

2010

Kansas Performance Tests with Grain Sorghum Hybrids

Report of Progress 1041



Kansas State University
Agricultural Experiment Station
and Cooperative Extension Service

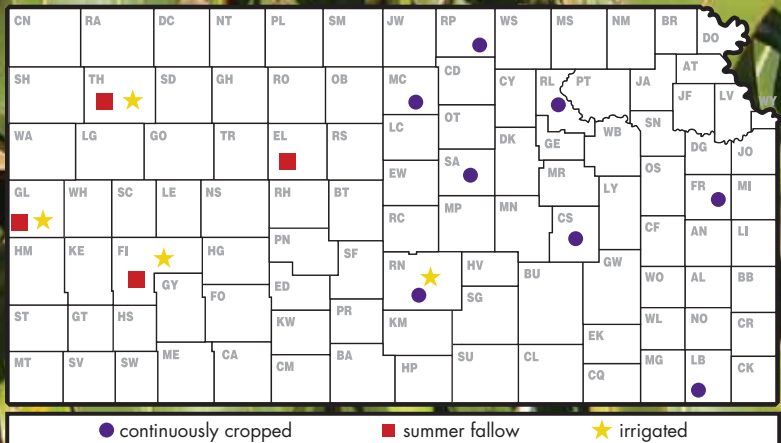


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2010 GRAIN SORGHUM CROP REVIEW

Statewide Growing Conditions

The Kansas grain sorghum growing season progressed rapidly in 2010, spurred by mostly favorable planting conditions in the spring and extremely hot temperatures during the summer. Frequent and sometimes heavy rains required that many acres be replanted, especially in southeast Kansas. Increased rainfall in the spring helped the topsoil moisture levels remain adequate throughout the state, with the exception of a two-week period in August when temperatures stayed in the triple digits (Figure 1). During this period of extreme heat, the grain sorghum was forced to develop at an accelerated pace. Consequently, many producers found that their grain sorghum did not fill completely and yield potential was not met in many fields. The quality of the 2010 crop, however, stayed consistently fair to excellent for the entirety of the growing season (Figure 2).

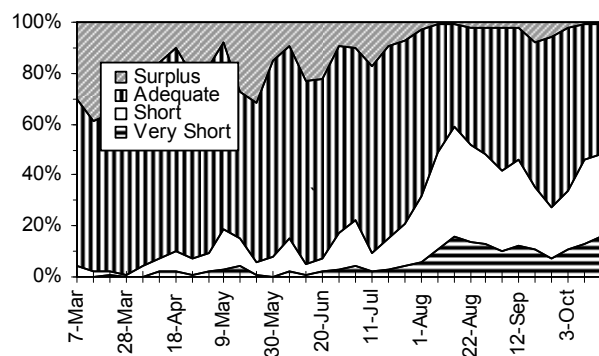


Figure 1. Statewide status of topsoil moisture

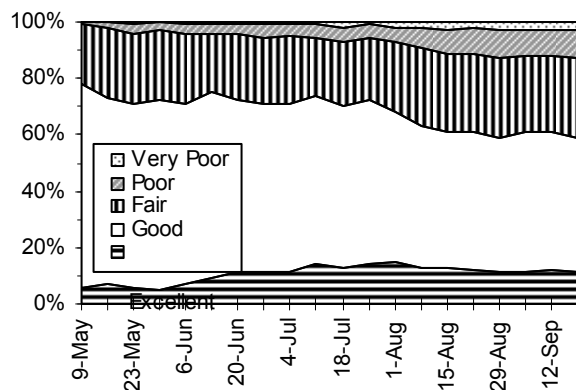


Figure 2. Condition of 2010 Kansas sorghum crop
(Crop Weather Reports, Kansas Agricultural Statistics Service, Topeka)

Diseases

Yield losses due to plant diseases were minimal in the 2010 Kansas grain sorghum crop. Most of the problems that occurred were early in the season when frequent rainfalls kept the soil at or above field capacity. The two most common early season diseases were sorghum downy mildew and Pythium seedling blight. Later, crazy top downy mildew could be found in fields where water tends to pond, such as at field edges where runoff collects.

In no-till fields where rotation is not practiced, sooty stripe was the most common foliar disease. Because this disease is spread by splashing rain drops, the fields with the highest levels of disease coincided with areas that received frequent rainfalls during the mid to late vegetative stages.

Late in the season, both Fusarium stalk rot and Fusarium neck rot could be found in fields that had received significant drought stress earlier in the season. Grain molds, although present, did not appear to be a particular problem.

Other diseases that were reported but did little or no damage include bacterial stripe, target spot, and maize dwarf mosaic. No ergot was known to occur in Kansas in 2010.

(Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

Insect problems during the 2010 growing season mostly consisted of whorl-feeding caterpillars and feeding on the developing grain in the head by these same species of insects. The predominant species for both whorl-feeding and head feeding were fall armyworms and corn earworms (often called the sorghum headworm). Whorl feeding can be very dramatic and always causes considerable concern to growers but is rarely detrimental to the plant, which has an amazing capacity to compensate for loss of leaf tissue at this stage of development with little affect on yield. Many acres, however, were treated to control the head-feeding larvae. This was justified because significant grain can be destroyed very quickly if the infestation is not detected in the early stages of grain fill. One larva/head will reduce yield by about 5%. (Jeff Whitworth, Kansas State University Department of Entomology)

Harvest Statistics

The Kansas Agricultural Statistics Service predicted a 171.6 million-bushel crop in the October 8 Crops Report, down 24% from last year (Figure 3). The number of acres harvested was down 350,000 acres from last year, at 2.35 million. The average yield estimate of 78 bushels per acre is 10 bushels lower than last year's yield. (Kansas Agricultural Statistics Service, Topeka)

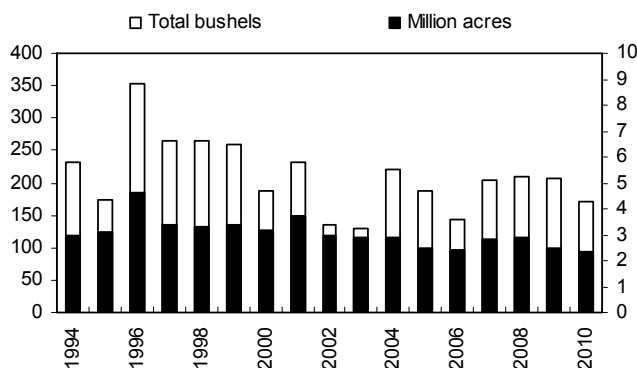


Figure 3. Historical Kansas grain sorghum production

2010 PERFORMANCE TESTS

Objectives and Procedures

Grain sorghum performance tests, conducted annually by the Kansas Agricultural Experiment Station, provide farmers, extension workers, and seed industry personnel with unbiased agronomic information on many of the grain sorghum hybrids marketed in the state. Because entry selection and location are voluntary, not all hybrids grown in the state are included in tests, and the same group of hybrids is not grown at all test locations.

A summary of growing-season weather data is given in individual test discussions. These data are from the nearest weather-reporting station and often are supplemented with information from the test site. Precipitation graphs include cumulative lines for 2010 and the 30-year normal in addition to daily rainfall amounts since last fall. Temperature graphs include daily maximum and minimum temperatures compared with normal. General trends in precipitation and temperature relative to normal are readily observed in the graphs. A table with monthly totals and averages for the growing season also is included.

The growth unit, or growing degree day, concept was developed to measure the amount of heat available for growth and maturation. To calculate the daily growing degree day accumulation, add the maximum temperature and the minimum temperature for each day, divide by 2, and subtract a base temperature of 35°F. Any temperature below 35°F was considered to be 35°F.

Explanatory information precedes data summaries for each test. Tables 2 through 22 contain results from the individual performance tests. Hybrids are listed in order of increasing days to half bloom when that information is available, so hybrids of similar maturity appear together.

Figures 4 through 8 graphically summarize yield and maturity information over the past 3 years for each region. In these figures, hybrid performance is standardized by using the average of two check hybrids present in every test. The number beside each bar shows the number of tests in which a given hybrid was compared with the check hybrids. Symbols beside each bar indicate if performance of a hybrid was significantly greater (+) or lower (-) than the average performance of the check hybrids. As with individual test results, small differences should not be overemphasized. Relative ranking and large differences are better indicators of performance.

Most tests were planted at a rate 25 to 30% greater than the desired population and thinned only to remove doubles. Planting to stand enables evaluation of product performance for the entire growing season.

Three or four plots (replications) of each hybrid were grown in a randomized complete block design at each location. Each harvested plot consisted of two rows trimmed to a specific length ranging from 20 to 30 feet at the different locations.

Grain yields are reported as bushels per acre of shelled grain (56 lb/bu) adjusted to a moisture content of 12.5%. Yields also are presented as a percentage of test average to speed recognition of highest-yielding hybrids. Hybrids yielding more than 100% of the test average year after year merit consideration. Adaptation to individual farms for appropriate maturity, stalk strength, and other factors must also be considered.

The percentage of lodged stalks is reported when appropriate. Both broken stalks and stalks leaning more than 45 degrees from vertical were considered lodged, although most were harvestable with modern machinery. Severely lodged stalks or dropped heads that could not be picked up by normal harvest procedures were not included in yield. Because harvest often is delayed until latest maturing entries are ripe, early and mid-season hybrids could lodge simply because they must wait well past their optimum harvest date.

Relative maturity is measured in terms of both number of days from planting to half bloom and grain moisture at harvest. Maturity can be critical when considering a sorghum hybrid for a specific cropping system.

Small differences in yield or other characteristics should not be overemphasized. Least significant differences (LSD) are shown at the bottom of each table. Unless two entries differ by at least the LSD shown, little confidence can be placed in one being superior to the other.

The coefficient of variability (CV) can be used to estimate the degree of confidence one can have in published data from replicated tests. In this testing program, a CV of less than 10% generally indicates reliable, uniform data, whereas a CV of 10 to 15% is not uncommon and usually indicates that data are acceptable for the rough performance comparisons desired from these tests. Tests with a CV greater than 15% still may be useful, especially in situations with low yields.

Table 1. Entrants in the 2010 Kansas Grain Sorghum Performance Tests

Channel Bio Corp.
Lincoln, NE
402-467-2517
channelbio.com

**Dyna-Gro
UAP-Pueblo**
Overland Park, KS
913-227-0838

Phillips Seed Farms
Hope, KS
785-949-2204
phillipsseed.com

Syngenta Seeds
Minnetonka, MN
402-616-6534
syngenta.com

**Asgrow/DeKalb
Monsanto Seed**
St. Louis, MO
800-335-2676
www.asgrow.com

**Midland
Kauffman Seeds**
Haven, KS
620-465-2245

**Pioneer Brand
Pioneer Hi-Bred, Intl., Inc.**
Lincoln, NE
800-228-4050
pioneer.com

Triumph Seed Co., Inc.
Ralls, TX
888-521-7333
triumphseed.com

Drussel Seed, Inc.
Garden City, KS
620-275-2359

Ohlde Seed Farms
Palmer, KS
785-692-4555

Producers Hybrids
Battle Creek, NE
888-675-3190
producershybrids.com

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Agronomy North Farm, Manhattan; Jane Lingenfelser, agronomist

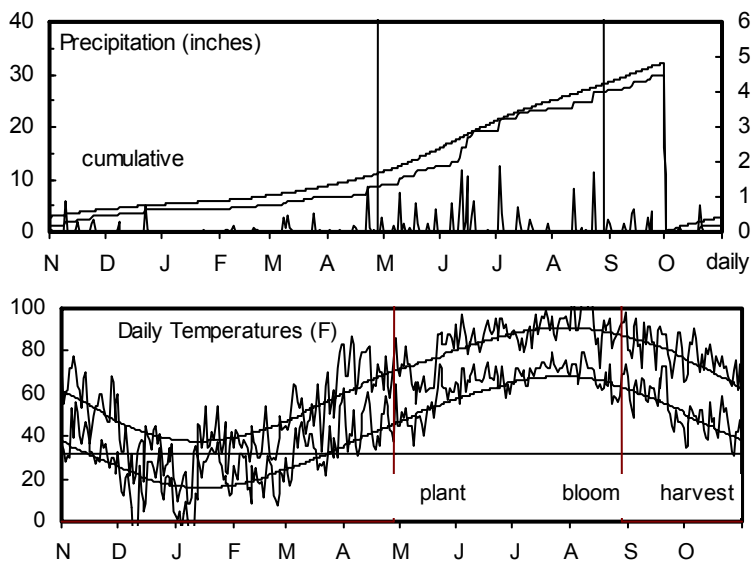
Reading silt loam; Soybean in 2009

120 - 0 - 0 lb/a N, P, K

Planted on 4/29/2010; Harvested on 8/27/2010

Target stand of 55,000 plants/acre; 3.8 in. spacing

Heavy rains after planting caused emergence and stand issues.



| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 5.6 | 6.0 | 34 | 35 | | |
| April | 2.3 | 2.6 | 59 | 53 | 825 | 575 |
| May | 3.6 | 4.5 | 64 | 64 | 914 | 918 |
| June | 6.6 | 5.1 | 77 | 73 | 1226 | 1158 |
| July | 4.2 | 4.0 | 81 | 79 | 1340 | 1369 |
| August | 3.5 | 3.5 | 80 | 78 | 1284 | 1317 |
| Sept. | 2.7 | 3.8 | 70 | 70 | 1048 | 1035 |
| Oct. | 1.1 | 2.7 | 60 | 57 | 866 | 698 |
| Totals: | 29.6 | 32.1 | 55 | 54 | 7,503 | 7,070 |

Table 2. Riley County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|----------|----------------------|------------|------------|------------|------------|---------|------|------|------------|-----------|----|------------|-----------|-----------|----------|------|------|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST | | | Days Grain | | | Days Grain | | | Plnt | Pop. | Hds. |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | to Moist. | % | Blm | to Moist. | Wt. lb/bu | | | |
| | | | | | | | AVERAGE | | | | | | Ht. in. | Ldg % | 1000 ppa | per Plnt | | |
| MATURITY CHECK | EARLY | 86 | 95 | -- | 91 | -- | 86 | 72 | -- | 71 | 14 | 71 | 11 | 60 | -- | 5 | 40.4 | 1.5 |
| DEKALB | DKS36-06 | 94 | 134 | -- | 114 | -- | 94 | 101 | -- | 72 | 17 | 72 | 15 | 60 | -- | 1 | 41.2 | 1.3 |
| DEKALB | DKS37-07 | 95 | 117 | 120 | 106 | 111 | 95 | 88 | 96 | 70 | 16 | 72 | 14 | 60 | -- | 5 | 43.9 | 1.4 |
| DEKALB | DKS44-20 | 105 | 147 | 142 | 126 | 131 | 106 | 111 | 113 | 73 | 18 | 73 | 15 | 60 | -- | 1 | 43.9 | 1.4 |
| DYNA-GRO | 742C | 84 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 73 | 13 | 59 | -- | 4 | 42.9 | 1.2 |
| DYNA-GRO | 772B | 102 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 73 | 15 | 59 | -- | 2 | 40.9 | 1.3 |
| DYNA-GRO | GX08365 | 99 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 73 | 14 | 59 | -- | 0 | 41.2 | 1.4 |
| PIONEER | 84P74 | 118 | 144 | -- | 131 | -- | 119 | 109 | -- | 74 | 20 | 73 | 16 | 59 | -- | 8 | 42.4 | 1.4 |
| SYNGENTA | H-390W | 82 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | 73 | 13 | 58 | -- | 3 | 40.4 | 1.2 |
| TRIUMPH | TR 448 | 86 | -- | -- | -- | -- | 86 | -- | -- | -- | -- | 73 | 12 | 59 | -- | 0 | 38.6 | 1.3 |
| MATURITY CHECK | MEDIUM | 116 | 119 | -- | 118 | -- | 116 | 90 | -- | 72 | 16 | 74 | 14 | 59 | -- | 4 | 44.1 | 1.5 |
| PIONEER | 85Y40 | 118 | 141 | 135 | 130 | 131 | 118 | 106 | 108 | 74 | 18 | 74 | 15 | 59 | -- | 1 | 45.9 | 1.4 |
| SYNGENTA | 5613 | 97 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 74 | 13 | 59 | -- | 0 | 40.9 | 1.3 |
| SYNGENTA | 5745 | 96 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 74 | 14 | 59 | -- | 2 | 50.5 | 1.2 |
| DEKALB | DKS49-45 | 100 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 75 | 14 | 60 | -- | 4 | 44.1 | 1.2 |
| DYNA-GRO | 766B | 102 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 75 | 13 | 59 | -- | 4 | 40.4 | 1.4 |
| PIONEER | 85G03 | 113 | 137 | 134 | 125 | 128 | 114 | 103 | 106 | 73 | 17 | 75 | 15 | 59 | -- | 4 | 44.4 | 1.5 |
| TRIUMPH | TR 463 | 107 | -- | -- | -- | -- | 107 | -- | -- | -- | -- | 75 | 14 | 58 | -- | 1 | 39.5 | 1.7 |
| DEKALB | DKS53-67 | 105 | 147 | 138 | 126 | 130 | 105 | 111 | 110 | 76 | 20 | 76 | 16 | 60 | -- | 0 | 42.9 | 1.2 |
| DEKALB | DKS54-00 | 92 | 150 | 148 | 121 | 130 | 92 | 113 | 118 | 74 | 19 | 76 | 15 | 59 | -- | 5 | 42.9 | 1.3 |
| MATURITY CHECK | LATE | 94 | 133 | -- | 114 | -- | 95 | 100 | -- | 75 | 17 | 76 | 15 | 58 | -- | 4 | 40.4 | 1.2 |
| PIONEER | 84G62 | 118 | 142 | 126 | 130 | 129 | 118 | 107 | 101 | 76 | 19 | 76 | 16 | 59 | -- | 3 | 41.2 | 1.4 |
| SYNGENTA | 5464 | 87 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 77 | 16 | 58 | -- | 1 | 41.5 | 1.2 |
| AVERAGES | | 100 | 133 | 126 | 117 | 120 | 100 | 133 | 126 | 73 | 18 | 74 | 14 | 59 | -- | 3 | 42.4 | 1.3 |
| CV (%) | | 10 | 9 | 6 | -- | -- | 10 | 9 | 6 | -- | -- | 1 | 5 | 1 | -- | -- | 10 | -- |
| LSD (0.05) | | 13 | 18 | 11 | -- | -- | 13 | 13 | 8 | -- | -- | 2 | 1 | 1 | -- | 7 | 11 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

