 58.4 | 6040 |
| ATx2752 x SC599-11E | TAES | 79 | 49 | 3 | 11 | 7 | 2.5 | 58.8 | 6030 |
| AKS66 x RTx434 | TAES | 84 | 48 | 1 | 11 | 12 | 3.2 | 56.9 | 5960 |

TABLE S2. Continued

| ENTRY | COMPANY OR BRAND NAME | DAYS TO 50% FLOWER | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | BIRD DAMAGE (%) | DESIR. RATING (1-5) | TEST WEIGHT (lb/bu) | YIELD (lb/A) |
|-----------------------------|-----------------------------|--------------------------|-------------------------|-------------------------|---------------------------|-----------------------|---------------------------|---------------------------|-----------------|
| ATx626 x RTx430 | TAES | 79 | 52 | 3 | 12 | 8 | 2.7 | 51.8 | 5940 |
| ATx626 x RTAM428 | TAES | 79 | 57 | 5 | 11 | 5 | 2.7 | 55.4 | 5940 |
| ORO G XTRA | R. C. Young | 79 | 48 | 1 | 10 | 3 | 2.7 | 56.0 | 5890 |
| ATx2752 x RTx430 | TAES | 82 | 47 | 0 | 11 | 3 | 2.5 | 57.5 | 5870 |
| A8106 x RTx434 | TAES | 84 | 53 | 4 | 13 | 5 | 1.7 | 54.7 | 5860 |
| ATx629 x RTx434 | TAES | 81 | 55 | 5 | 11 | 7 | 2.0 | 56.2 | 5860 |
| NK 2665 | Northrup King | 78 | 44 | 1 | 10 | 2 | 3.2 | 56.5 | 5840 |
| ATx378 x RTx433 | TAES | 82 | 54 | 4 | 10 | 8 | 2.2 | 55.1 | 5660 |
| ATx626 x RTx433 | TAES | 79 | 56 | 4 | 11 | 13 | 1.7 | 54.3 | 5620 |
| ET-610 | East Texas Seed | 84 | 45 | 1 | 12 | 15 | 3.0 | 55.8 | 5530 |
| AT629 x RTx433 | TAES | 79 | 55 | 5 | 11 | 12 | 2.3 | 49.3 | 5490 |
| AKS5 x ADN55 | TAES | 73 | 60 | 8 | 10 | 15 | 2.7 | 58.1 | 5470 |
| ATx628 x RTx434 | TAES | 84 | 53 | 3 | 10 | 10 | 2.7 | 56.5 | 5270 |
| ATx378 x RTx434 | TAES | 85 | 54 | 4 | 10 | 33 | 2.7 | 55.3 | 4890 |
| GSC 1153 | GroAgri Seed | 71 | 46 | 5 | 10 | 8 | 3.2 | 55.6 | 4510 |
| TEST MEAN = 6160 (310) lb/A | | LSD(0.1) = 740 lb/A | | CV = 8.6% | | | | | |

* DESIRABILITY (1 = excellent, 5 = very poor)