North Central Kansas Experiment Field, Belleville; Michael Larson and Doug Stensaas, technicians

Crete silt loam; Soybean in 2009

140 - 0 - 0 lb/a N, P, K

Planted on 6/18/2010; Harvested on 10/29/2010

Target stand of 50,000 plants/acre; 4.2 in. spacing

A freeze was required for the crop to reach physiological maturity and drydown.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 6.2 | 4.9 | 31 | 32 | | |
| April | 4.2 | 1.7 | 57 | 52 | 655 | 534 |
| May | 3.5 | 2.3 | 61 | 63 | 807 | 886 |
| June | 5.5 | 3.6 | 76 | 73 | 1186 | 1149 |
| July | 1.8 | 4.7 | 79 | 78 | 1290 | 1368 |
| August | 2.2 | 3.4 | 79 | 77 | 1254 | 1310 |
| Sept. | 2.7 | 3.3 | 68 | 68 | 982 | 987 |
| Oct. | 0.1 | 1.7 | 60 | 59 | 373 | 375 |
| Totals: | 26.1 | 25.6 | 53 | 52 | 6,547 | 6,609 |

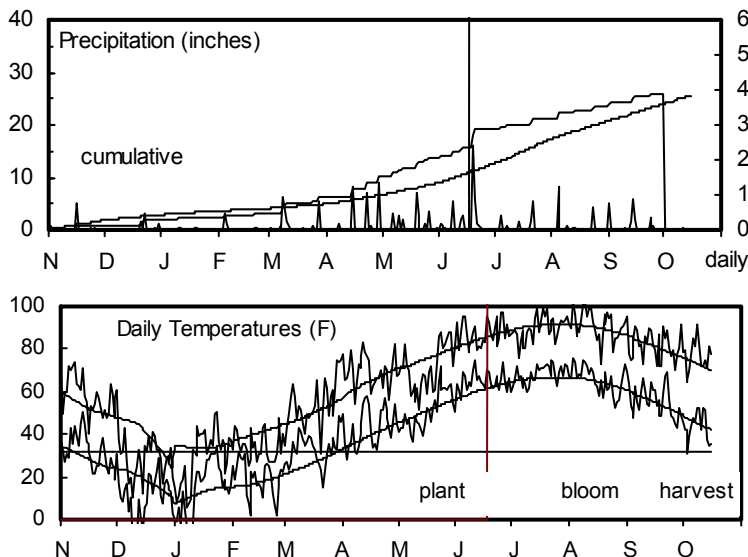


Table 3. Republic County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | Plnt Ht. in. | Ldg % | Pop. 1000 ppa | Hds. per Plnt | | |
|----------------|----------|----------------------|------------|------------|------------|------------|-----------------|------|------|----------------------|----|-----|--------------|-------|---------------|---------------|------|-------|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST AVERAGE | | | Days Grain to Moist. | | | | | | | | |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | | | | | % | lb/bu |
| DEKALB | DKS36-06 | 140 | 180 | -- | 160 | -- | 100 | 107 | -- | -- | 18 | -- | 19 | 58 | 54 | -- | 50.3 | -- |
| DEKALB | DKS37-07 | 133 | 180 | 155 | 157 | 156 | 95 | 107 | 101 | -- | 18 | -- | 20 | 57 | 52 | -- | 47.6 | -- |
| DEKALB | DKS44-20 | 154 | 176 | 178 | 165 | 169 | 111 | 104 | 115 | -- | 21 | -- | 25 | 56 | 53 | -- | 52.5 | -- |
| DEKALB | DKS49-45 | 155 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 25 | 56 | 55 | -- | 58.1 | -- |
| DEKALB | DKS53-67 | 160 | 205 | 188 | 183 | 184 | 115 | 121 | 122 | -- | 22 | -- | 27 | 56 | 54 | -- | 50.5 | -- |
| DEKALB | DKS54-00 | 140 | 186 | 187 | 163 | 171 | 100 | 110 | 121 | -- | 23 | -- | 29 | 55 | 55 | -- | 57.4 | -- |
| DYNA-GRO | 742C | 113 | 148 | -- | 131 | -- | 81 | 88 | -- | -- | 19 | -- | 20 | 56 | 45 | -- | 54.2 | -- |
| DYNA-GRO | 751B | 123 | 174 | 166 | 149 | 154 | 88 | 103 | 108 | -- | 23 | -- | 28 | 55 | 48 | -- | 30.4 | -- |
| DYNA-GRO | 764B | 140 | 137 | 124 | 139 | 134 | 100 | 81 | 80 | -- | 21 | -- | 24 | 55 | 51 | -- | 45.2 | -- |
| DYNA-GRO | 766B | 159 | 151 | 156 | 155 | 155 | 114 | 89 | 101 | -- | 19 | -- | 20 | 57 | 52 | -- | 50.0 | -- |
| DYNA-GRO | 772B | 153 | 170 | 176 | 162 | 166 | 110 | 100 | 114 | -- | 21 | -- | 26 | 56 | 54 | -- | 50.4 | -- |
| DYNA-GRO | 778B | 116 | 165 | 181 | 141 | 154 | 83 | 98 | 117 | -- | 24 | -- | 30 | 55 | 61 | -- | 40.0 | -- |
| MATURITY CHECK | EARLY | 104 | 171 | 134 | 138 | 136 | 75 | 101 | 87 | -- | 17 | -- | 18 | 58 | 48 | -- | 43.5 | -- |
| MATURITY CHECK | LATE | 149 | 190 | 172 | 170 | 170 | 107 | 112 | 111 | -- | 22 | -- | 27 | 54 | 55 | -- | 43.2 | -- |
| MATURITY CHECK | MEDIUM | 149 | 139 | 133 | 144 | 140 | 106 | 82 | 86 | -- | 17 | -- | 18 | 59 | 53 | -- | 55.5 | -- |
| OHLDE | O-525 | 137 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 21 | 55 | 48 | -- | 52.2 | -- |
| OHLDE | O-530 | 111 | -- | -- | -- | -- | 79 | -- | -- | -- | -- | -- | 27 | 55 | 47 | -- | 32.1 | -- |
| OHLDE | O-567 | 133 | 174 | 162 | 154 | 156 | 95 | 103 | 105 | -- | 18 | -- | 20 | 56 | 49 | -- | 57.3 | -- |
| OHLDE | O-575 | 135 | 175 | 166 | 155 | 159 | 97 | 103 | 108 | -- | 21 | -- | 26 | 56 | 48 | -- | 47.6 | -- |
| OHLDE | O-587 | 134 | 183 | 170 | 159 | 162 | 96 | 108 | 110 | -- | 20 | -- | 24 | 56 | 49 | -- | 37.8 | -- |
| PIONEER | 84G62 | 161 | 201 | 191 | 181 | 184 | 115 | 119 | 123 | -- | 23 | -- | 29 | 56 | 49 | -- | 49.2 | -- |
| PIONEER | 84P74 | 176 | 184 | -- | 180 | -- | 126 | 109 | -- | -- | 21 | -- | 25 | 56 | 54 | -- | 48.4 | -- |
| PIONEER | 85G03 | 141 | 186 | 154 | 164 | 160 | 101 | 110 | 100 | -- | 18 | -- | 20 | 57 | 51 | -- | 51.4 | -- |
| PIONEER | 85Y40 | 157 | 191 | 164 | 174 | 171 | 112 | 113 | 106 | -- | 19 | -- | 21 | 58 | 54 | -- | 60.0 | -- |
| SYNGENTA | 5464 | 132 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 27 | 55 | 53 | -- | 41.3 | -- |
| SYNGENTA | 5556 | 153 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | -- | 22 | 57 | 50 | -- | 52.4 | -- |
| SYNGENTA | 5613 | 158 | -- | -- | -- | -- | 113 | -- | -- | -- | -- | -- | 21 | 56 | 51 | -- | 45.3 | -- |
| SYNGENTA | 5745 | 140 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 19 | 58 | 45 | -- | 52.5 | -- |
| SYNGENTA | H-390W | 105 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | -- | 18 | 57 | 47 | -- | 41.0 | -- |
| SYNGENTA | H-486 | 155 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 22 | 56 | 51 | -- | 60.2 | -- |
| TRIUMPH | TR 438 | 137 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 24 | 56 | 49 | -- | 52.5 | -- |
| TRIUMPH | TR 452 | 139 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | -- | 25 | 55 | 52 | -- | 50.3 | -- |
| TRIUMPH | TR 458 | 129 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | -- | 24 | 56 | 50 | -- | 35.9 | -- |
| TRIUMPH | TR 481 | 121 | 163 | 166 | 142 | 150 | 87 | 96 | 107 | -- | 23 | -- | 29 | 56 | 57 | -- | 49.8 | -- |
| TRIUMPH | TRX05361 | 129 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- | 31 | 54 | 59 | -- | 41.1 | -- |

Table 3 continued. Republic County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHEL | | | | | YIELD AS % | | | 2009-2010 | | | | | | | | | |
|---------|------------|--------------------|------|-------|------|------|------------|------|------|-------------|----------------|-------------|----------------|----------------|--------------|-------|---------------|---------------|--|
| | | 2-Yr. | | 3-Yr. | | AVG. | OF TEST | | | Days to Blm | Grain Moist. % | Days to Blm | Grain Moist. % | Test Wt. lb/bu | Plnt Ht. in. | Ldg % | Pop. 1000 ppa | Hds. per Plnt | |
| | | 2010 | 2009 | 2008 | AVG. | | 2010 | 2009 | 2008 | | | | | | | | | | |
| | | 2010 | 2009 | 2008 | AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | % | lb/bu | in. | % | ppa | Plnt | | |
| TRIUMPH | TRX85002 | 143 | 181 | -- | 162 | -- | 102 | 107 | -- | -- | 23 | -- | 28 | 55 | 56 | -- | 40.1 | -- | |
| TRIUMPH | TRX95005 | 149 | 179 | -- | 164 | -- | 107 | 106 | -- | -- | 20 | -- | 23 | 56 | 50 | -- | 43.5 | -- | |
| | AVERAGES | 140 | 169 | 154 | 155 | 154 | 140 | 169 | 154 | -- | 20 | -- | 24 | 56 | 52 | -- | 47.9 | -- | |
| | CV (%) | 8 | 5 | 6 | -- | -- | 8 | 5 | 6 | -- | -- | -- | 0 | 0 | 3 | -- | 12 | -- | |
| | LSD (0.05) | 19 | 14 | 15 | -- | -- | 14 | 8 | 10 | -- | -- | -- | 0 | 0 | 2 | -- | 9 | -- | |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Top LSD group in bold.

NORTH CENTRAL DRYLAND GRAIN SORGHUM TEST

Farmer's field, Beloit; Michael Larson and Doug Stensaas, technicians

Harney silt loam; Wheat in 2009

140 - 0 - 0 lb/a N, P, K

Planted on 6/29/2010; Harvested on 11/8/2010

Target stand of 50,000plants/acre; 4.2 in. spacing

A freeze was required for the crop to reach physiological maturity and drydown.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 6.1 | | 33 | | | |
| April | 3.9 | | 58 | | 700 | 424 |
| May | 3.2 | | 62 | | 827 | 835 |
| June | 4.0 | | 77 | | 1202 | 1197 |
| July | 4.4 | | 80 | | 1316 | 1369 |
| August | 1.6 | | 80 | | 1284 | 1242 |
| Sept. | 3.7 | | 71 | | 1039 | 971 |
| Oct. | 0.1 | | 60 | | 379 | 400 |
| Totals: | 27.0 | | 54 | | 6,747 | 6,438 |

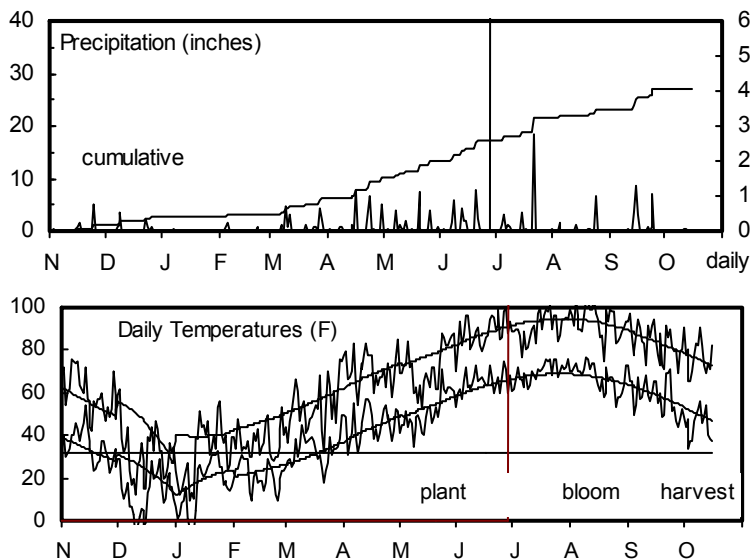


Table 4. Mitchell County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|----------|----------------------|------|------|------------|------------|------|------|------------|---------|------------|----------|--------|----------|-------|---------|-----------|------------|
| | | ACRE YIELD, BUSHELS | | | | OF TEST | | | Days Grain | | Days Grain | | Test | | Plnt | | Pop. Hds. | |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | AVERAGE | to Blm | Moist. % | to Blm | Moist. % | lb/bu | Ht. in. | Ldg % | 1000.0 ppa |
| DEKALB | DKS36-06 | 105 | 161 | -- | 133 | -- | 109 | 109 | -- | -- | -- | 12 | 58 | 48 | -- | -- | -- | -- |
| DEKALB | DKS37-07 | 112 | 157 | 152 | 134 | 140 | 116 | 106 | 104 | -- | -- | 12 | 60 | 46 | -- | -- | -- | -- |
| DEKALB | DKS44-20 | 98 | 162 | 153 | 130 | 138 | 102 | 110 | 105 | -- | -- | 12 | 57 | 48 | -- | -- | -- | -- |
| DEKALB | DKS49-45 | 115 | -- | -- | -- | -- | 119 | -- | -- | -- | -- | 12 | 59 | 50 | -- | -- | -- | -- |
| DEKALB | DKS53-67 | 110 | 175 | 160 | 142 | 148 | 114 | 118 | 109 | -- | -- | 12 | 58 | 50 | -- | -- | -- | -- |
| DEKALB | DKS54-00 | 94 | 169 | 162 | 132 | 142 | 98 | 114 | 111 | -- | -- | 13 | 57 | 52 | -- | -- | -- | -- |
| DYNA-GRO | 742C | 87 | 132 | -- | 109 | -- | 90 | 89 | -- | -- | -- | 12 | 58 | 44 | -- | -- | -- | -- |
| DYNA-GRO | 751B | 93 | 141 | 146 | 117 | 127 | 96 | 96 | 100 | -- | -- | 12 | 58 | 44 | -- | -- | -- | -- |
| DYNA-GRO | 764B | 99 | 136 | 139 | 117 | 125 | 102 | 92 | 93 | -- | -- | 12 | 58 | 48 | -- | -- | -- | -- |
| DYNA-GRO | 766B | 108 | 145 | 151 | 126 | 135 | 112 | 98 | 103 | -- | -- | 12 | 57 | 42 | -- | -- | -- | -- |
| DYNA-GRO | 772B | 92 | 149 | 150 | 121 | 130 | 95 | 101 | 103 | -- | -- | 12 | 59 | 44 | -- | -- | -- | -- |
| DYNA-GRO | 778B | 45 | 141 | 140 | 93 | 109 | 47 | 95 | 96 | -- | -- | 13 | 56 | 54 | -- | -- | -- | -- |
| MATURITY CHECK | EARLY | 89 | 133 | 147 | 111 | 123 | 92 | 90 | 101 | -- | -- | 12 | 59 | 42 | -- | -- | -- | -- |
| MATURITY CHECK | LATE | 96 | 139 | 138 | 117 | 124 | 99 | 94 | 94 | -- | -- | 13 | 56 | 48 | -- | -- | -- | -- |
| MATURITY CHECK | MEDIUM | 102 | 129 | 112 | 116 | 114 | 106 | 88 | 77 | -- | -- | 13 | 60 | 48 | -- | -- | -- | -- |
| OHLDE | O-525 | 99 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 12 | 59 | 42 | -- | -- | -- | -- |
| OHLDE | O-530 | 96 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 12 | 57 | 40 | -- | -- | -- | -- |
| OHLDE | O-567 | 94 | 146 | 157 | 120 | 132 | 97 | 98 | 107 | -- | -- | 12 | 57 | 42 | -- | -- | -- | -- |
| OHLDE | O-587 | 113 | 148 | 161 | 131 | 141 | 117 | 100 | 110 | -- | -- | 13 | 59 | 46 | -- | -- | -- | -- |
| PHILLIPS | 595 | 83 | -- | -- | -- | -- | 85 | -- | -- | -- | -- | 12 | 57 | 36 | -- | -- | -- | -- |
| PHILLIPS | 672 | 104 | 147 | -- | 126 | -- | 108 | 100 | -- | -- | -- | 12 | 58 | 46 | -- | -- | -- | -- |
| PHILLIPS | 775 | 71 | 144 | -- | 107 | -- | 74 | 97 | -- | -- | -- | 13 | 58 | 46 | -- | -- | -- | -- |
| PIONEER | 84G62 | 116 | -- | -- | -- | -- | 120 | -- | -- | -- | -- | 12 | 57 | 46 | -- | -- | -- | -- |
| PIONEER | 84P74 | 111 | 177 | -- | 144 | -- | 114 | 120 | -- | -- | -- | 13 | 56 | 46 | -- | -- | -- | -- |
| PIONEER | 85G03 | 116 | 166 | 163 | 141 | 148 | 120 | 112 | 111 | -- | -- | 12 | 60 | 50 | -- | -- | -- | -- |
| PIONEER | 85Y40 | 113 | 156 | -- | 135 | -- | 117 | 106 | -- | -- | -- | 12 | 56 | 45 | -- | -- | -- | -- |
| SYNGENTA | 5464 | 102 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 12 | 58 | 44 | -- | -- | -- | -- |
| SYNGENTA | 5613 | 106 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 12 | 59 | 48 | -- | -- | -- | -- |
| SYNGENTA | H-486 | 94 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 12 | 60 | 44 | -- | -- | -- | -- |
| TRIUMPH | TR 448 | 95 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 12 | 59 | 44 | -- | -- | -- | -- |
| TRIUMPH | TR 452 | 102 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 12 | 57 | 46 | -- | -- | -- | -- |
| TRIUMPH | TRX05361 | 69 | -- | -- | -- | -- | 71 | -- | -- | -- | -- | 12 | 57 | 52 | -- | -- | -- | -- |
| TRIUMPH | TRX84732 | 62 | -- | -- | -- | -- | 64 | -- | -- | -- | -- | 13 | 56 | 46 | -- | -- | -- | -- |
| AVERAGES | | 97 | 148 | 146 | 122 | 130 | 97 | 148 | 146 | -- | -- | 12 | 58 | 46 | -- | -- | -- | -- |
| CV (%) | | 10 | 5 | 6 | -- | -- | 10 | 5 | 6 | -- | -- | 0 | 0 | 0 | -- | -- | -- | -- |
| LSD (0.05) | | 16 | 11 | 14 | -- | -- | 17 | 8 | 9 | -- | -- | 0 | 0 | 0 | -- | -- | -- | -- |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