TABLE S3. GRAIN SORGHUM PERFORMANCE TEST, EAGLE LAKE, 1988

| ENTRY | COMPANY OR BRAND NAME | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | LODGING (%) | BIRD DAMAGE (%) | DESIR. RATING (1-5) * | TEST WEIGHT (lb/bu) | YIELD (lb/A) |
|---------------------|-----------------------------|-------------------------|-------------------------|---------------------------|----------------|-----------------------|-----------------------------|---------------------------|-----------------|
| S.G. 932 | Garrison Seed | 52 | 1 | 10 | 0 | 0 | 2.7 | 52.3 | 4360 |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | 50 | 1 | 11 | 0 | 0 | 2.2 | 55.6 | 4180 |
| ATx626 x R4244 | TAES | 60 | 3 | 12 | 5 | 0 | 3.0 | 54.7 | 4140 |
| AKS5 x RTx434 | TAES | 62 | 6 | 11 | 93 | 0 | 4.5 | 49.7 | 4100 |
| NK 2665 | Northrup King | 47 | 1 | 10 | 0 | 0 | 3.0 | 52.6 | 4080 |
| ATx626 x RTx430 | TAES | 53 | 1 | 11 | 7 | 2 | 3.0 | 52.5 | 4020 |
| ATx626 x RTx433 | TAES | 52 | 2 | 11 | 13 | 2 | 3.0 | 50.0 | 3900 |
| A83E x RTx430 | TAES | 63 | 3 | 11 | 0 | 0 | 2.2 | 48.3 | 3890 |
| WAC 710DR | SeedTec Int. | 47 | 2 | 11 | 0 | 0 | 3.2 | 46.6 | 3870 |
| ATx378 x RTx434 | TAES | 52 | 1 | 11 | 0 | 0 | 2.3 | 53.1 | 3530 |
| Wrangler II | Conlee Seed | 49 | 2 | 11 | 45 | 3 | 4.0 | 51.0 | 3500 |
| A2Tx632 x SC599-11E | TAES | 52 | 4 | 12 | 0 | 0 | 2.7 | 52.5 | 3470 |
| WAC D701G | SeedTec Int. | 45 | 1 | 10 | 0 | 0 | 3.0 | 55.5 | 3430 |
| ATx628 x RTx434 | TAES | 51 | 2 | 10 | 0 | 0 | 2.5 | 53.8 | 3390 |
| A8602 x SC103-12 | TAES | 59 | 3 | 12 | 55 | 2 | 4.5 | 50.4 | 3370 |
| ATx631 x RTx435 | TAES | 53 | 1 | 12 | 0 | 0 | 2.2 | 52.6 | 3370 |
| AKS5 x ADN55 | TAES | 60 | 6 | 10 | 70 | 0 | 4.5 | 51.3 | 3350 |
| ATx629 x RTx433 | TAES | 53 | 2 | 11 | 0 | 2 | 2.5 | 48.4 | 3340 |
| AKS66 x RTx434 | TAES | 48 | 0 | 11 | 0 | 0 | 3.0 | 47.7 | 3340 |
| A8106 x RTx434 | TAES | 51 | 2 | 13 | 0 | 3 | 2.5 | 53.7 | 3310 |
| ATx2752 x SC599-11E | TAES | 49 | 2 | 11 | 0 | 2 | 3.0 | 55.7 | 3300 |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | 45 | 1 | 10 | 0 | 3 | 3.2 | 55.1 | 3250 |
| ATx378 x RTx433 | TAES | 50 | 1 | 11 | 0 | 2 | 2.8 | 51.7 | 3250 |
| ORO G XTRA | R. C. Young | 48 | 1 | 11 | 0 | 2 | 3.2 | 52.0 | 3140 |
| ATx2752 x SC103-12 | TAES | 54 | 1 | 11 | 12 | 0 | 3.7 | 54.3 | 3130 |

TABLE S3. Continued

| ENTRY | COMPANY OR BRAND NAME | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | LODGING (%) | BIRD DAMAGE (%) | DESIR. RATING (1-5) | TEST WEIGHT (lb/bu) | YIELD (lb/A) |
|--|-----------------------------|-------------------------|-------------------------|---------------------------|----------------|-----------------------|---------------------------|---------------------------|-----------------|
| ATx629 x RTx434 | TAES | 58 | 3 | 11 | 17 | 2 | 2.7 | 51.2 | 3100 |
| ET-610 | East Texas Seed | 42 | 0 | 12 | 0 | 0 | 3.7 | 50.2 | 3050 |
| DK-66 | Dekalb-Pfizer | 52 | 0 | 10 | 0 | 2 | 3.2 | 54.9 | 2990 |
| ATx378 x IA28 | TAES | 53 | 2 | 10 | 0 | 3 | 3.3 | 52.7 | 2880 |
| ATx2752 x RTx430 | TAES | 44 | 0 | 11 | 0 | 0 | 3.3 | 54.6 | 2880 |
| ATx399 x RTx435 | TAES | 44 | 2 | 11 | 0 | 0 | 3.2 | 54.5 | 2870 |
| ATx626 x R8503 | TAES | 49 | 1 | 11 | 0 | 0 | 3.0 | 52.3 | 2840 |
| WAC 686 | SeedTec Int. | 49 | 1 | 10 | 13 | 3 | 3.7 | 53.0 | 2690 |
| ATx626 x RTAM428 | TAES | 50 | 1 | 11 | 13 | 2 | 4.2 | 42.4 | 2540 |
| GSC 1153 | GroAgri Seed | 45 | 4 | 11 | 0 | 3 | 4.0 | 53.7 | 2500 |
| NC+ 572E | NC+ Hybrids | 48 | 1 | 10 | 10 | 0 | 3.8 | 52.0 | 2450 |
| A2Tx632 x SC103-12E | TAES | 54 | 2 | 11 | 0 | 0 | 3.0 | 50.6 | 2390 |
| ATx626 x IA28 | TAES | 54 | 1 | 11 | 17 | 2 | 3.8 | 52.6 | 2390 |
| T-E Y-75 | Taylor-Evans | 45 | 0 | 10 | 15 | 0 | 4.0 | 52.2 | 2230 |
| Topaz | Asgrow Seed | 42 | 0 | 10 | 0 | 0 | 4.7 | 44.6 | 2190 |
| TEST MEAN = 3230 (350) lb/A LSD(0.1) = 870 lb/A CV = 18.6% | | | | | | | | | |

* DESIRABILITY (1 = excellent, 5 = very poor)

TABLE S4. GRAIN SORGHUM RATOON CROP AND TOTAL YIELD, BEAUMONT, 1988

| ENTRY | COMPANY OR BRAND NAME | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | DESIR. RATING (1-5) * | TEST WEIGHT (lb/bu) | --- YIELD (lb/A) ---- | | |
|---------------------|-----------------------------|-------------------------|-------------------------|---------------------------|-----------------------------|---------------------------|-----------------------|--------------|----------------|
| | | | | | | | RATOON CROP | MAIN CROP | TOTAL YIELD |
| ATx378 x IA28 | TAES | 59 | 3 | 10 | 1.3 | 56.5 | 2550 | 6310 | 8860 |
| S.G. 932 | Garrison Seed | 52 | 2 | 9 | 3.0 | 54.7 | 2350 | 6430 | 8780 |
| ATx626 x RTx430 | TAES | 57 | 2 | 12 | 2.3 | 49.9 | 2340 | 5940 | 8280 |
| Wrangler II | Conlee Seed | 60 | 2 | 11 | 2.3 | 51.2 | 2200 | 6090 | 8290 |
| A83E x RTx430 | TAES | 72 | 8 | 11 | 3.5 | 54.7 | 2180 | 7000 | 9180 |
| ORO G XTRA | R. C. Young | 55 | 3 | 10 | 3.2 | 55.8 | 2140 | 5890 | 8030 |
| T-E Y-75 | Taylor-Evans | 55 | 2 | 9 | 2.3 | 56.5 | 2090 | 6220 | 8310 |
| ATx626 x RTAM428 | TAES | 60 | 3 | 11 | 2.8 | 49.9 | 2080 | 5940 | 8020 |
| ATx2752 x SC103-12 | TAES | 61 | 4 | 9 | 1.7 | 57.8 | 2060 | 7210 | 9270 |
| WAC 710DR | SeedTec, Int. | 50 | 3 | 9 | 3.3 | 52.8 | 2040 | 6600 | 8640 |
| NC+ 572E | NC+ Hybrids | 52 | 2 | 11 | 2.7 | 57.9 | 2030 | 6040 | 8070 |
| A8602 x SC103-12 | TAES | 66 | 6 | 10 | 2.8 | 56.8 | 2020 | 6590 | 8610 |
| WAC 686 | SeedTec, Int. | 55 | 4 | 10 | 2.8 | 56.1 | 1990 | 6340 | 8330 |
| ATx626 x IA28 | TAES | 61 | 3 | 11 | 2.0 | 54.9 | 1990 | 6950 | 8940 |
| ATx399 x RTx435 | TAES | 53 | 4 | 9 | 2.8 | 54.1 | 1980 | 6160 | 8140 |
| ATx626 x R8503 | TAES | 56 | 2 | 11 | 2.0 | 51.8 | 1960 | 6720 | 8680 |
| ATx378 x RTx434 | TAES | 63 | 7 | 9 | 3.2 | 53.7 | 1930 | 4890 | 6820 |
| NK 2665 | Northrup King | 51 | 2 | 10 | 3.7 | 54.6 | 1900 | 5840 | 7740 |
| A2Tx632 x SC103-12E | TAES | 67 | 6 | 12 | 2.2 | 54.5 | 1890 | 7360 | 9250 |
| ATx2752 x SC599-11E | TAES | 53 | 5 | 9 | 2.5 | 55.6 | 1880 | 6030 | 7910 |
| Pioneer hybrid 8260 | Pioneer Hi-Bred | 50 | 3 | 10 | 3.2 | 58.5 | 1860 | 6590 | 8450 |
| ET-610 | East Texas Seed | 56 | 2 | 10 | 3.2 | 55.2 | 1840 | 5530 | 7370 |
| A2Tx632 x SC599-11E | TAES | 55 | 6 | 9 | 2.2 | 54.9 | 1840 | 6580 | 8420 |
| ATx629 x RTx433 | TAES | 58 | 3 | 10 | 2.8 | 50.3 | 1840 | 5490 | 7330 |
| ATx629 x RTx434 | TAES | 62 | 6 | 10 | 2.2 | 49.7 | 1820 | 5860 | 7680 |