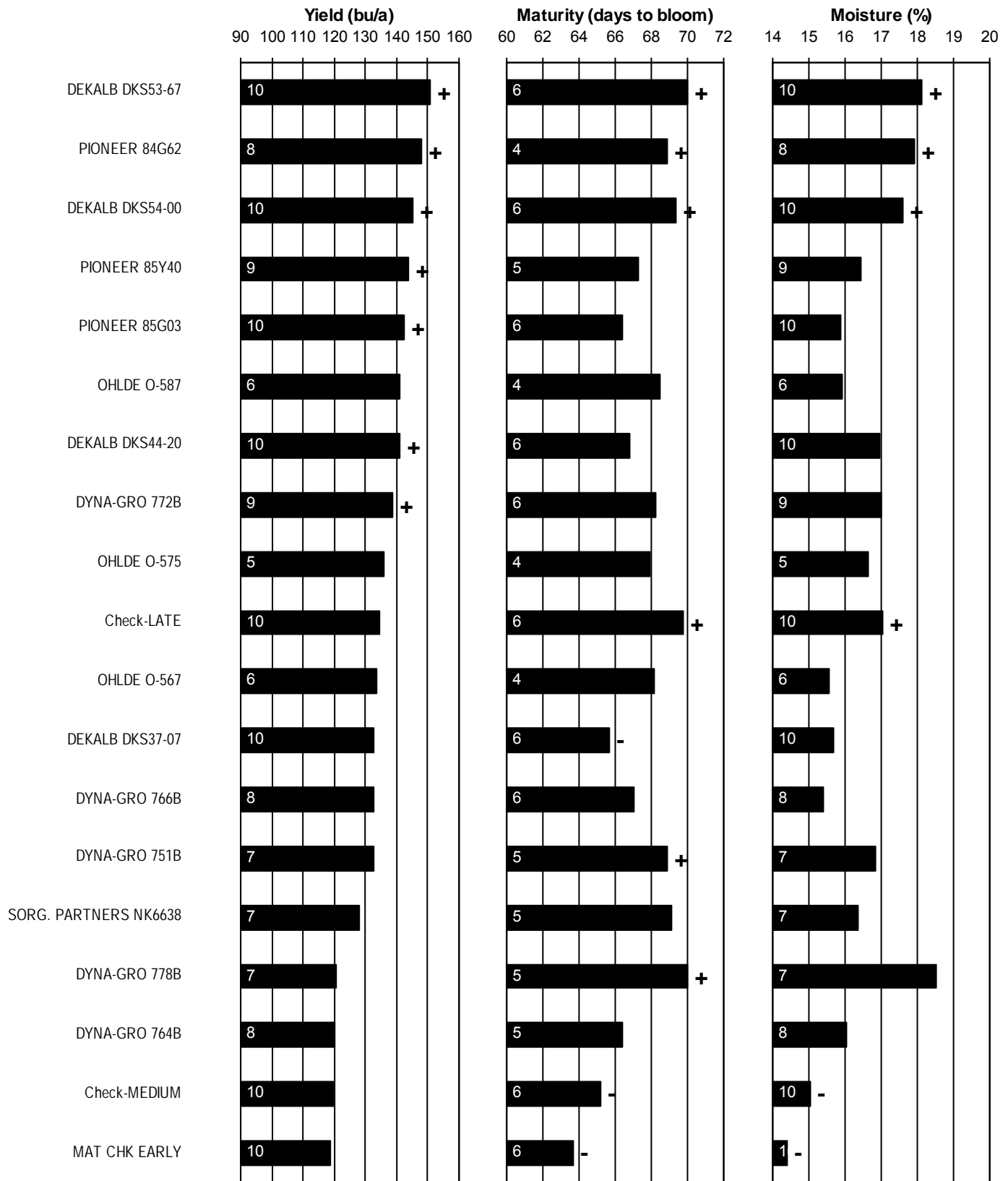
Table 5. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2010

| BRAND/NAME | RLD | RPD | MTD | AVG. | BRAND/NAME | RLD | RPD | MTD | AVG. |
|-----------------|-----|-----|-----|------|-----------------------|-----|-----|-----|------|
| DEKALB | | | | | SYNGENTA | | | | |
| DKS36-06 | 94 | 100 | 109 | 101 | 5464 | 88 | 95 | 105 | 96 |
| DKS37-07 | 95 | 95 | 116 | 102 | 5556 | -- | 109 | -- | -- |
| DKS44-20 | 106 | 111 | 102 | 106 | 5613 | 97 | 113 | 110 | 107 |
| DKS49-45 | 100 | 111 | 119 | 110 | 5745 | 96 | 101 | -- | -- |
| DKS53-67 | 105 | 115 | 114 | 111 | H-390W | 82 | 75 | -- | -- |
| DKS54-00 | 92 | 100 | 98 | 97 | H-486 | -- | 111 | 97 | -- |
| DYNA-GRO | | | | | TRIUMPH | | | | |
| 742C | 84 | 81 | 90 | 85 | TR 438 | -- | 98 | -- | -- |
| 751B | -- | 88 | 96 | -- | TR 452 | -- | 100 | 106 | -- |
| 764B | -- | 100 | 102 | -- | TR 458 | -- | 93 | -- | -- |
| 766B | 102 | 114 | 112 | 109 | TR 463 | 107 | -- | -- | -- |
| 772B | 102 | 110 | 95 | 103 | TR 481 | -- | 87 | -- | -- |
| 778B | -- | 83 | 47 | -- | TR 448 | 86 | -- | 98 | -- |
| GX08365 | 99 | -- | -- | -- | TRX05361 | -- | 92 | 71 | -- |
| OHLDE | | | | | MATURITY CHECK | | | | |
| O-525 | -- | 98 | 102 | -- | EARLY | 86 | 75 | 92 | 84 |
| O-530 | -- | 79 | 99 | -- | LATE | 95 | 107 | 99 | 100 |
| O-567 | -- | 95 | 97 | -- | MEDIUM | 116 | 106 | 106 | 109 |
| O-575 | -- | 97 | -- | -- | AVERAGES (bu/a) | 100 | 140 | 97 | 112 |
| O-587 | -- | 96 | 117 | -- | CV (%) | 10 | 8 | 10 | -- |
| PHILLIPS | | | | | LSD (0.05) | | | | |
| 595 | -- | -- | 85 | -- | | 13 | 14 | 17 | -- |
| 672 | -- | -- | 108 | -- | | | | | |
| 775 | -- | -- | 74 | -- | | | | | |
| PIONEER | | | | | | | | | |
| 84G62 | 118 | 115 | 120 | 118 | | | | | |
| 84P74 | 119 | 126 | 114 | 120 | | | | | |
| 85G03 | 114 | 101 | 120 | 111 | | | | | |
| 85Y40 | 118 | 112 | 117 | 116 | | | | | |

RLD = Riley Co., Manhattan

RPD = Republic Co., Belleville

MTD= Mitchell Co., Beloit



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 4. NORTHEAST Kansas sorghum hybrid standardized performance summary, 2008-2010

SOUTHEAST KANSAS NO-TILL DRYLAND GRAIN SORGHUM TEST

East Central Kansas Experiment Field, Ottawa; Larry Maddux, agronomist; Jim Kimball, technician

Woodson silt loam; Soybean in 2009

150 - 30 - 0 lb/a N, P, K

Planted on 5/5/2010; Harvested on 9/7/2010

Target stand of 55,000 plants/acre; 3.8 in. spacing

Wet spring conditions affected emergence and development.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 7.5 | 6.4 | 36 | 37 | | |
| April | 4.8 | 2.9 | 60 | 56 | 752 | 634 |
| May | 4.6 | 4.1 | 66 | 65 | 941 | 953 |
| June | 6.4 | 4.9 | 79 | 74 | 1259 | 1186 |
| July | 5.5 | 4.0 | 81 | 80 | 1352 | 1401 |
| August | 2.1 | 3.2 | 81 | 79 | 1297 | 1362 |
| Sept. | 5.9 | 4.0 | 71 | 71 | 1054 | 1062 |
| Oct. | 1.6 | 1.2 | 61 | 62 | 390 | 416 |
| Totals: | 38.3 | 30.8 | 57 | 56 | 7,045 | 7,014 |

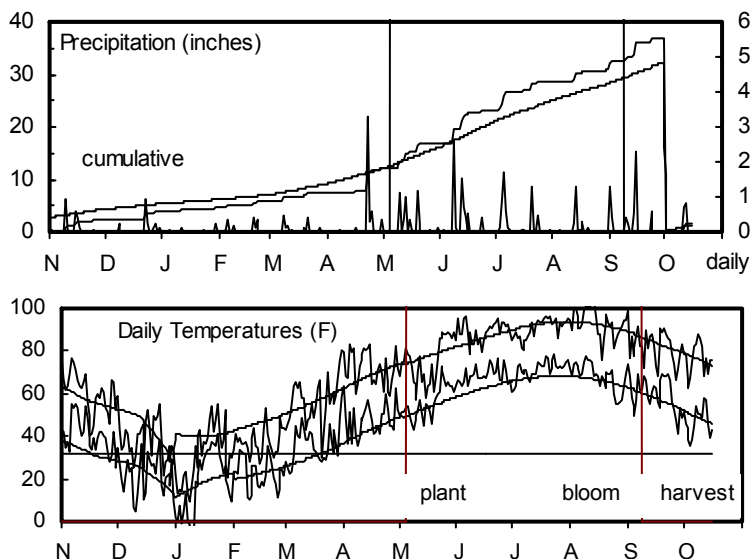


Table 6. Franklin County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | YIELD AS % | | 2009-2010 | | | | | | | | | | | | |
|----------------|------------|---------------------|------------|------------|------------|-------------|----------------|-------------|----------------|----------------|--------------|---------|---------------|---------------|------|------|------|-----|
| | | 2009 | 2008 | OF TEST | | Days to Blm | Grain Moist. % | Days to Blm | Grain Moist. % | Test Wt. lb/bu | Plnt Ht. in. | Ldg % | Pop. 1000 ppa | Hds. per Plnt | | | | |
| | | | | 2-Yr. AVG. | 3-Yr. AVG. | | | | | | | | | | 2009 | 2008 | | |
| | | AVERAGE | | AVERAGE | | AVERAGE | | AVERAGE | | AVERAGE | | AVERAGE | | AVERAGE | | | | |
| DEKALB | DKS36-06 | 50 | 99 | -- | 75 | -- | 88 | 101 | -- | -- | 17 | -- | 16 | 58 | 62 | 44 | 23.2 | 1.4 |
| DEKALB | DKS37-07 | 55 | 98 | 84 | 77 | 79 | 96 | 100 | 96 | -- | 21 | -- | 20 | 58 | 55 | 23 | 18.0 | 1.8 |
| DEKALB | DKS44-20 | 69 | 90 | 82 | 80 | 80 | 120 | 92 | 94 | -- | 18 | -- | 16 | 60 | 60 | 29 | 22.9 | 1.5 |
| DEKALB | DKS49-45 | 52 | -- | -- | -- | -- | 91 | -- | -- | -- | -- | -- | 19 | 59 | 62 | 20 | 28.1 | 1.3 |
| DEKALB | DKS53-67 | 50 | 85 | 94 | 67 | 76 | 86 | 86 | 107 | -- | 24 | -- | 23 | 58 | 58 | 13 | 22.4 | 1.8 |
| DEKALB | DKS54-00 | 63 | 87 | 87 | 75 | 79 | 110 | 89 | 100 | -- | 24 | -- | 19 | 58 | 58 | 8 | 29.0 | 1.5 |
| DEKALB | DKS54-03 | 56 | 100 | 93 | 78 | 83 | 97 | 102 | 107 | -- | 23 | -- | 20 | 57 | 55 | 18 | 25.6 | 1.4 |
| MATURITY CHECK | EARLY | 49 | 89 | 85 | 69 | 74 | 84 | 91 | 98 | -- | 18 | -- | 17 | 59 | 63 | 43 | 23.6 | 1.5 |
| MATURITY CHECK | LATE | 62 | 128 | 79 | 95 | 90 | 107 | 131 | 91 | -- | 23 | -- | 23 | 58 | 63 | 10 | 16.8 | 1.5 |
| MATURITY CHECK | MEDIUM | 59 | 109 | 78 | 84 | 82 | 102 | 111 | 89 | -- | 20 | -- | 19 | 58 | 56 | 48 | 31.3 | 1.4 |
| MIDLAND | M-4595 | 43 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | -- | 16 | 58 | 48 | 35 | 20.9 | 1.5 |
| MIDLAND | M-4665 | 63 | 88 | -- | 75 | -- | 109 | 89 | -- | -- | 20 | -- | 16 | 57 | 60 | 11 | 23.5 | 1.6 |
| MIDLAND | M-4748 | 48 | 96 | -- | 72 | -- | 84 | 98 | -- | -- | 19 | -- | 18 | 59 | 63 | 56 | 22.4 | 1.3 |
| MIDLAND | M-4765 | 71 | 111 | -- | 91 | -- | 123 | 113 | -- | -- | 23 | -- | 21 | 59 | 61 | 8 | 18.9 | 1.5 |
| MIDLAND | M-4772 | 59 | 88 | -- | 73 | -- | 102 | 89 | -- | -- | 24 | -- | 20 | 57 | 60 | 45 | 25.2 | 1.5 |
| MIDLAND | M-4790 | 40 | 78 | -- | 59 | -- | 69 | 79 | -- | -- | 29 | -- | 26 | 57 | 64 | 8 | 19.7 | 1.5 |
| PIONEER | 84G62 | 55 | 108 | 101 | 81 | 88 | 95 | 110 | 115 | -- | 22 | -- | 20 | 59 | 54 | 51 | 20.2 | 1.7 |
| PIONEER | 84P74 | 69 | 103 | -- | 86 | -- | 120 | 105 | -- | -- | 27 | -- | 24 | 57 | 61 | 11 | 17.7 | 1.7 |
| PIONEER | 85G03 | 54 | 101 | 90 | 77 | 82 | 94 | 102 | 103 | -- | 21 | -- | 17 | 58 | 58 | 40 | 26.7 | 1.6 |
| PIONEER | 85Y40 | 55 | 109 | 110 | 82 | 91 | 96 | 111 | 126 | -- | 22 | -- | 20 | 59 | 60 | 50 | 20.9 | 1.7 |
| SYNGENTA | 5464 | 59 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 20 | 57 | 61 | 30 | 15.1 | 1.4 |
| SYNGENTA | 5745 | 59 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | -- | 16 | 59 | 56 | 16 | 27.6 | 1.6 |
| SYNGENTA | H-390W | 60 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 19 | 58 | 48 | 25 | 15.0 | 1.6 |
| TRIUMPH | TR 458 | 55 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 23 | 56 | 60 | 18 | 20.8 | 1.5 |
| TRIUMPH | TR 463 | 85 | -- | -- | -- | -- | 148 | -- | -- | -- | -- | -- | 22 | 57 | 62 | 6 | 25.0 | 1.3 |
| | AVERAGES | 58 | 98 | 87 | 78 | 81 | 58 | 98 | 87 | -- | 22 | -- | 20 | 58 | 59 | 27 | 22.4 | 1.5 |
| | CV (%) | 10 | 6 | 9 | -- | -- | 10 | 6 | 9 | -- | -- | -- | 12 | 1 | 0 | -- | 18 | 14 |
| | LSD (0.05) | 8 | 8 | 11 | -- | -- | 14 | 8 | 12 | -- | -- | -- | 3 | 1 | 0 | 28 | 6 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Top LSD group in bold.