TABLE S4. Continued

| ENTRY | COMPANY OR BRAND NAME | PLANT HEIGHT (in) | PANICLE EXS. (in) | PANICLE LENGTH (in) | DESIR. RATING (1-5) | TEST WEIGHT (lb/bu) | --- YIELD (lb/A) ---- | | |
|-----------------------------|-----------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|-----------------------|--------------|----------------|
| | | | | | | | RATOON CROP | MAIN CROP | TOTAL YIELD |
| ATx378 x RTx433 | TAES | 57 | 4 | 9 | 3.3 | 53.1 | 1790 | 5660 | 7450 |
| ATx2752 x RTx430 | TAES | 51 | 3 | 10 | 3.0 | 53.9 | 1770 | 5870 | 7640 |
| WAC D701G | SeedTec, Int. | 51 | 2 | 10 | 3.2 | 53.3 | 1770 | 6260 | 8030 |
| AKS66 x RTx434 | TAES | 59 | 5 | 11 | 3.2 | 50.6 | 1760 | 5960 | 7720 |
| ATx626 x RTx433 | TAES | 62 | 6 | 11 | 2.7 | 52.3 | 1680 | 5620 | 7300 |
| Topaz | Asgrow Seed | 50 | 2 | 10 | 3.2 | 52.4 | 1680 | 6920 | 8600 |
| Pioneer hybrid 8358 | Pioneer Hi-Bred | 51 | 3 | 10 | 3.2 | 58.4 | 1660 | 6080 | 7740 |
| AKS5 x ADN55 | TAES | 69 | 10 | 9 | 3.8 | 58.0 | 1620 | 5470 | 7090 |
| ATx626 x R4244 | TAES | 68 | 6 | 11 | 2.8 | 55.6 | 1600 | 6810 | 8410 |
| AKS5 x RTx434 | TAES | 75 | 8 | 9 | 3.3 | 58.5 | 1560 | 6430 | 7990 |
| ATx628 x RTx434 | TAES | 59 | 5 | 10 | 2.7 | 53.1 | 1540 | 5270 | 6810 |
| A8106 x RTx434 | TAES | 63 | 7 | 12 | 2.3 | 47.9 | 1340 | 5860 | 7200 |
| GSC 1153 | GroAgri Seed | 54 | 4 | 10 | 3.5 | 56.0 | 1310 | 4510 | 5820 |
| ATx631 x RTx435 | TAES | 66 | 8 | 12 | 2.7 | 49.3 | 1310 | 6840 | 8150 |
| DK 66 | Dekalb-Pfizer | 56 | 3 | 10 | 3.5 | 55.2 | 1290 | 6790 | 8080 |
| TEST MEAN = 1860 (230) lb/A | | LSD(0.1) = 570 lb/A | | CV = 21.9% | | | | | |

* DESIRABILITY (1 = excellent, 5 = very poor)

TABLE S5. AGRONOMIC AND TEST INFORMATION: HALFWAY, TEXAS

Supplementary Grain Sorghum Test

TITLE: Single row irrigated grain sorghum hybrid performance test at the Texas Agricultural Experiment Station, Halfway, Texas, 1988.