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

ImMasche Research Center, Strong City; Jane Lingenfelter, agronomist; Gene Eidman, cooperater

Osage silty clay; Soybean in 2009

140 - 20 - 0 lb/a N, P, K

Planted on 5/4/2010; Harvested on 8/31/2010

Target stand of 55,000 plants/acre; 3.8 in. spacing

Flooding in June followed by a wet July delayed the development of the crop.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 6.4 | 6.0 | 34 | 35 | | |
| April | 4.6 | 2.7 | 59 | 54 | 717 | 563 |
| May | 5.7 | 4.5 | 64 | 65 | 890 | 909 |
| June | 4.6 | 5.1 | 77 | 74 | 1225 | 1147 |
| July | 7.0 | 3.9 | 80 | 79 | 1329 | 1358 |
| August | 2.1 | 3.5 | 80 | 77 | 1291 | 1315 |
| Sept. | 5.6 | 3.8 | 70 | 70 | 1034 | 1027 |
| Oct. | 1.1 | 1.6 | 61 | 61 | 383 | 387 |
| Totals: | 37.0 | 31.1 | 55 | 54 | 6,869 | 6,705 |

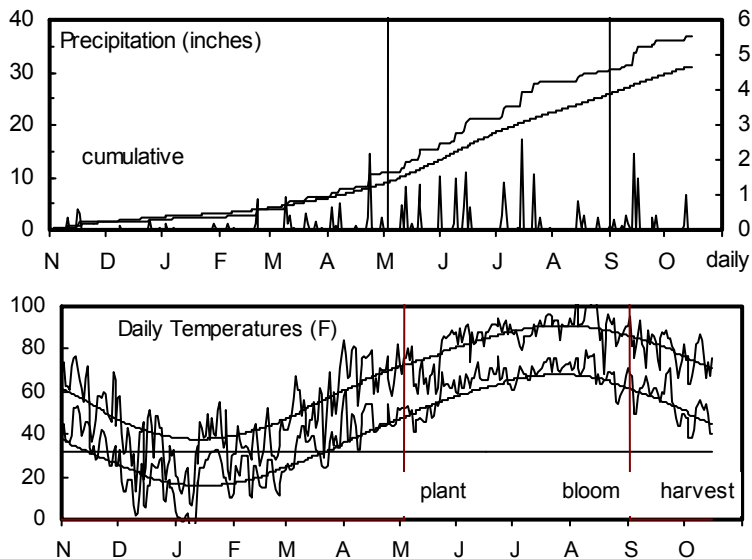


Table 7. Chase County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | YIELD AS % | | | 2009-2010 | | | | | | | | | | | |
|----------------|------------|---------------------|------|-----------------------|------|-----------------|-----------|------|------|-------|-----------|-------|-----------|-------|------|------|------|-----|
| | | 2010 | 2009 | 2-Yr. AVG. 3-Yr. AVG. | | OF TEST AVERAGE | | | Days | Grain | Days | Grain | Test | Plnt | Pop. | Hds. | | |
| | | | | 2010 | 2009 | 2008 | 2010 | 2009 | 2008 | Blm | to Moist. | Blm | to Moist. | lb/bu | Ht. | Ldg | 1000 | per |
| MATURITY CHECK | EARLY | 78 | 61 | 50 | 70 | 63 | 84 | 88 | 97 | 69 | 14 | 65 | 13 | 57 | 46 | 10 | 55.2 | 1.2 |
| DEKALB | DKS36-06 | 108 | 64 | -- | 86 | -- | 116 | 93 | -- | 70 | 16 | 68 | 14 | 58 | 55 | 8 | 57.1 | 1.1 |
| DEKALB | DKS37-07 | 83 | 69 | 54 | 76 | 69 | 89 | 99 | 104 | 70 | 15 | 68 | 13 | 59 | 52 | 7 | 61.0 | 1.0 |
| SYNGENTA | 5556 | 88 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 68 | 13 | 58 | 52 | 9 | 55.2 | 1.0 |
| MATURITY CHECK | MEDIUM | 108 | 65 | 29 | 86 | 67 | 116 | 94 | 55 | 71 | 17 | 69 | 13 | 58 | 54 | 9 | 60.1 | 1.2 |
| DEKALB | DKS44-20 | 86 | 67 | 63 | 77 | 72 | 92 | 97 | 121 | 72 | 17 | 71 | 13 | 59 | 54 | 12 | 61.1 | 1.1 |
| SYNGENTA | H-390W | 84 | -- | -- | -- | -- | 90 | -- | -- | -- | -- | 71 | 13 | 58 | 46 | 15 | 46.4 | 1.2 |
| SYNGENTA | H-486 | 110 | -- | -- | -- | -- | 118 | -- | -- | -- | -- | 71 | 13 | 58 | 53 | 11 | 61.1 | 1.1 |
| DEKALB | DKS49-45 | 98 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 72 | 14 | 59 | 56 | 6 | 57.1 | 1.1 |
| DEKALB | DKS53-67 | 84 | 65 | 57 | 75 | 69 | 90 | 94 | 109 | 73 | 18 | 72 | 15 | 59 | 52 | 21 | 48.5 | 1.3 |
| DEKALB | DKS54-00 | 94 | 73 | 72 | 84 | 80 | 101 | 106 | 139 | 73 | 17 | 72 | 14 | 58 | 58 | 10 | 50.7 | 1.2 |
| SYNGENTA | 5464 | 90 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 72 | 14 | 57 | 53 | 27 | 47.0 | 1.2 |
| DEKALB | DKS54-03 | 109 | 67 | 55 | 88 | 77 | 116 | 97 | 106 | 73 | 17 | 73 | 13 | 56 | 53 | 11 | 51.7 | 1.2 |
| MATURITY CHECK | LATE | 87 | 64 | 27 | 76 | 59 | 93 | 93 | 52 | 73 | 18 | 73 | 15 | 57 | 55 | 11 | 53.1 | 1.2 |
| | AVERAGES | 93 | 69 | 52 | 81 | 71 | 93 | 69 | 52 | 72 | 17 | 70 | 14 | 58 | 53 | 12 | 54.7 | 1.1 |
| | CV (%) | 9 | 7 | 9 | -- | -- | 9 | 7 | 9 | -- | -- | 1 | 10 | 2 | 2 | -- | 9 | 7 |
| | LSD (0.05) | 12 | 7 | 7 | -- | -- | 13 | 10 | 13 | -- | -- | 1 | 2 | 1 | 1 | 13 | 11 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Southeast Agricultural Research Center, Parsons; Kelly Kusel, technician

Parsons silt loam; Soybean in 2009

100 - 46 - 60 lb/a N, P, K

Planted on 4/27/2010; Harvested on 8/31/2010

Target stand of 45,000 plants/acre; 4.6 in. spacing

Standing water 3 weeks after planting thinned stands.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 18.3 | 10.3 | 41 | 39 | | |
| April | 3.5 | 3.7 | 54 | 57 | 586 | 668 |
| May | 6.3 | 5.0 | 69 | 65 | 1062 | 952 |
| June | 18.3 | 4.8 | 75 | 74 | 1197 | 1178 |
| July | 3.7 | 3.6 | 79 | 80 | 1325 | 1385 |
| August | 3.9 | 3.8 | 84 | 79 | 1404 | 1345 |
| Sept. | 4.9 | 4.5 | 74 | 71 | 1144 | 1075 |
| Oct. | 0.4 | 1.9 | 64 | 63 | 424 | 421 |
| Totals: | 59.3 | 37.5 | 59 | 57 | 7,141 | 7,022 |

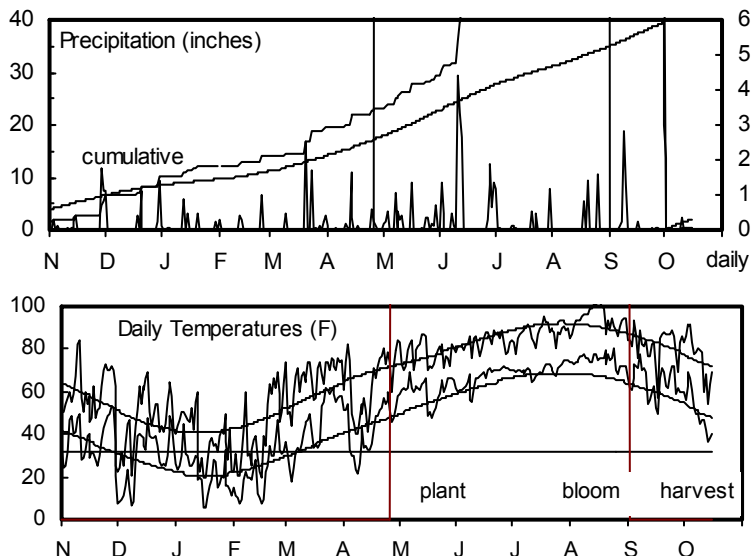


Table 8. Labette County Dryland Grain Sorghum Performance Test, 2008-2010

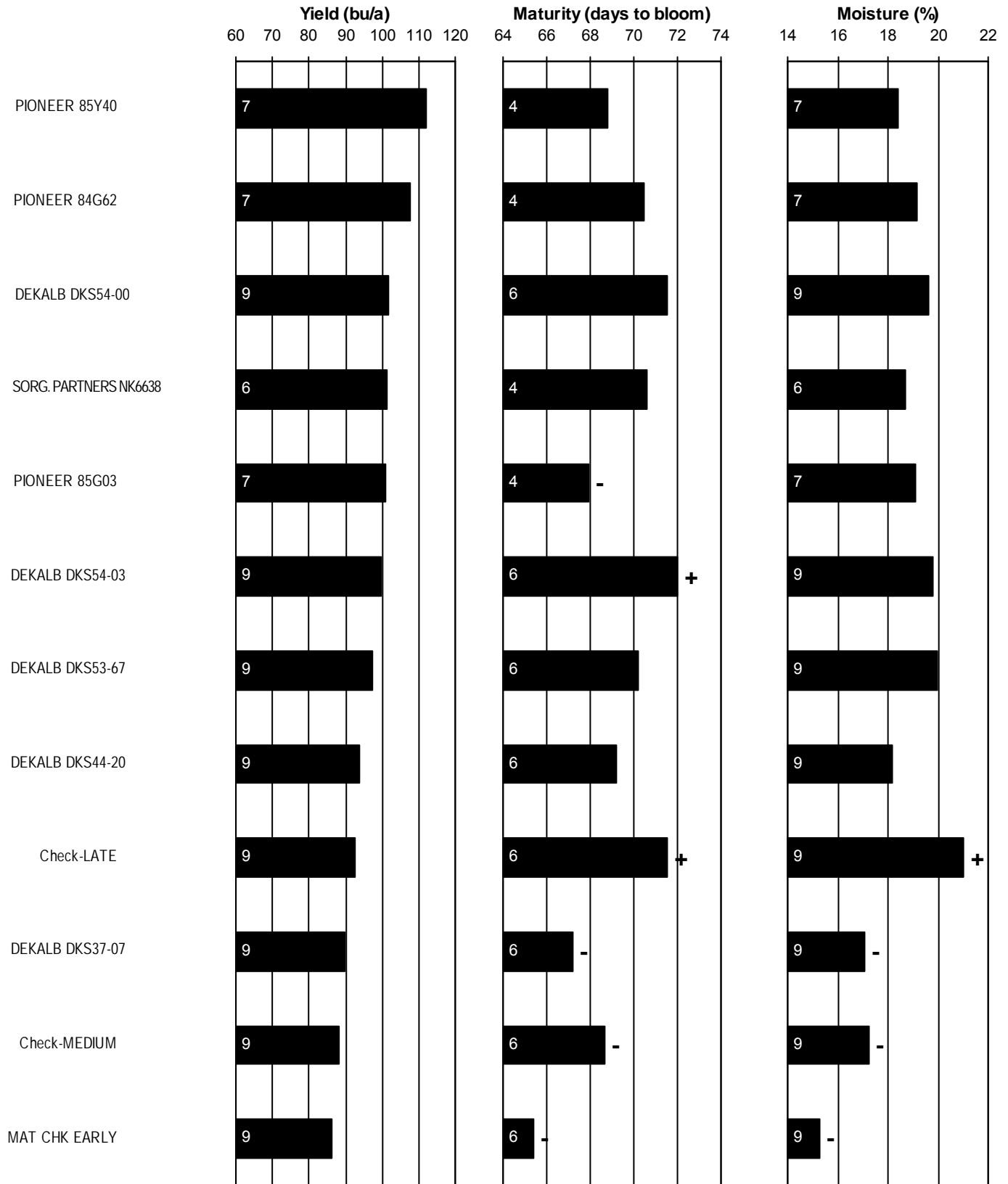
| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|------------|----------------------|------------|------------|------------|------------|---------|------|------|------------|-----------|------|------|------|------|-------|------|-----|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST | | | Days Grain | | | Plnt | Pop. | Hds. | | | |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | to Moist. | Days | | | | Grain | Test | Wt. |
| MATURITY CHECK | EARLY | 124 | 102 | 136 | 113 | 121 | 88 | 78 | 115 | 67 | 15 | 69 | 12 | 55 | 53 | -- | 48.9 | 1.5 |
| DEKALB | DKS36-06 | 141 | 117 | -- | 129 | | 100 | 90 | -- | 68 | 16 | 73 | 13 | 59 | 60 | -- | 52.4 | 1.2 |
| DEKALB | DKS37-07 | 133 | 116 | 117 | 125 | 122 | 94 | 89 | 99 | 68 | 16 | 73 | 13 | 58 | 58 | -- | 51.8 | 1.1 |
| MATURITY CHECK | MEDIUM | 151 | 110 | 83 | 131 | 115 | 107 | 84 | 70 | 69 | 16 | 73 | 13 | 58 | 60 | -- | 51.7 | 1.3 |
| DEKALB | DKS44-20 | 150 | 109 | 129 | 129 | 129 | 106 | 83 | 109 | 70 | 16 | 74 | 14 | 59 | 58 | -- | 50.8 | 1.2 |
| SYNGENTA | 5556 | 127 | -- | -- | -- | -- | 90 | -- | -- | -- | -- | 74 | 13 | 57 | 55 | -- | 48.1 | 1.2 |
| TRIUMPH | TR 452 | 121 | -- | -- | -- | -- | 85 | -- | -- | -- | -- | 74 | 13 | 58 | 55 | -- | 46.8 | 1.2 |
| SYNGENTA | H-486 | 131 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | 75 | 13 | 57 | 55 | -- | 55.7 | 1.0 |
| DEKALB | DKS49-45 | 142 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 77 | 14 | 59 | 62 | -- | 48.6 | 1.3 |
| DEKALB | DKS53-67 | 148 | 155 | 139 | 152 | 147 | 105 | 119 | 118 | 73 | 16 | 77 | 14 | 60 | 60 | -- | 45.2 | 1.4 |
| DEKALB | DKS54-00 | 151 | 151 | 136 | 151 | 146 | 107 | 115 | 115 | 74 | 16 | 77 | 14 | 58 | 63 | -- | 42.7 | 1.4 |
| DEKALB | DKS54-03 | 148 | 142 | 129 | 145 | 140 | 104 | 109 | 109 | 74 | 16 | 78 | 13 | 55 | 61 | -- | 50.4 | 1.2 |
| MATURITY CHECK | LATE | 153 | 131 | 104 | 142 | 129 | 108 | 100 | 88 | 74 | 17 | 78 | 14 | 58 | 64 | -- | 40.3 | 1.4 |
| SYNGENTA | 5464 | 146 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 78 | 14 | 57 | 60 | -- | 38.4 | 1.3 |
| TRIUMPH | TR 481 | 157 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 79 | 15 | 59 | 64 | -- | 52.5 | 1.1 |
| | AVERAGES | 141 | 131 | 118 | 136 | 130 | 141 | 131 | 118 | -- | -- | 75 | 14 | 58 | 59 | -- | 48.3 | 1.3 |
| | CV (%) | 5 | 7 | 7 | -- | -- | 5 | 7 | 7 | -- | -- | 1 | 2 | 1 | 2 | -- | 6 | 8 |
| | LSD (0.05) | 10 | 14 | 13 | -- | -- | 7 | 10 | 11 | -- | -- | 1 | 0 | 1 | 1 | -- | 4 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Top LSD group in bold.

Table 9. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2010

| BRAND/NAME | FRD | CHD | LBD | AVG. | BRAND/NAME | FRD | CHD | LBD | AVG. |
|-------------------|------------|------------|------------|-------------|-----------------------|------------|------------|------------|-------------|
| DEKALB | | | | | SYNGENTA | | | | |
| DKS36-06 | 88 | 116 | 100 | 101 | 5464 | 102 | 97 | 103 | 100 |
| DKS37-07 | 96 | 89 | 94 | 93 | 5556 | -- | 94 | 90 | -- |
| DKS44-20 | 120 | 92 | 106 | 106 | 5745 | 103 | -- | -- | -- |
| DKS49-45 | 91 | 105 | 100 | 99 | H-390W | 104 | 90 | -- | -- |
| DKS53-67 | 86 | 90 | 105 | 94 | H-486 | -- | 118 | 93 | -- |
| DKS54-00 | 110 | 101 | 107 | 106 | TRIUMPH | | | | |
| DKS54-03 | 97 | 116 | 104 | 106 | TR 452 | -- | -- | 85 | -- |
| MIDLAND | | | | | TR 458 | 95 | -- | -- | -- |
| M-4595 | 75 | -- | -- | -- | TR 463 | 148 | -- | -- | -- |
| M-4665 | 109 | -- | -- | -- | TR 481 | -- | -- | 111 | -- |
| M-4748 | 84 | -- | -- | -- | MATURITY CHECK | | | | |
| M-4765 | 123 | -- | -- | -- | EARLY | 84 | 84 | 88 | 85 |
| M-4772 | 102 | -- | -- | -- | LATE | 107 | 93 | 108 | 103 |
| M-4790 | 69 | -- | -- | -- | MEDIUM | 102 | 116 | 107 | 108 |
| PIONEER | | | | | AVERAGES (bu/a) | 58 | 93 | 141 | 97 |
| 84G62 | 95 | -- | -- | -- | CV(%) | 10 | 9 | 5 | -- |
| 84P74 | 120 | -- | -- | -- | LSD (0.05) | 14 | 12 | 7 | -- |
| 85G03 | 94 | -- | -- | -- | | | | | |
| 85Y40 | 96 | -- | -- | -- | | | | | |



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 5. SOUTHEAST Kansas sorghum hybrid standardized performance summary, 2008-2010

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

Clayton Short farm, Assaria; Jane Lingenfelter, agronomist

Hord silt loam; Soybean in 2009

90 - 35 - 0 lb/a N, P, K

Planted on 5/7/2010; Harvested on 9/8/2010

Target stand of 50,000 plants/acre; 4.2 in. spacing

Conditions were generally good until mid-August when a two-week period of extreme heat stressed the test.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 8.4 | 6.9 | 36 | 37 | | |
| April | 1.0 | 3.0 | 61 | 55 | 772 | 593 |
| May | 5.6 | 5.1 | 65 | 65 | 935 | 923 |
| June | 4.2 | 4.2 | 79 | 75 | 1264 | 1211 |
| July | 9.0 | 4.3 | 80 | 81 | 1347 | 1431 |
| August | 2.2 | 3.5 | 81 | 80 | 1309 | 1394 |
| Sept. | 7.7 | 2.5 | 71 | 71 | 1069 | 1072 |
| Oct. | 0.5 | 1.3 | 60 | 62 | 382 | 407 |
| Totals: | 38.6 | 30.9 | 57 | 56 | 7,078 | 7,031 |

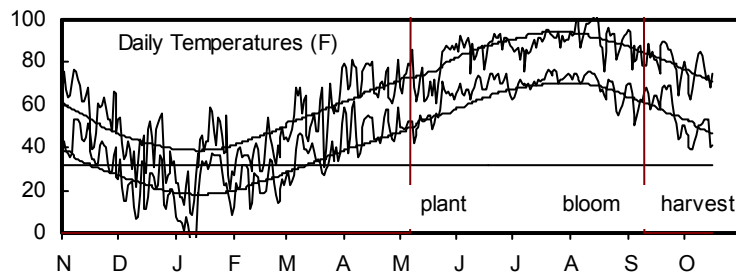
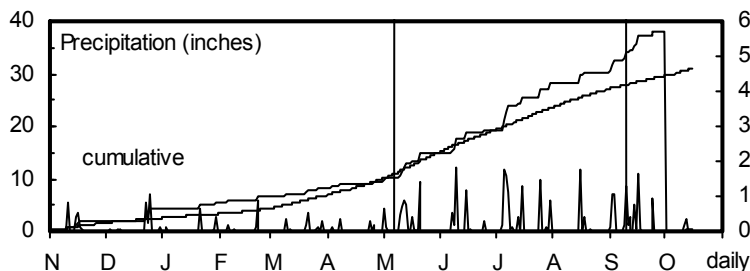