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

METHODS & MATERIALS:

| | |
|----------------------|--|
| Experimental Design: | Triple lattice |
| Plot Size: | 10 ft (3 beds) X 22 ft |
| Row Spacing: | Single row on 40-inch spaced beds |
| Soil Type: | Pullman clay loam |
| Previous Crop: | Corn |
| Fertilizer: | 154 lbs N/A as anhydrous ammonia |
| Herbicide: | 1 lb ai/A Milogard |
| Insecticide: | 6.5 lbs/A Counter 15G preplant; 3/8 lb ai/A Lorsban Aug 12 and 1/2 lb ai/A Lorsban Aug 19 and 25 |
| Irrigations: | Preplant plus 3.6, 2.8, 3.4, 3.5, 2.8 acre in/A applications June 20, Jul 20, 26, Aug 2, 10, 17 |
| Plant Population: | 83,335 avg plants/A |
| Date Planted: | May 24 |
| Harvest Date: | Oct 14 |

RESULTS & DISCUSSION:

Table S6 contains all agronomic data recorded in 1988. Yields were excellent in this test. Timely irrigation and rainfall contributed to higher than average test yields. Slightly below average plant population may have reduced yields in some hybrids. Lodging occurred in only one tall hybrid. Yields were not adjusted for the estimated bird damage.

The systemic insecticide, Counter, was applied preplant for greenbug control. No midge damage was reported. Three insecticide applications were applied for control of midge for late flowering sorghum.

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

Table S6. Grain yield and other agronomic data for forty-nine grain sorghum hybrids evaluated under irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1988

| COMPANY OR BRAND NAME | HYBRID DESIGNATION | GRAIN YIELD lb/A 1 | DUNCAN'S 5% LEVEL 2 | DAYS TO FLOWER 3 | PLANT HEIGHT (IN) 4 | HEAD EXS. IN. 4 | HEIGHT UNIF. 5 | HEAD TYPE 6 | BIRD DAMAGE % 7 | MOIS- TURE % 8 | MATU- RITY 9 |
|-----------------------------|-----------------------|-----------------------------|------------------------------|---------------------------|------------------------------|--------------------------|----------------------|-------------------|--------------------------|-------------------------|--------------------|
| Triumph | Two 80-D | 9452 | A | 73 | 61 | 4 | 3.0 | 2.7 | 1.3 | 13.8 | ML |
| Northrup King | NK 2665 | 9267 | A-B | 73 | 57 | 3 | 2.0 | 2.3 | 0.7 | 13.9 | L |
| Garrison | SG 932 | 9232 | A-C | 73 | 64 | 5 | 3.0 | 2.0 | 2.7 | 14.4 | ML |
| Northrup King | S9750 | 9214 | A-C | 73 | 63 | 5 | 3.0 | 3.0 | 0.7 | 13.9 | L |
| Hoegemeyer | GT 662 | 9200 | A-C | 72 | 59 | 6 | 2.3 | 3.0 | 1.0 | 13.4 | M |
| Tx. Ag. Exp. Stat. | ATx631 x R8505 | 9178 | A-D | 75 | 72 | 7 | 3.0 | 3.0 | 2.0 | 15.0 | ML |
| Frontier | F-524G | 9172 | A-D | 73 | 60 | 4 | 3.3 | 3.0 | 2.7 | 14.8 | L |
| Hoegemeyer | GT 688 | 9115 | A-E | 73 | 62 | 4 | 3.3 | 2.7 | 1.7 | 13.3 | ML |
| Conlee | RUSTLER | 9080 | A-E | 73 | 58 | 6 | 3.3 | 2.7 | 3.3 | 14.2 | ML |
| Seedco | 705 | 9025 | A-E | 73 | 64 | 4 | 3.0 | 3.0 | 2.0 | 14.4 | ML |
| Garrison | SG 944X | 8983 | A-E | 72 | 64 | 4 | 3.0 | 3.0 | 1.3 | 14.4 | ML |
| Cargill | DR 1125 | 8891 | A-E | 72 | 59 | 5 | 2.3 | 3.0 | 2.0 | 13.7 | ML |
| Asgrow/O'S Gold | OSAGE | 8864 | A-E | 72 | 60 | 6 | 2.3 | 2.7 | 1.3 | 12.7 | M |
| Tx. Ag. Exp. Stat. | ATx399 x Tx430 | 8847 | A-E | 73 | 58 | 5 | 2.7 | 3.0 | 1.0 | 12.8 | ML |
| Tx. Ag. Exp. Stat. | ATx2752 x Tx430 | 8832 | A-E | 73 | 63 | 4 | 2.7 | 3.0 | 1.0 | 14.4 | ML |
| Warner | W-844-E | 8805 | A-F | 71 | 58 | 5 | 3.0 | 3.0 | 1.7 | 13.7 | ML |
| Summit | XS 8761E | 8769 | A-G | 73 | 62 | 4 | 3.0 | 3.0 | 2.7 | 14.3 | ML |
| SeedTec | WAC D701G | 8717 | A-G | 73 | 61 | 4 | 3.0 | 3.0 | 2.3 | 14.9 | L |
| Taylor-Evans | T-E Y-75 | 8700 | A-G | 72 | 59 | 4 | 2.7 | 3.0 | 0.7 | 13.1 | ML |
| Cargill | 6670 | 8682 | A-G | 73 | 63 | 5 | 3.0 | 2.7 | 2.7 | 13.6 | ML |
| Tx. Ag. Exp. Stat. | A4R x Tx430 | 8625 | A-G | 68 | 55 | 9 | 2.0 | 2.7 | 2.7 | 12.6 | ML |
| Asgrow/O'S Gold | TOPAZ | 8600 | A-G | 72 | 62 | 7 | 4.3 | 3.0 | 2.0 | 13.5 | M |
| Cargill | 4462 | 8542 | A-H | 72 | 62 | 7 | 1.3 | 3.0 | 3.7 | 12.9 | M |
| Cargill | 5572 | 8539 | A-H | 73 | 63 | 7 | 3.3 | 3.0 | 2.7 | 13.9 | ML |
| Tx. Ag. Exp. Stat. | A1 x R8505 | 8527 | A-H | 73 | 66 | 8 | 4.0 | 3.0 | 0.7 | 14.3 | ML |
| Northrup King | KS 737 | 8496 | A-H | 73 | 61 | 5 | 2.7 | 3.0 | 1.0 | 14.0 | L |
| Tx. Ag. Exp. Stat. | ATx399 x GR105-4 | 8256 | B-I | 74 | 59 | 4 | 4.0 | 3.0 | 0.3 | 13.3 | ML |
| Triumph | TR 74 CR | 8237 | B-I | 70 | 66 | 7 | 3.3 | 3.0 | 3.0 | 13.7 | M |
| Tx. Ag. Exp. Stat. | ATx2752 x GR103-2 | 8205 | B-I | 73 | 64 | 4 | 4.3 | 3.0 | 2.3 | 13.4 | ML |
| Tx. Ag. Exp. Stat. | ATx2752 x GR105-7 | 8197 | B-I | 74 | 61 | 5 | 3.7 | 3.0 | 5.3 | 14.7 | ML |
| Tx. Ag. Exp. Stat. | ATx2752 x GR105-6 | 8195 | B-I | 73 | 57 | 5 | 3.7 | 3.0 | 1.7 | 14.1 | ML |
| Triumph | Two 70-D | 8125 | B-I | 72 | 57 | 5 | 2.7 | 3.0 | 2.0 | 13.1 | M |
| Garrison | SG 922 | 8123 | B-I | 73 | 58 | 7 | 2.3 | 3.0 | 1.3 | 13.6 | ML |
| Conlee | TOWHEAD | 8094 | C-I | 74 | 60 | 6 | 3.7 | 3.3 | 1.7 | 13.4 | ML |
| Northrup King | S 9740Y | 8085 | C-I | 74 | 64 | 7 | 3.3 | 3.0 | 3.0 | 13.5 | M |
| Asgrow/O'S Gold | XP 5017 | 8040 | D-J | 75 | 61 | 7 | 3.0 | 3.0 | 0.3 | 13.9 | M |
| Seedco | 710 | 8029 | D-J | 72 | 57 | 4 | 3.3 | 3.0 | 4.3 | 13.8 | M |
| Tx. Ag. Exp. Stat. | A1 x Tx430 | 8028 | D-J | 69 | 60 | 5 | 3.3 | 4.0 | 2.3 | 12.8 | ML |