Table 10. Saline County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | OF TEST | | YIELD AS % | | 2009-2010 | | Days Grain to Blm | Days Grain to Moist. | Test Wt. lb/bu | Plnt Ht. in. | Ldg % | Pop. 1000 ppa | Hds. per Plnt | | |
|----------------|----------|---------------------|------|------------|------|------------|------|-----------|------|-------------------|----------------------|----------------|--------------|-------|---------------|---------------|------|-----|
| | | 2010 | 2009 | 2008 | 2007 | 2010 | 2009 | 2008 | 2009 | | | | | | | | 2010 | |
| | | 2-Yr. AVG. | | 3-Yr. AVG. | | AVERAGE | | AVERAGE | | | | | | | | | | |
| CHANNEL | 6B10 | 82 | -- | -- | -- | 95 | -- | -- | -- | -- | 21 | 54 | -- | 6 | 44.4 | 1.2 | | |
| CHANNEL | 7B11 | 98 | -- | -- | -- | 114 | -- | -- | -- | -- | 16 | 59 | -- | 0 | 46.8 | 1.3 | | |
| DEKALB | DKS36-06 | 79 | 152 | -- | 115 | 92 | 107 | -- | 22 | -- | 26 | 53 | -- | 17 | 48.5 | 1.3 | | |
| DEKALB | DKS37-07 | 66 | 152 | 133 | 109 | 117 | 77 | 107 | 98 | -- | 20 | -- | 24 | 53 | -- | 10 | 58.0 | 1.1 |
| DEKALB | DKS44-20 | 97 | 162 | 153 | 130 | 137 | 113 | 114 | 114 | -- | 18 | -- | 17 | 57 | -- | 3 | 57.7 | 1.1 |
| DEKALB | DKS49-45 | 82 | -- | -- | -- | 95 | -- | -- | -- | -- | 24 | 54 | -- | 18 | 56.0 | 1.1 | | |
| DEKALB | DKS53-67 | 95 | 168 | 153 | 132 | 139 | 111 | 118 | 113 | -- | 22 | -- | 23 | 55 | -- | 18 | 42.1 | 1.4 |
| DEKALB | DKS54-00 | 93 | 151 | 147 | 122 | 130 | 108 | 106 | 109 | -- | 20 | -- | 22 | 55 | -- | 9 | 47.0 | 1.2 |
| DEKALB | DKS54-03 | 86 | -- | -- | -- | 100 | -- | -- | -- | -- | 20 | 53 | -- | 10 | 48.7 | 1.1 | | |
| DYNA-GRO | 742C | 81 | 124 | -- | 103 | -- | 94 | 87 | -- | 16 | -- | 17 | 54 | -- | 9 | 52.8 | 1.1 | |
| DYNA-GRO | 751B | 79 | 159 | 138 | 119 | 125 | 92 | 111 | 102 | -- | 18 | -- | 19 | 57 | -- | 3 | 53.1 | 1.1 |
| DYNA-GRO | 764B | 93 | 151 | 138 | 122 | 127 | 108 | 106 | 103 | -- | 17 | -- | 17 | 55 | -- | 4 | 43.2 | 1.4 |
| DYNA-GRO | 766B | 77 | 149 | 142 | 113 | 123 | 90 | 105 | 105 | -- | 18 | -- | 19 | 56 | -- | 20 | 52.0 | 1.1 |
| DYNA-GRO | 772B | 74 | 145 | 152 | 110 | 124 | 86 | 102 | 113 | -- | 23 | -- | 28 | 51 | -- | 35 | 43.6 | 1.3 |
| DYNA-GRO | 778B | 77 | 156 | 127 | 116 | 120 | 90 | 109 | 94 | -- | 22 | -- | 24 | 57 | -- | 3 | 35.6 | 1.3 |
| MATURITY CHECK | EARLY | 75 | 113 | 143 | 94 | 110 | 87 | 80 | 106 | -- | 16 | -- | 17 | 53 | -- | 0 | 50.2 | 1.2 |
| MATURITY CHECK | LATE | 90 | 140 | 122 | 115 | 117 | 105 | 98 | 90 | -- | 19 | -- | 21 | 55 | -- | 1 | 47.3 | 1.2 |
| MATURITY CHECK | MEDIUM | 92 | 134 | 115 | 113 | 114 | 107 | 94 | 85 | -- | 21 | -- | 26 | 53 | -- | 18 | 47.0 | 1.4 |
| PHILLIPS | 670 | 76 | -- | -- | -- | 88 | -- | -- | -- | -- | 14 | 57 | -- | 0 | 39.5 | 1.5 | | |
| PHILLIPS | 672 | 68 | 152 | -- | 110 | -- | 79 | 106 | -- | 20 | -- | 23 | 54 | -- | 27 | 50.2 | 1.3 | |
| PHILLIPS | 775 | 89 | 154 | -- | 121 | -- | 103 | 108 | -- | 21 | -- | 25 | 52 | -- | 18 | 47.0 | 1.1 | |
| PIONEER | 84G62 | 94 | 161 | 160 | 127 | 138 | 109 | 113 | 118 | -- | 19 | -- | 17 | 57 | -- | 7 | 51.1 | 1.1 |
| PIONEER | 84P74 | 100 | 173 | -- | 137 | -- | 117 | 121 | -- | 24 | -- | 26 | 54 | -- | 9 | 48.4 | 1.2 | |
| PIONEER | 85G03 | 99 | 157 | 151 | 128 | 136 | 115 | 110 | 112 | -- | 21 | -- | 24 | 54 | -- | 6 | 49.3 | 1.4 |
| PIONEER | 85Y40 | 97 | 171 | 156 | 134 | 141 | 113 | 120 | 115 | -- | 19 | -- | 18 | 57 | -- | 3 | 53.4 | 1.2 |
| PRODUCERS | PH256 | 89 | -- | -- | -- | 104 | -- | -- | -- | -- | 18 | 57 | -- | 0 | 38.3 | 1.6 | | |
| SYNGENTA | 5464 | 87 | -- | -- | -- | 102 | -- | -- | -- | -- | 27 | 52 | -- | 21 | 47.9 | 1.3 | | |
| SYNGENTA | H-390W | 83 | -- | -- | -- | 97 | -- | -- | -- | -- | 17 | 54 | -- | 1 | 49.6 | 1.2 | | |
| SYNGENTA | H-486 | 89 | -- | -- | -- | 104 | -- | -- | -- | -- | 17 | 55 | -- | 0 | 58.1 | 1.0 | | |
| TRIUMPH | TR 438 | 84 | -- | -- | -- | 97 | -- | -- | -- | -- | 17 | 54 | -- | 1 | 51.7 | 1.2 | | |
| TRIUMPH | TR 452 | 80 | 142 | 130 | 111 | 117 | 93 | 100 | 96 | -- | 18 | -- | 19 | 55 | -- | 0 | 49.9 | 1.0 |
| TRIUMPH | TRX05361 | 74 | -- | -- | -- | 86 | -- | -- | -- | -- | 20 | 56 | -- | 1 | 42.6 | 1.1 | | |
| TRIUMPH | TRX85002 | 98 | 139 | -- | 119 | -- | 113 | 98 | -- | 21 | -- | 19 | 58 | -- | 0 | 42.5 | 1.1 | |
| TRIUMPH | TRX95005 | 102 | 153 | -- | 128 | -- | 118 | 108 | -- | 18 | -- | 17 | 56 | -- | 1 | 40.3 | 1.6 | |

Table 10 continued. Saline County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | | | | YIELD AS % | | | 2009-2010 | | | | | | | | | | |
|-------|------------|---------------------|------|------|-------|-------|------------|------|------|-----------|-------|--------|-------|------|--------|------|------|-----|------|-----|
| | | OF TEST | | | | | AVERAGE | | | Days | Grain | Days | Grain | Test | Plnt | Pop. | Hds. | | | |
| | | 2010 | 2009 | 2008 | 2-Yr. | 3-Yr. | 2010 | 2009 | 2008 | Blm | to | Moist. | Blm | to | Moist. | Wt. | Ht. | Ldg | 1000 | per |
| | | | | | AVG. | AVG. | | | | | % | % | | % | lb/bu | in. | % | ppa | Pint | |
| | AVERAGES | 86 | 143 | 135 | 114 | 121 | 86 | 143 | 135 | -- | 20 | -- | 21 | 55 | -- | 8 | 48.1 | 1.2 | | |
| | CV (%) | 7 | 6 | 5 | -- | -- | 7 | 6 | 5 | -- | -- | -- | 14 | 3 | -- | -- | 5 | 6 | | |
| | LSD (0.05) | 9 | 11 | 9 | -- | -- | 10 | 8 | 7 | -- | -- | -- | 4 | 2 | -- | 0 | 3 | 0 | | |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

CENTRAL KANSAS NO-TILL DRYLAND GRAIN SORGHUM TEST

South Central Kansas Experiment Field, Hutchinson; William Heer, agronomist

Ost loam; Soybean in 2009

120 - 40 - 0 lb/a N, P, K

Planted on 5/6/2010; Harvested on 9/20/2010

Target stand of 40,000 plants/acre; 5.2 in. spacing

Wet soils after planting affected emergence and stands; very hot and dry during the summer until harvest.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 0.5 | 4.4 | 36 | 37 | | |
| April | 1.6 | 2.6 | 58 | 55 | 703 | 617 |
| May | 4.8 | 3.8 | 64 | 65 | 894 | 927 |
| June | 7.8 | 4.3 | 79 | 75 | 1246 | 1196 |
| July | 6.1 | 3.5 | 81 | 81 | 1319 | 1416 |
| August | 3.9 | 3.1 | 80 | 79 | 1284 | 1361 |
| Sept. | 1.3 | 3.3 | 72 | 70 | 1063 | 1053 |
| Oct. | 0.3 | 1.1 | 60 | 62 | 376 | 407 |
| Totals: | 26.4 | 26.1 | 56 | 56 | 6,885 | 6,977 |

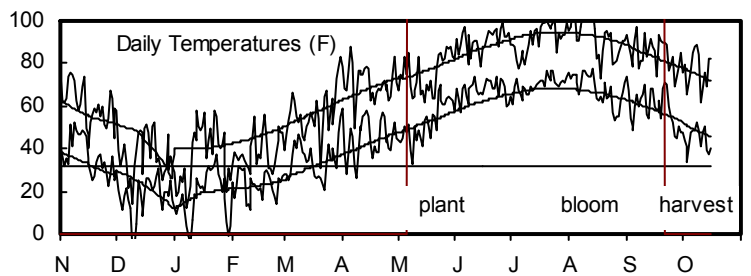
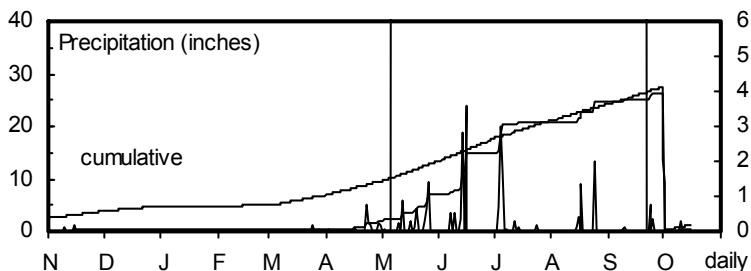


Table 11. Reno County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|------------|----------------------|------------|------------|------------|------------|---------|------|------|------------|-------------|------|-------------|-------|---------|-------|---------------|---------------|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST | | | Days Grain | | | Test | | Plnt | | Pop. 1000 ppa | Hds. per Plnt |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | to Moist. % | Days | to Moist. % | lb/bu | Ht. in. | Ldg % | | |
| DEKALB | DKS36-06 | 77 | 79 | -- | 78 | -- | 101 | 75 | -- | 67 | 15 | 71 | 14 | 56 | 56 | 48 | 30.2 | 1.4 |
| MATURITY CHECK | EARLY | 73 | 69 | 116 | 71 | 86 | 95 | 66 | 103 | 66 | 15 | 71 | 15 | 55 | 49 | 13 | 37.5 | 1.4 |
| DEKALB | DKS37-07 | 83 | 111 | 108 | 97 | 101 | 108 | 107 | 96 | 67 | 15 | 73 | 14 | 57 | 53 | 46 | 42.4 | 1.1 |
| MATURITY CHECK | MEDIUM | 94 | 96 | 86 | 95 | 92 | 122 | 92 | 77 | 68 | 14 | 73 | 14 | 56 | 52 | 17 | 38.6 | 1.4 |
| MIDLAND | M-4595 | 49 | -- | -- | -- | -- | 64 | -- | -- | -- | -- | 73 | 12 | 54 | 42 | 41 | 38.9 | 1.2 |
| PRODUCERS | PH266 | 80 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | 73 | 13 | 57 | 52 | 26 | 31.8 | 1.3 |
| SYNGENTA | H-390W | 65 | -- | -- | -- | -- | 85 | -- | -- | -- | -- | 73 | 13 | 54 | 47 | 63 | 33.1 | 1.4 |
| SYNGENTA | 5745 | 69 | -- | -- | -- | -- | 89 | -- | -- | -- | -- | 74 | 14 | 56 | 53 | 8 | 45.9 | 1.2 |
| SYNGENTA | H-486 | 76 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 74 | 14 | 56 | 50 | 26 | 45.8 | 1.0 |
| DEKALB | DKS53-67 | 102 | 122 | 148 | 112 | 124 | 132 | 117 | 131 | 69 | 15 | 75 | 14 | 58 | 52 | 14 | 29.5 | 1.7 |
| MIDLAND | M-4665 | 71 | 81 | -- | 76 | -- | 93 | 78 | -- | 69 | 14 | 75 | 13 | 55 | 47 | 51 | 37.8 | 1.2 |
| PRODUCERS | PH246W | 71 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 75 | 13 | 55 | 50 | 15 | 32.5 | 1.1 |
| DEKALB | DKS49-45 | 74 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 76 | 14 | 57 | 54 | 30 | 40.2 | 1.2 |
| MIDLAND | M-4748 | 78 | 90 | 106 | 84 | 91 | 102 | 87 | 94 | 69 | 14 | 76 | 14 | 56 | 54 | 26 | 31.8 | 1.3 |
| TRIUMPH | TRX95005 | 63 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | 76 | 14 | 55 | 52 | 51 | 37.3 | 1.3 |
| DEKALB | DKS44-20 | 80 | 110 | 127 | 95 | 106 | 104 | 105 | 113 | 70 | 16 | 77 | 15 | 55 | 50 | 30 | 43.8 | 1.2 |
| DEKALB | DKS54-03 | 97 | -- | -- | -- | -- | 126 | -- | -- | -- | -- | 77 | 14 | 56 | 56 | 2 | 36.2 | 1.1 |
| MIDLAND | M-4790 | 84 | 125 | -- | 104 | -- | 109 | 119 | -- | 71 | 15 | 77 | 15 | 58 | 65 | 3 | 34.7 | 1.2 |
| PRODUCERS | PH256 | 56 | -- | -- | -- | -- | 73 | -- | -- | -- | -- | 77 | 14 | 55 | 52 | 50 | 33.5 | 1.4 |
| MATURITY CHECK | LATE | 88 | 114 | 108 | 101 | 103 | 114 | 109 | 96 | 71 | 14 | 78 | 14 | 57 | 56 | 25 | 28.8 | 1.5 |
| MIDLAND | M-4772 | 87 | 126 | 115 | 106 | 109 | 113 | 120 | 103 | 71 | 15 | 78 | 14 | 57 | 56 | 12 | 38.0 | 1.1 |
| SYNGENTA | 5464 | 85 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 78 | 15 | 57 | 53 | 13 | 37.6 | 1.1 |
| TRIUMPH | TRX85002 | 60 | 109 | -- | 84 | -- | 78 | 104 | -- | 73 | 16 | 78 | 16 | 55 | 59 | 15 | 46.6 | 1.1 |
| DEKALB | DKS54-00 | 87 | 126 | 140 | 106 | 118 | 114 | 120 | 124 | 72 | 14 | 79 | 14 | 57 | 58 | 19 | 37.1 | 1.2 |
| PRODUCERS | PH276 | 85 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 79 | 15 | 56 | 59 | 18 | 32.5 | 1.2 |
| MIDLAND | M-4765 | 66 | 98 | -- | 82 | -- | 86 | 93 | -- | 71 | 15 | 80 | 14 | 57 | 50 | 24 | 34.7 | 1.1 |
| | AVERAGES | 77 | 105 | 113 | 91 | 98 | 77 | 105 | 113 | 70 | 15 | 75 | 14 | 56 | 53 | 26 | 36.8 | 1.2 |
| | CV (%) | 10 | 9 | 8 | -- | -- | 10 | 9 | 8 | -- | -- | 5 | 8 | 3 | 2 | -- | 9 | 10 |
| | LSD (0.05) | 10 | 13 | 13 | -- | -- | 14 | 12 | 11 | -- | -- | 5 | 2 | 3 | 1 | 26 | 5 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

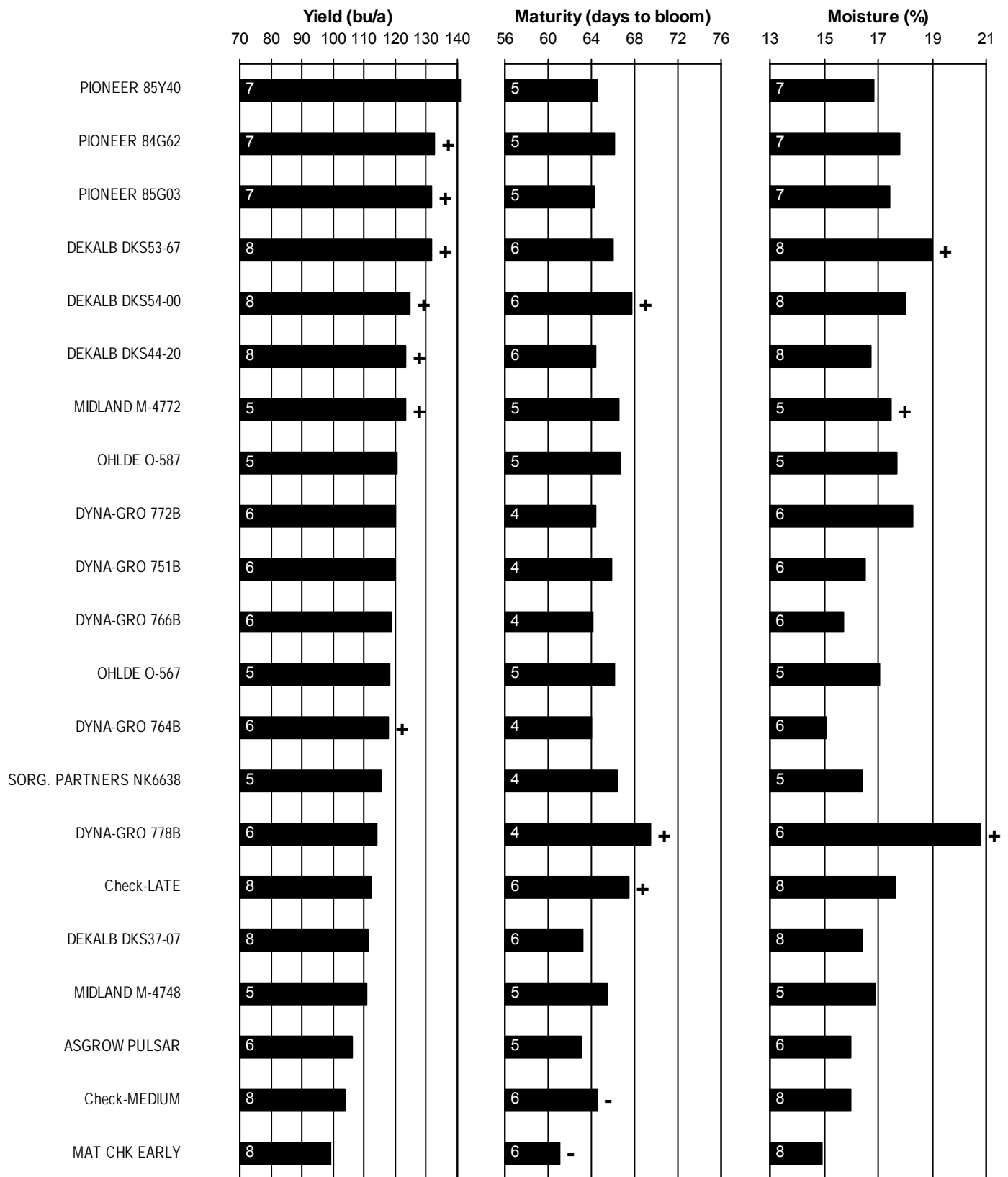
Top LSD group in bold.