Table S6. Grain yield and other agronomic data for forty-nine grain sorghum hybrids evaluated under irrigation at the Texas Agricultural Experiment Station, Halfway, Texas, 1988

| COMPANY OR BRAND NAME | HYBRID DESIGNATION | GRAIN | DUNCAN'S | DAYS | PLANT HEIGHT (IN) | HEAD | HEIGHT UNIF. 5 | HEAD TYPE 6 | BIRD DAMAGE % | MOIS- TURE % | MATU- RITY 7 |
|-----------------------------|-----------------------|--------------------|------------------|-------------------|-------------------------|------------------|----------------------|-------------------|---------------------|--------------------|--------------------|
| | | YIELD lb/A 1 | 5% LEVEL 2 | TO FLOWER 3 | | EXS. IN. 4 | | | | | |
| Warner | WX 88116 | 8006 | E-J | 73 | 61 | 4 | 3.0 | 3.0 | 2.3 | 13.4 | L |
| Tx. Ag. Exp. Stat. | ATx630 x R3338wx | 7977 | E-K | 70 | 71 | 9 | 4.3 | 2.0 | 4.3 | 13.0 | ML |
| Northrup King | KS 780 | 7668 | F-K | 73 | 56 | 7 | 2.7 | 3.0 | 3.0 | 14.0 | M |
| Triumph | TRX 5015 | 7647 | G-K | 67 | 61 | 7 | 2.3 | 3.0 | 6.3 | 12.3 | M |
| Seedco | 702 | 7446 | H-K | 74 | 54 | 7 | 2.7 | 3.0 | 3.0 | 13.6 | M |
| Cargill | 70 | 7344 | I-K | 74 | 52 | 5 | 2.3 | 3.0 | 4.0 | 14.6 | M |
| Tx. Ag. Exp. Stat. | ATx378 x GR108-3 | 7338 | I-K | 74 | 58 | 5 | 5.0 | 2.0 | 1.3 | 15.0 | ML |
| Tx. Ag. Exp. Stat. | A1 x Tx434 | 7181 | I-K | 71 | 69 | 8 | 4.7 | 4.0 | 6.0 | 13.6 | ML |
| Tx. Ag. Exp. Stat. | A1 x R4317 | 6960 | J-K | 70 | 59 | 5 | 3.3 | 3.0 | 3.7 | 13.3 | ML |
| Tx. Ag. Exp. Stat. | ATx399 x GR101-4 | 6899 | K | 74 | 57 | 6 | 3.0 | 3.0 | 4.0 | 13.5 | ML |
| Tx. Ag. Exp. Stat. | RS610 | 5186 | L | 62 | 61 | 9 | 4.0 | 2.3 | 26.7 | 11.6 | ME |

TEST MEAN= 8339
TEST C.V.=6.8
LSD .05=919.3

- 1 All yields adjusted to 13% moisture
- 2 Any two hybrids having a common letter are not significantly different at the 0.05 probability level.
- 3 Number of days from planting until date when majority of heads are in half-bloom.
- 4 Head exertion is average number of inches from the flag leaf to the base of the head.
- 5 Height uniformity rating 1-5 : 1 =uniform 5= irregular.
- 6 Head type rating 1-5: 1= tight, compact head 5= loose, open head.
- 7 Seed company maturity designation: ME= medium early, M= medium, ML= medium late, L= late.

LITERATURE CITED

1. Texas Agricultural Facts. October 20, 1988

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