Table 12. CENTRAL Kansas Sorghum Hybrid Yield Summary (% of test avg.), 2010

| BRAND/NAME | SAD | RND | AVG. | BRAND/NAME | SAD | RND | AVG. |
|-------------------|------------|------------|-------------|-----------------------|------------|------------|-------------|
| CHANNEL | | | | SYNGENTA | | | |
| 6B10 | 95 | -- | -- | 5464 | 102 | 111 | 106 |
| 7B11 | 114 | -- | -- | 5745 | -- | 89 | -- |
| DEKALB | | | | TRIUMPH | | | |
| DKS36-06 | 92 | 101 | 96 | H-390W | 97 | 85 | 91 |
| DKS37-07 | 77 | 108 | 92 | H-486 | 104 | 99 | 101 |
| DKS44-20 | 113 | 104 | 108 | TR 438 | 97 | -- | -- |
| DKS49-45 | 95 | 96 | 96 | TR 452 | 93 | -- | -- |
| DKS53-67 | 111 | 132 | 121 | TRX05361 | 86 | -- | -- |
| DKS54-00 | 108 | 114 | 111 | TRX85002 | 113 | 78 | 96 |
| DKS54-03 | 100 | 126 | 113 | TRX95005 | 118 | 82 | 100 |
| DYNA-GRO | | | | MATURITY CHECK | | | |
| 742C | 94 | -- | -- | EARLY | 87 | 95 | 91 |
| 751B | 92 | -- | -- | LATE | 105 | 114 | 110 |
| 764B | 108 | -- | -- | MEDIUM | 107 | 122 | 115 |
| 766B | 90 | -- | -- | AVERAGES (bu/a) | 86 | 77 | 81 |
| 772B | 86 | -- | -- | CV (%) | 7 | 10 | -- |
| 778B | 90 | -- | -- | LSD (0.05) | 10 | 14 | -- |
| MIDLAND | | | | | | | |
| M-4595 | -- | 64 | -- | | | | |
| M-4665 | -- | 93 | -- | | | | |
| M-4748 | -- | 102 | -- | | | | |
| M-4765 | -- | 86 | -- | | | | |
| M-4772 | -- | 113 | -- | | | | |
| M-4790 | -- | 109 | -- | | | | |
| PHILLIPS | | | | | | | |
| 670 | 88 | -- | -- | | | | |
| 672 | 79 | -- | -- | | | | |
| 775 | 103 | -- | -- | | | | |
| PIONEER | | | | | | | |
| 84G62 | 109 | -- | -- | | | | |
| 84P74 | 117 | -- | -- | | | | |
| 85G03 | 115 | -- | -- | | | | |
| 85Y40 | 113 | -- | -- | | | | |
| PRODUCERS | | | | | | | |
| PH246W | -- | 92 | -- | | | | |
| PH256 | 104 | 73 | 88 | | | | |
| PH266 | -- | 104 | -- | | | | |
| PH276 | -- | 111 | -- | | | | |

SAD = Saline Co., Assaria

RND = Reno Co., Hutchinson



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 6. CENTRAL Kansas sorghum hybrid standardized performance summary, 2008-2010

WEST KANSAS FALLOW GRAIN SORGHUM TEST

Agricultural Research Center, Hays; Wayne Aschwege, technician

Harney silt loam; Fallow in 2009

80 - 0 - 0 lb/a N, P, K

Planted on 6/3/2010; Harvested on 10/14/2010

Target stand of 35,000 plants/acre; 6.0 in. spacing

Hot and dry from mid-August throughout the rest of the growing season.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 3.0 | 3.5 | 34 | 33 | | |
| April | 2.5 | 1.8 | 56 | 50 | 645 | 478 |
| May | 1.8 | 3.1 | 61 | 61 | 796 | 833 |
| June | 4.1 | 3.8 | 77 | 71 | 1173 | 1109 |
| July | 1.6 | 3.4 | 80 | 78 | 1285 | 1344 |
| August | 3.3 | 2.8 | 79 | 76 | 1242 | 1286 |
| Sept. | 2.2 | 2.3 | 69 | 68 | 1010 | 984 |
| Oct. | 0.1 | 0.7 | 60 | 58 | 374 | 358 |
| Totals: | 18.4 | 21.3 | 54 | 52 | 6,524 | 6,392 |

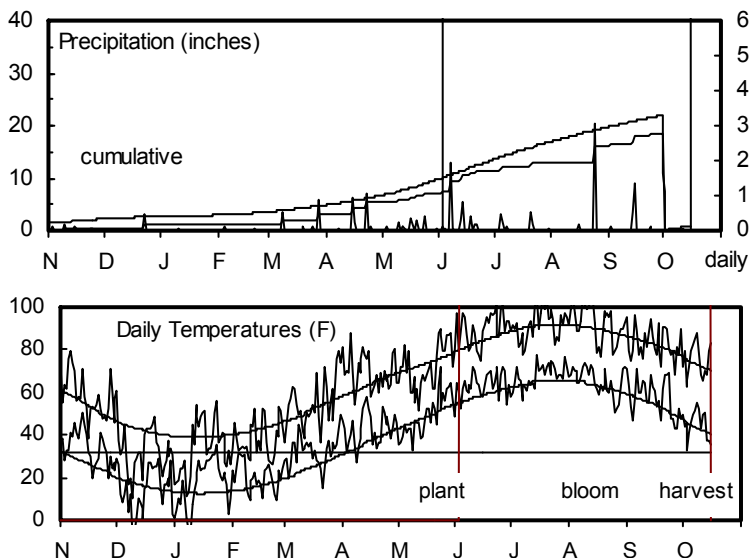


Table 13. Ellis County Fallow Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|----------|----------------------|------|------|------------|---------|------|------|-----------------|-----------|------|-------|-----------|-----------|-----------|-------|----------|---------------|
| | | ACRE YIELD, BUSHELS | | | | OF TEST | | | Days Grain Test | | | | Plnt Ldg | | Pop. Hds. | | | |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 2010 | 2009 | 2008 | Blm | to Moist. | Days | Grain | to Moist. | Wt. lb/bu | Ht. in. | Ldg % | 1000 ppa | Hds. per Plnt |
| DEKALB | DKS28-05 | 95 | 129 | -- | 112 | -- | 89 | 94 | -- | 59 | 9 | 56 | 10 | 57 | 45 | -- | 33.3 | 1.5 |
| DEKALB | DKS29-28 | 92 | 114 | 90 | 103 | 99 | 86 | 83 | 76 | 62 | 11 | 57 | 11 | 57 | 39 | -- | 35.1 | 1.3 |
| MATURITY CHECK | EARLY | 89 | 121 | 116 | 105 | 109 | 84 | 88 | 97 | 63 | 11 | 57 | 10 | 57 | 45 | -- | 32.8 | 1.5 |
| PHILLIPS | 595 | 95 | -- | -- | -- | -- | 89 | -- | -- | -- | -- | 60 | 11 | 58 | 39 | -- | 31.8 | 1.5 |
| DEKALB | DKS37-07 | 89 | 136 | 111 | 113 | 112 | 84 | 99 | 94 | 65 | 14 | 61 | 12 | 60 | 46 | -- | 34.3 | 1.3 |
| SYNGENTA | H-307 | 105 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 61 | 11 | 57 | 48 | -- | 33.4 | 1.5 |
| ASGROW | PULSAR | 92 | 125 | 103 | 109 | 107 | 87 | 91 | 87 | 66 | 12 | 62 | 11 | 60 | 41 | -- | 32.0 | 1.6 |
| DEKALB | DKS36-06 | 103 | 143 | -- | 123 | -- | 97 | 104 | -- | 66 | 14 | 62 | 12 | 61 | 48 | -- | 32.9 | 1.3 |
| OHLDE | O-530 | 103 | 142 | 112 | 123 | 119 | 97 | 103 | 94 | 67 | 13 | 62 | 12 | 62 | 44 | -- | 32.7 | 1.2 |
| PRODUCERS | PH256 | 101 | 138 | -- | 120 | -- | 94 | 100 | -- | 69 | 14 | 62 | 13 | 59 | 46 | -- | 31.8 | 1.5 |
| TRIUMPH | TR 448 | 97 | -- | -- | -- | -- | 91 | -- | -- | -- | -- | 62 | 13 | 62 | 43 | -- | 31.3 | 1.2 |
| DEKALB | DKS44-20 | 121 | 156 | 123 | 139 | 133 | 113 | 113 | 104 | 68 | 13 | 63 | 12 | 62 | 47 | -- | 34.8 | 1.3 |
| DYNA-GRO | 742C | 100 | 146 | -- | 123 | -- | 94 | 106 | -- | 68 | 13 | 63 | 12 | 60 | 40 | -- | 31.2 | 1.4 |
| OHLDE | O-525 | 108 | 141 | 124 | 125 | 124 | 102 | 103 | 104 | 67 | 12 | 63 | 11 | 60 | 43 | -- | 34.6 | 1.2 |
| PRODUCERS | PH246W | 101 | 131 | -- | 116 | -- | 95 | 95 | -- | 66 | 11 | 63 | 10 | 59 | 44 | -- | 30.9 | 1.3 |
| SYNGENTA | H-390W | 104 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 63 | 12 | 60 | 41 | -- | 32.0 | 1.4 |
| TRIUMPH | TR 452 | 101 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 63 | 13 | 61 | 46 | -- | 32.3 | 1.2 |
| MATURITY CHECK | MEDIUM | 112 | 126 | 112 | 119 | 117 | 105 | 92 | 94 | 68 | 15 | 64 | 14 | 59 | 46 | -- | 34.2 | 1.5 |
| PHILLIPS | 672 | 107 | 128 | -- | 118 | -- | 100 | 93 | -- | 68 | 13 | 64 | 12 | 60 | 45 | -- | 34.3 | 1.2 |
| PIONEER | 85G03 | 111 | 156 | -- | 134 | -- | 104 | 113 | -- | 69 | 16 | 64 | 14 | 58 | 47 | -- | 34.5 | 1.5 |
| PIONEER | 85Y40 | 133 | 148 | 150 | 141 | 144 | 125 | 107 | 126 | 68 | 13 | 64 | 12 | 61 | 50 | -- | 34.9 | 1.4 |
| CHANNEL | 6B10 | 122 | 160 | -- | 141 | -- | 114 | 116 | -- | 69 | 12 | 65 | 12 | 62 | 43 | -- | 33.4 | 1.3 |
| DYNA-GRO | 764B | 115 | 149 | 118 | 132 | 127 | 108 | 108 | 99 | 69 | 13 | 65 | 12 | 61 | 44 | -- | 34.3 | 1.5 |
| DYNA-GRO | 766B | 95 | 130 | 126 | 113 | 117 | 90 | 95 | 106 | 68 | 13 | 65 | 12 | 60 | 45 | -- | 30.1 | 1.3 |
| TRIUMPH | TR 458 | 108 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 65 | 14 | 58 | 45 | -- | 32.7 | 1.5 |
| DYNA-GRO | 751B | 102 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 66 | 12 | 60 | 43 | -- | 33.0 | 1.4 |
| OHLDE | O-587 | 108 | 136 | -- | 122 | -- | 101 | 99 | -- | 71 | 13 | 66 | 12 | 60 | 44 | -- | 30.8 | 1.4 |
| PIONEER | 84P74 | 127 | -- | -- | -- | -- | 119 | -- | -- | -- | -- | 66 | 13 | 60 | 48 | -- | 33.4 | 1.4 |
| SYNGENTA | 5556 | 103 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 66 | 12 | 60 | 44 | -- | 31.9 | 1.5 |
| CHANNEL | 7B11 | 112 | 143 | -- | 128 | -- | 106 | 104 | -- | 72 | 14 | 67 | 13 | 62 | 48 | -- | 29.8 | 1.5 |
| OHLDE | O-567 | 116 | 157 | 136 | 137 | 136 | 109 | 114 | 115 | 71 | 13 | 67 | 12 | 61 | 44 | -- | 33.9 | 1.2 |
| PRODUCERS | PH266 | 109 | 152 | -- | 131 | -- | 102 | 110 | -- | 72 | 14 | 67 | 13 | 61 | 44 | -- | 32.8 | 1.3 |
| SYNGENTA | 5464 | 100 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 67 | 14 | 59 | 44 | -- | 29.4 | 1.3 |
| DYNA-GRO | 772B | 107 | 150 | 125 | 129 | 127 | 101 | 109 | 106 | 71 | 14 | 68 | 13 | 61 | 45 | -- | 32.8 | 1.1 |
| PIONEER | 84G62 | 115 | -- | -- | -- | -- | 108 | -- | -- | -- | -- | 68 | 12 | 61 | 44 | -- | 32.4 | 1.3 |

Table 13 continued. Ellis County Fallow Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % | | | | | | | | | | | | | | | 2009-2010 | |
|----------------|------------|--------------------|------------|-------|------|------|---------|------|------|------------|--------|------------|--------|-------|------|-----|-----------|------|
| | | ACRE YIELD, BUSHEL | | | | | OF TEST | | | Days Grain | | Days Grain | | Test | Pint | | Pop. | Hds. |
| | | 2-Yr. | | 3-Yr. | | | AVERAGE | | | to | Moist. | to | Moist. | Wt. | Ht. | Ldg | 1000 | per |
| | | 2010 | 2009 | 2008 | AVG. | AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | % | lb/bu | in. | % | ppa | Pint |
| DYNA-GRO | 778B | 104 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 71 | 14 | 60 | 48 | -- | 30.8 | 1.6 |
| TRIUMPH | TRX05361 | 124 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | 71 | 14 | 58 | 46 | -- | 32.4 | 1.1 |
| MATURITY CHECK | LATE | 125 | 125 | 122 | 125 | 124 | 118 | 91 | 102 | 75 | 14 | 72 | 14 | 61 | 47 | -- | 30.2 | 1.4 |
| TRIUMPH | TRX85002 | 100 | 157 | -- | 129 | -- | 94 | 114 | -- | 77 | 16 | 72 | 16 | 59 | 43 | -- | 30.1 | 1.4 |
| | AVERAGES | 106 | 138 | 119 | 122 | 121 | 106 | 138 | 119 | 68 | 13 | 64 | 12 | 60 | 44 | -- | 32.5 | 1.4 |
| | CV (%) | 11 | 10 | 10 | -- | -- | 11 | 10 | 10 | -- | -- | 2 | 5 | 1 | 5 | -- | 8 | 10 |
| | LSD (0.05) | 16 | 19 | 17 | -- | -- | 15 | 14 | 15 | -- | -- | 2 | 1 | 1 | 3 | -- | 4 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Keith silt loam; Fallow in 2009

80 - 0 - 0 lb/a N, P, K

Planted on 6/2/2010; Harvested on 10/9/2010

Target stand of 25,000 plants/acre; 8.4 in. spacing

Very good growing conditions until mid-August, when the weather turned hot and dry.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 2.2 | 2.4 | 33 | 32 | | |
| April | 2.3 | 1.4 | 52 | 49 | 523 | 421 |
| May | 2.3 | 2.9 | 58 | 59 | 697 | 762 |
| June | 2.5 | 3.4 | 74 | 70 | 1105 | 1054 |
| July | 3.8 | 3.1 | 77 | 76 | 1234 | 1285 |
| August | 1.4 | 2.1 | 74 | 74 | 1149 | 1216 |
| Sept. | 0.6 | 1.6 | 67 | 66 | 926 | 910 |
| Oct. | 0.2 | 0.2 | 58 | 56 | 344 | 324 |
| Totals: | 15.2 | 17.2 | 52 | 51 | 5,979 | 5,972 |

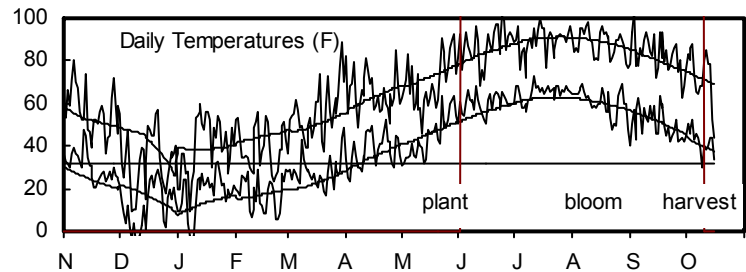
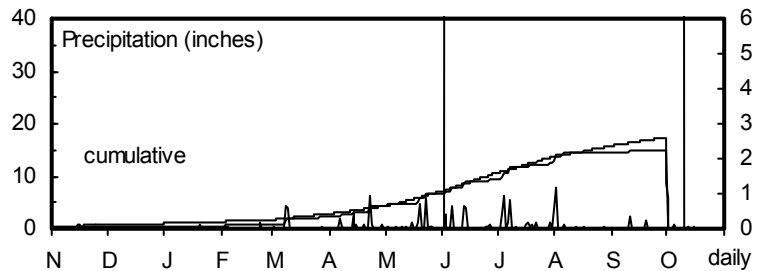


Table 14. Thomas County Fallow Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | YIELD AS % | | | 2009-2010 | | | | | | | | | | | |
|----------------|------------|---------------------|------------|------------|------|------|------------|------|------------|-----|------|-----|------|-------|------|----|------|------|
| | | 2-Yr. 3-Yr. | | OF TEST | | | Days Grain | | Days Grain | | Test | | Plnt | | Pop. | | Hds. | |
| | | 2010 | 2009 | 2008 | AVG. | AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | % | lb/bu | in. | % | Ldg | 1000 |
| MATURITY CHECK | EARLY | 134 | 103 | 141 | 119 | 126 | 89 | 81 | 100 | 62 | 10 | 56 | 9 | 58 | 44 | 0 | 29.5 | 2.0 |
| DEKALB | DKS28-05 | 142 | 143 | -- | 143 | -- | 95 | 113 | -- | 61 | 10 | 57 | 10 | 56 | 45 | 0 | 28.9 | 2.0 |
| DEKALB | DKS29-28 | 143 | 122 | -- | 133 | -- | 95 | 96 | -- | 62 | 10 | 58 | 11 | 60 | 39 | 0 | 30.5 | 1.8 |
| PHILLIPS | 595 | 137 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 60 | 13 | 60 | 39 | 0 | 28.4 | 2.0 |
| ASGROW | PULSAR | 135 | 136 | 135 | 135 | 135 | 90 | 107 | 96 | 63 | 10 | 61 | 11 | 59 | 45 | 0 | 26.8 | 2.1 |
| DEKALB | DKS37-07 | 157 | 137 | 156 | 147 | 150 | 105 | 107 | 111 | 66 | 11 | 62 | 12 | 61 | 47 | 0 | 29.6 | 1.6 |
| DEKALB | DKS36-06 | 156 | 135 | -- | 146 | -- | 104 | 106 | -- | 67 | 11 | 63 | 12 | 61 | 48 | 0 | 28.7 | 1.8 |
| DEKALB | DKS44-20 | 144 | 131 | 145 | 138 | 140 | 96 | 104 | 103 | 68 | 12 | 65 | 11 | 60 | 48 | 0 | 29.0 | 1.4 |
| PRODUCERS | PH256 | 146 | 126 | -- | 136 | -- | 97 | 99 | -- | 69 | 11 | 65 | 11 | 59 | 49 | 1 | 27.4 | 1.9 |
| CHANNEL | 6B10 | 160 | 147 | -- | 154 | -- | 107 | 116 | -- | 68 | 12 | 66 | 13 | 60 | 46 | 0 | 27.4 | 1.6 |
| PHILLIPS | 672 | 149 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 66 | 13 | 59 | 46 | 0 | 30.2 | 1.3 |
| PIONEER | 84P74 | 168 | -- | -- | -- | -- | 112 | -- | -- | -- | -- | 66 | 12 | 60 | 49 | 0 | 28.9 | 1.7 |
| PRODUCERS | PH246W | 122 | 114 | -- | 118 | -- | 81 | 89 | -- | 69 | 10 | 66 | 11 | 60 | 46 | 0 | 21.9 | 1.8 |
| CHANNEL | 7B11 | 143 | 135 | -- | 139 | -- | 95 | 106 | -- | 70 | 13 | 67 | 13 | 60 | 52 | 0 | 27.6 | 1.6 |
| PIONEER | 85Y40 | 168 | 135 | 140 | 152 | 148 | 112 | 106 | 99 | 71 | 12 | 67 | 13 | 61 | 48 | 0 | 29.6 | 1.5 |
| MATURITY CHECK | MEDIUM | 161 | 127 | 145 | 144 | 144 | 107 | 100 | 103 | 71 | 11 | 68 | 12 | 59 | 50 | 0 | 28.3 | 1.8 |
| PIONEER | 85G03 | 161 | 131 | -- | 146 | -- | 108 | 103 | -- | 71 | 12 | 68 | 12 | 59 | 49 | 0 | 28.6 | 1.9 |
| PIONEER | 84G62 | 171 | -- | -- | -- | -- | 114 | -- | -- | -- | -- | 69 | 12 | 60 | 47 | 0 | 29.7 | 1.5 |
| MATURITY CHECK | LATE | 149 | 126 | 136 | 138 | 137 | 99 | 100 | 96 | 75 | 11 | 70 | 13 | 57 | 52 | 0 | 25.8 | 1.6 |
| PRODUCERS | PH266 | 151 | 119 | -- | 135 | -- | 101 | 94 | -- | 74 | 10 | 71 | 12 | 60 | 48 | 0 | 27.3 | 1.5 |
| | AVERAGES | 150 | 127 | 141 | 139 | 139 | 150 | 127 | 141 | 68 | 11 | 65 | 12 | 59 | 47 | 0 | 28.2 | 1.7 |
| | CV (%) | 9 | 7 | 11 | -- | -- | 9 | 7 | 11 | -- | -- | 1 | 13 | 2 | 3 | -- | 6 | 7 |
| | LSD (0.05) | 20 | 13 | 21 | -- | -- | 13 | 10 | 15 | -- | -- | 1 | 2 | 2 | 2 | 1 | 3 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist; Lucas Haag; technician

Richfield silt loam; Fallow in 2009

85 - 20 - 0 lb/a N, P, K

Planted on 5/27/2010; Harvested on 10/19/2010

Target stand of 25,000 plants/acre; 8.4 in. spacing

Dry conditions late in the summer.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 0.7 | 2.1 | 37 | 34 | | |
| April | 1.8 | 1.3 | 50 | 49 | 504 | 430 |
| May | 2.2 | 2.3 | 63 | 59 | 851 | 772 |
| June | 1.2 | 2.5 | 72 | 70 | 1046 | 1063 |
| July | 2.7 | 2.6 | 75 | 76 | 1158 | 1287 |
| August | 1.4 | 2.3 | 71 | 74 | 1086 | 1209 |
| Sept. | 0.5 | 1.3 | 60 | 66 | 751 | 934 |
| Oct. | 1.9 | 0.3 | 44 | 57 | 166 | 340 |
| Totals: | 12.3 | 14.7 | 52 | 52 | 5,562 | 6,035 |

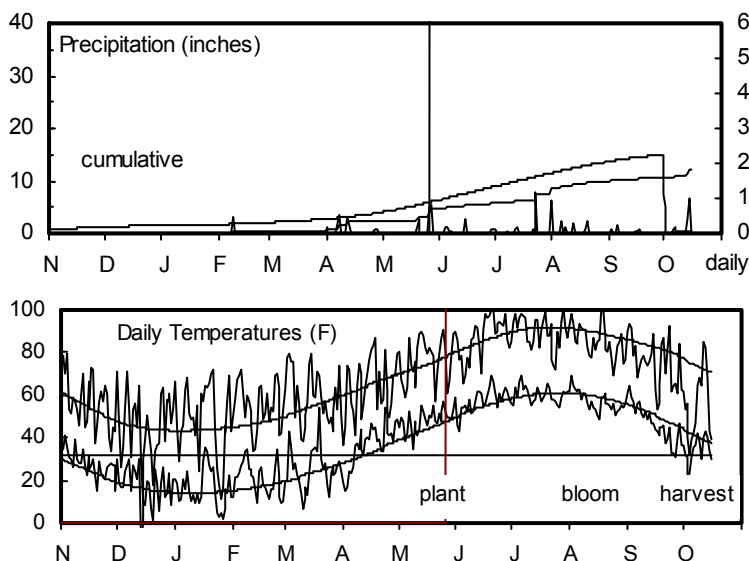


Table 15. Greeley County Dryland Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | Plnt | Hts. | Ldg | Pop. 1000 ppa | Hds. per Plnt | | |
|----------------|------------|----------------------|------|------|------------|------------|---------|------|------|----------|-------------------|------|------|-----|---------------|---------------|----------|-------------------|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST | | | | | | | | | | | |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Days Blm | Grain to Moist. % | | | | | | Days Blm | Grain to Moist. % |
| DEKALB | DKS28-05 | 88 | 87 | -- | 88 | -- | 80 | 119 | -- | 63 | 14 | 60 | 11 | 58 | 43 | 0 | -- | -- |
| DEKALB | DKS29-28 | 92 | 79 | -- | 86 | -- | 84 | 108 | -- | 64 | 14 | 60 | 12 | 57 | 37 | 0 | -- | -- |
| MATURITY CHECK | EARLY | 91 | 79 | 69 | 85 | 80 | 83 | 108 | 88 | 64 | 14 | 60 | 11 | 58 | 40 | 0 | -- | -- |
| PIONEER | 86G08 | 123 | -- | -- | -- | -- | 112 | -- | -- | -- | -- | 60 | 13 | 56 | 46 | 3 | -- | -- |
| SYNGENTA | 5875 | 87 | -- | -- | -- | -- | 79 | -- | -- | -- | -- | 60 | 12 | 57 | 37 | 0 | -- | -- |
| TRIUMPH | TR 424 | 71 | -- | -- | -- | -- | 65 | -- | -- | -- | -- | 60 | 11 | 57 | 37 | 0 | -- | -- |
| PIONEER | 86G32 | 112 | 81 | 66 | 97 | 86 | 102 | 111 | 85 | 64 | 15 | 61 | 12 | 57 | 45 | 0 | -- | -- |
| ASGROW | PULSAR | 96 | 81 | 86 | 88 | 88 | 87 | 111 | 111 | 65 | 15 | 63 | 12 | 57 | 45 | 5 | -- | -- |
| CHANNEL | 5B90 | 101 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 63 | 12 | 57 | 45 | 0 | -- | -- |
| DEKALB | DKS36-06 | 124 | 91 | -- | 108 | -- | 113 | 125 | -- | 66 | 15 | 63 | 13 | 57 | 48 | 0 | -- | -- |
| DEKALB | DKS37-07 | 120 | 80 | 98 | 100 | 99 | 110 | 110 | 125 | 66 | 15 | 63 | 12 | 57 | 46 | 0 | -- | -- |
| SYNGENTA | H-307 | 125 | -- | -- | -- | -- | 114 | -- | -- | -- | -- | 64 | 12 | 57 | 50 | 0 | -- | -- |
| CHANNEL | 6B10 | 114 | 81 | -- | 97 | -- | 104 | 111 | -- | 69 | 14 | 67 | 12 | 57 | 46 | 5 | -- | -- |
| PRODUCERS | PH246W | 97 | 80 | -- | 89 | -- | 89 | 110 | -- | 68 | 14 | 67 | 11 | 58 | 47 | 0 | -- | -- |
| SYNGENTA | 5745 | 110 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 67 | 12 | 57 | 45 | 0 | -- | -- |
| DEKALB | DKS44-20 | 118 | 74 | 102 | 96 | 98 | 108 | 101 | 131 | 70 | 14 | 68 | 12 | 57 | 47 | 0 | -- | -- |
| DRUSSEL SEED | DSS B6506 | 123 | 81 | 86 | 102 | 97 | 112 | 111 | 111 | 70 | 15 | 68 | 12 | 57 | 48 | 0 | -- | -- |
| DRUSSEL SEED | DSS B64 | 126 | 85 | 96 | 105 | 102 | 115 | 116 | 124 | 70 | 15 | 69 | 12 | 57 | 46 | 0 | -- | -- |
| PRODUCERS | PH256 | 123 | 80 | -- | 101 | -- | 112 | 109 | -- | 70 | 15 | 69 | 12 | 57 | 50 | 5 | -- | -- |
| PIONEER | 85Y40 | 104 | 80 | 81 | 92 | 88 | 95 | 110 | 104 | 73 | 18 | 70 | 17 | 54 | 48 | 18 | -- | -- |
| TRIUMPH | TR 448 | 121 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 70 | 12 | 57 | 44 | 0 | -- | -- |
| SYNGENTA | H-390W | 111 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | 71 | 12 | 57 | 45 | 3 | -- | -- |
| MATURITY CHECK | LATE | 122 | 53 | 68 | 88 | 81 | 111 | 73 | 87 | 76 | 15 | 73 | 12 | 57 | 54 | 10 | -- | -- |
| MATURITY CHECK | MEDIUM | 118 | 54 | 78 | 86 | 83 | 107 | 74 | 100 | 75 | 15 | 74 | 13 | 56 | 49 | 5 | -- | -- |
| PIONEER | 85G03 | 123 | 55 | -- | 89 | -- | 112 | 76 | -- | 76 | 15 | 74 | 12 | 57 | 48 | 0 | -- | -- |
| PRODUCERS | PH266 | 109 | 49 | -- | 79 | -- | 99 | 67 | -- | 77 | 16 | 75 | 12 | 57 | 51 | 0 | -- | -- |
| | AVERAGES | 110 | 73 | 78 | 92 | 87 | 110 | 73 | 78 | 69 | 15 | 66 | 12 | 57 | 45 | 3 | -- | -- |
| | CV (%) | 10 | 8 | 14 | -- | -- | 10 | 8 | 14 | -- | -- | 2 | 9 | 2 | 4 | -- | -- | -- |
| | LSD (0.05) | 16 | 8 | 15 | -- | -- | 14 | 11 | 19 | -- | -- | 2 | 2 | 1 | 3 | 10 | -- | -- |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST

Southwest Research-Extension Center, Garden City; Monty Spangler, technician

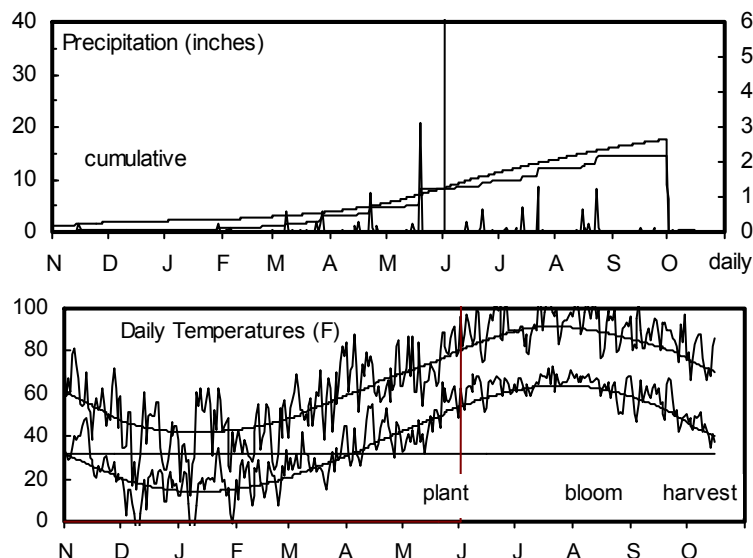
Keith silt loam; Grain Sorghum in 2009

100 - 0 - 0 lb/a N, P, K

Planted on 6/2/2010; Harvested on 10/15/2010

Target stand of 35,000 plants/acre; 6.0 in. spacing

Wet winter into early spring. Hot and dry from mid-June until harvest.



| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 3.0 | 2.8 | 35 | 34 | | |
| April | 1.9 | 1.6 | 54 | 50 | 599 | 472 |
| May | 3.6 | 2.9 | 61 | 61 | 793 | 831 |
| June | 1.2 | 3.0 | 77 | 72 | 1167 | 1115 |
| July | 2.4 | 2.5 | 79 | 78 | 1254 | 1321 |
| August | 2.4 | 2.2 | 79 | 75 | 1217 | 1260 |
| Sept. | 0.2 | 1.6 | 72 | 68 | 1048 | 973 |
| Oct. | 0.1 | 0.5 | 61 | 58 | 384 | 356 |
| Totals: | 14.7 | 17.1 | 55 | 53 | 6,461 | 6,328 |

Table 16. Finney County Fallow Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | |
|----------------|------------|----------------------|-----------|------------|------------|---------|-----|-----|------------|-----------|------------|-----|------|------|------|----|------|------|
| | | ACRE YIELD, BUSHELS | | | | OF TEST | | | Days Grain | | Days Grain | | Test | | Plnt | | Pop. | Hds. |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | AVERAGE | | | to Moist. | to Moist. | lb/bu | Ht. | Ldg | 1000 | per | | | |
| | | 2010 | 2009 | 2008 | 2009 | 2008 | Blm | % | Blm | % | in. | % | ppa | Plnt | | | | |
| DEKALB | DKS28-05 | 102 | 41 | -- | 72 | -- | 92 | 89 | -- | 53 | 11 | 55 | 9 | 60 | 40 | 1 | 19.8 | 1.7 |
| MATURITY CHECK | EARLY | 96 | 25 | 89 | 61 | 70 | 86 | 54 | 114 | 58 | 11 | 55 | 9 | 60 | 40 | 0 | 20.4 | 1.6 |
| DEKALB | DKS29-28 | 95 | 29 | 63 | 62 | 62 | 86 | 61 | 80 | 56 | 12 | 56 | 9 | 60 | 36 | 1 | 19.5 | 1.5 |
| PIONEER | 86G32 | 117 | 39 | 73 | 78 | 76 | 105 | 84 | 93 | 57 | 13 | 56 | 11 | 60 | 42 | 6 | 19.8 | 1.5 |
| ASGROW | PULSAR | 104 | 43 | 77 | 73 | 74 | 93 | 93 | 98 | 59 | 12 | 57 | 10 | 60 | 40 | 0 | 18.0 | 1.8 |
| PIONEER | 86G08 | 109 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 57 | 10 | 61 | 43 | 3 | 19.1 | 1.5 |
| DEKALB | DKS36-06 | 117 | 57 | -- | 87 | -- | 105 | 123 | -- | 59 | 13 | 58 | 11 | 61 | 44 | 1 | 20.3 | 1.4 |
| DEKALB | DKS37-07 | 117 | 50 | 77 | 83 | 81 | 105 | 107 | 98 | 59 | 14 | 58 | 11 | 62 | 43 | 3 | 21.2 | 1.4 |
| MIDLAND | M-4595 | 83 | -- | -- | -- | -- | 74 | -- | -- | -- | -- | 58 | 10 | 59 | 36 | 57 | 18.5 | 1.4 |
| SYNGENTA | H-307 | 90 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | 58 | 9 | 59 | 43 | 16 | 21.5 | 1.4 |
| DEKALB | DKS44-20 | 111 | 59 | 76 | 85 | 82 | 100 | 127 | 96 | 62 | 12 | 61 | 10 | 62 | 42 | 2 | 23.6 | 1.1 |
| DRUSSEL SEED | DSS B6506 | 117 | 57 | 65 | 87 | 80 | 105 | 124 | 83 | 62 | 12 | 61 | 11 | 61 | 45 | 0 | 18.5 | 1.2 |
| MIDLAND | M-4748 | 128 | 51 | -- | 89 | -- | 116 | 110 | -- | 62 | 12 | 61 | 10 | 61 | 45 | 0 | 18.7 | 1.4 |
| SYNGENTA | 5745 | 97 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 61 | 11 | 60 | 42 | 2 | 20.7 | 1.3 |
| SYNGENTA | H-390W | 123 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 61 | 10 | 61 | 42 | 5 | 21.1 | 1.3 |
| TRIUMPH | TR 448 | 102 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 61 | 10 | 62 | 42 | 0 | 21.1 | 1.0 |
| CHANNEL | 6B10 | 124 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 62 | 11 | 62 | 41 | 5 | 17.7 | 1.4 |
| PIONEER | 85Y40 | 124 | 52 | 63 | 88 | 80 | 112 | 112 | 80 | 63 | 13 | 62 | 10 | 62 | 45 | 1 | 19.6 | 1.5 |
| SYNGENTA | 5613 | 113 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | 62 | 11 | 61 | 44 | 0 | 20.1 | 1.2 |
| CHANNEL | 7B11 | 118 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 63 | 10 | 63 | 44 | 0 | 16.9 | 1.5 |
| MIDLAND | M-4665 | 120 | 43 | -- | 82 | -- | 108 | 93 | -- | 64 | 14 | 63 | 10 | 61 | 44 | 6 | 20.0 | 1.5 |
| MIDLAND | M-4772 | 132 | 45 | -- | 88 | -- | 119 | 97 | -- | 63 | 13 | 63 | 11 | 62 | 45 | 0 | 17.6 | 1.5 |
| PIONEER | 85G03 | 106 | 63 | -- | 84 | -- | 96 | 135 | -- | 64 | 14 | 63 | 12 | 61 | 44 | 0 | 19.8 | 1.4 |
| DRUSSEL SEED | DSS B64 | 115 | 55 | 72 | 85 | 81 | 103 | 118 | 91 | 63 | 11 | 64 | 10 | 60 | 44 | 7 | 18.2 | 1.7 |
| MIDLAND | M-4765 | 106 | 38 | -- | 72 | -- | 95 | 83 | -- | 63 | 13 | 64 | 10 | 61 | 42 | 2 | 19.9 | 1.3 |
| SYNGENTA | 5556 | 114 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 65 | 11 | 61 | 42 | 3 | 18.4 | 1.5 |
| MATURITY CHECK | LATE | 127 | 54 | 100 | 90 | 94 | 115 | 115 | 127 | 67 | 12 | 66 | 10 | 60 | 46 | 2 | 18.3 | 1.5 |
| MATURITY CHECK | MEDIUM | 124 | 58 | 79 | 91 | 87 | 111 | 124 | 100 | 65 | 13 | 66 | 12 | 61 | 46 | 0 | 19.1 | 1.7 |
| MIDLAND | M-4790 | 102 | 40 | -- | 71 | -- | 92 | 85 | -- | 67 | 14 | 67 | 12 | 60 | 50 | 0 | 17.0 | 1.6 |
| TRIUMPH | TRX05361 | 102 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 67 | 10 | 60 | 49 | 3 | 15.9 | 1.1 |
| | AVERAGES | 111 | 46 | 79 | 79 | 79 | 111 | 46 | 79 | 61 | 13 | 61 | 10 | 61 | 43 | 4 | 19.4 | 1.4 |
| | CV (%) | 9 | 7 | 11 | -- | -- | 9 | 7 | 11 | -- | -- | 2 | 13 | 1 | 3 | -- | 10 | 8 |
| | LSD (0.05) | 14 | 5 | 12 | -- | -- | 12 | 10 | 15 | -- | -- | 2 | 2 | 1 | 2 | 10 | 3 | 0 |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
 Top LSD group in bold.

Table 17. WEST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2010

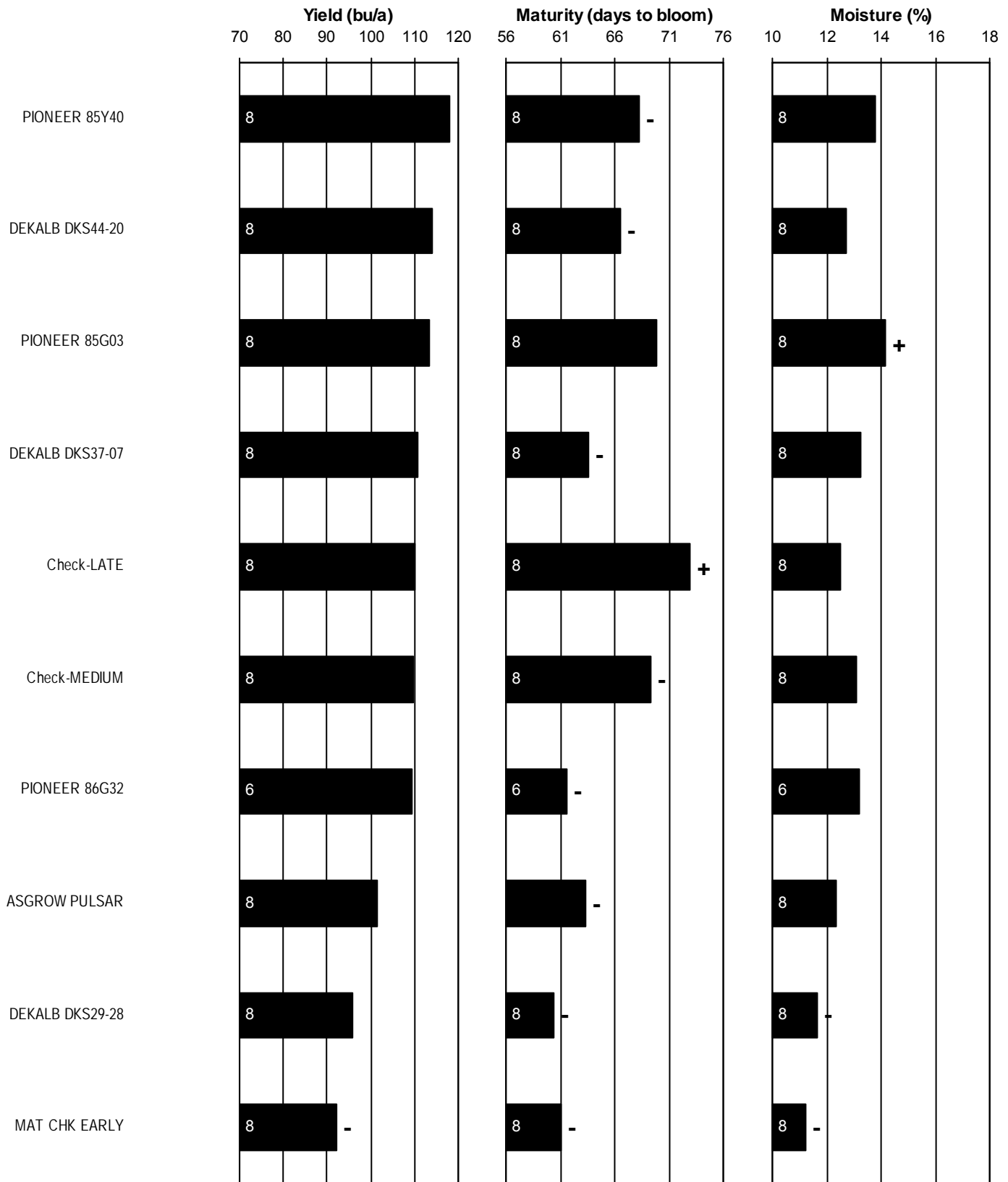
| BRAND/NAME | ELD | THD | GRD | FND | AVG. | BRAND/NAME | ELD | THD | GRD | FND | AVG. |
|---------------------|-----|-----|-----|-----|------|-----------------------|-----|-----|-----|-----|------|
| ASGROW | | | | | | PIONEER | | | | | |
| PULSAR | 87 | 90 | 87 | 93 | 89 | 84G62 | 108 | 114 | -- | -- | -- |
| CHANNEL | | | | | | 84P74 | 119 | 112 | -- | -- | -- |
| 5B90 | -- | -- | 92 | -- | -- | 85G03 | 104 | 108 | 112 | 96 | 105 |
| 6B10 | 114 | 107 | 104 | 111 | 109 | 85Y40 | 125 | 112 | 95 | 112 | 111 |
| 7B11 | 106 | 95 | -- | 106 | -- | 86G08 | -- | -- | 112 | 98 | -- |
| DEKALB | | | | | | 86G32 | -- | -- | 102 | 105 | -- |
| DKS28-05 | 89 | 95 | 80 | 92 | 89 | PRODUCERS | | | | | |
| DKS29-28 | 86 | 95 | 84 | 86 | 88 | PH246W | 95 | 81 | 89 | -- | -- |
| DKS36-06 | 97 | 104 | 113 | 105 | 105 | PH256 | 94 | 97 | 112 | -- | -- |
| DKS37-07 | 84 | 105 | 110 | 105 | 101 | PH266 | 102 | 101 | 99 | -- | -- |
| DKS44-20 | 113 | 96 | 108 | 100 | 104 | SYNGENTA | | | | | |
| DRUSSEL SEED | | | | | | 5464 | 94 | -- | -- | -- | -- |
| DSS B64 | -- | -- | 115 | 103 | -- | 5556 | 97 | -- | -- | 102 | -- |
| DSS B6506 | -- | -- | 112 | 105 | -- | 5613 | -- | -- | -- | 101 | -- |
| DYNA-GRO | | | | | | 5745 | -- | -- | 100 | 88 | -- |
| 742C | 94 | -- | -- | -- | -- | 5875 | -- | -- | 79 | -- | -- |
| 751B | 95 | -- | -- | -- | -- | H-307 | 99 | -- | 114 | 81 | -- |
| 764B | 108 | -- | -- | -- | -- | H-390W | 98 | -- | 101 | 110 | -- |
| 766B | 90 | -- | -- | -- | -- | TRIUMPH | | | | | |
| 772B | 101 | -- | -- | -- | -- | TR 452 | 94 | -- | -- | -- | -- |
| 778B | 98 | -- | -- | -- | -- | TR 458 | 102 | -- | -- | -- | -- |
| MIDLAND | | | | | | TR 424 | -- | -- | 65 | -- | -- |
| M-4595 | -- | -- | -- | 74 | -- | TR 448 | 91 | -- | 110 | 92 | -- |
| M-4665 | -- | -- | -- | 108 | -- | TRX05361 | 117 | -- | -- | 92 | -- |
| M-4748 | -- | -- | -- | 116 | -- | TRX85002 | 94 | -- | -- | -- | -- |
| M-4765 | -- | -- | -- | 95 | -- | MATURITY CHECK | | | | | |
| M-4772 | -- | -- | -- | 119 | -- | EARLY | 84 | 89 | 83 | 86 | 86 |
| M-4790 | -- | -- | -- | 92 | -- | LATE | 118 | 99 | 111 | 115 | 111 |
| OHLDE | | | | | | MEDIUM | 105 | 107 | 107 | 111 | 108 |
| O-525 | 102 | -- | -- | -- | -- | AVERAGES (bu/a) | 106 | 150 | 110 | 111 | 119 |
| O-530 | 97 | -- | -- | -- | -- | CV (%) | 11 | 9 | 10 | 9 | -- |
| O-567 | 109 | -- | -- | -- | -- | LSD (0.05) | 15 | 13 | 14 | 12 | -- |
| O-587 | 101 | -- | -- | -- | -- | | | | | | |
| PHILLIPS | | | | | | | | | | | |
| 595 | 89 | 92 | -- | -- | -- | | | | | | |
| 672 | 100 | 99 | -- | -- | -- | | | | | | |

ELD = Ellis Co., Hays

THD = Thomas Co., Colby

GRD = Greeley Co., Tribune

FND = Finney Co., Garden City



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 7. WEST Kansas sorghum hybrid standardized performance summary, 2008-2010

SOUTH CENTRAL KANSAS NO-TILL IRRIGATED GRAIN SORGHUM TEST

South Central Kansas Experiment Field, Hutchinson; William Heer, agronomist; Richard Seck, cooperater

Ost loam; Soybean in 2009

170 - 0 - 0 lb/a N, P, K

Planted on 5/6/2010; Harvested on 10/6/2010

Target stand of 90,000 plants/acre; 2.3 in. spacing

Wet soils after planting affected emergence and stands; very hot and dry during the summer until harvest.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 0.5 | 4.4 | 36 | 37 | | |
| April | 1.6 | 2.6 | 58 | 55 | 703 | 617 |
| May | 4.8 | 3.8 | 64 | 65 | 894 | 927 |
| June | 7.8 | 4.3 | 79 | 75 | 1246 | 1196 |
| July | 6.1 | 3.5 | 81 | 81 | 1319 | 1416 |
| August | 3.9 | 3.1 | 80 | 79 | 1284 | 1361 |
| Sept. | 1.3 | 3.3 | 72 | 70 | 1063 | 1053 |
| Oct. | 0.3 | 1.1 | 60 | 62 | 376 | 407 |
| Totals: | 26.4 | 26.1 | 56 | 56 | 6,885 | 6,977 |

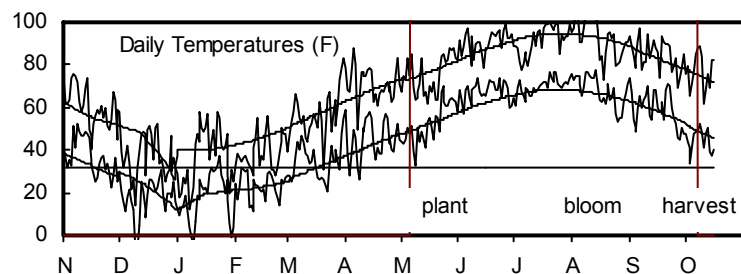
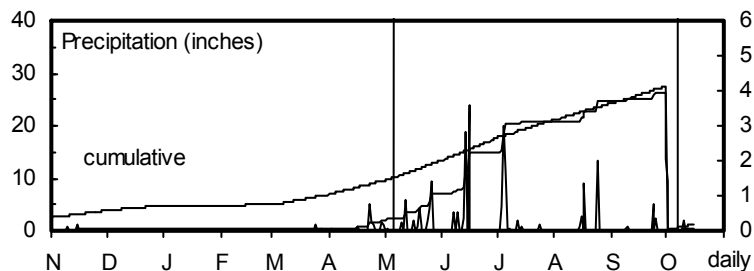


Table 18. Reno County No-Till Irrigated Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | | | |
|----------------|------------|----------------------|------------|------------|------------|------------|---------|------|------|------------|----|------------|----|-------|---------|-------|----------|----------|--|------|
| | | ACRE YIELD, BUSHEL | | | | | OF TEST | | | Days Grain | | Days Grain | | Test | | Plnt | | Pop. | | Hds. |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | % | lb/bu | Ht. in. | Ldg % | 1000 ppa | per Pint | | |
| | | | | | | | AVERAGE | | | | | | | | | | | | | |
| MIDLAND | M-4748 | 52 | 116 | 99 | 84 | 89 | 123 | 91 | 89 | 67 | 15 | 61 | 14 | 57 | 61 | -- | -- | -- | | |
| MATURITY CHECK | EARLY | 37 | 89 | 80 | 63 | 69 | 88 | 70 | 72 | 69 | 15 | 69 | 13 | 57 | 54 | -- | -- | -- | | |
| MIDLAND | M-4595 | 66 | -- | -- | -- | -- | 156 | -- | -- | -- | -- | 72 | 14 | 56 | 47 | -- | -- | -- | | |
| DYNA-GRO | 742C | 46 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 73 | 17 | 54 | 51 | -- | -- | -- | | |
| DEKALB | DKS44-20 | 54 | 120 | 119 | 87 | 98 | 128 | 94 | 107 | 70 | 16 | 74 | 14 | 58 | 63 | -- | -- | -- | | |
| DYNA-GRO | 766B | 56 | -- | -- | -- | -- | 134 | -- | -- | -- | -- | 74 | 14 | 58 | 61 | -- | -- | -- | | |
| MIDLAND | M-4665 | 44 | 111 | -- | 78 | -- | 103 | 87 | -- | 75 | 15 | 74 | 14 | 57 | 59 | -- | -- | -- | | |
| SYNGENTA | 5745 | 46 | -- | -- | -- | -- | 108 | -- | -- | -- | -- | 74 | 23 | 53 | 55 | -- | -- | -- | | |
| MIDLAND | M-4765 | 59 | 121 | -- | 90 | -- | 141 | 94 | -- | 75 | 15 | 75 | 14 | 58 | 56 | -- | -- | -- | | |
| SYNGENTA | 5613 | 33 | -- | -- | -- | -- | 78 | -- | -- | -- | -- | 75 | 16 | 56 | 62 | -- | -- | -- | | |
| CHANNEL | 6B10 | 46 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | 76 | 13 | 59 | 54 | -- | -- | -- | | |
| DEKALB | DKS53-67 | 47 | 146 | 125 | 97 | 106 | 111 | 114 | 112 | 75 | 15 | 76 | 13 | 59 | 61 | -- | -- | -- | | |
| MATURITY CHECK | MEDIUM | 35 | 98 | 91 | 66 | 75 | 84 | 76 | 81 | 73 | 18 | 76 | 19 | 57 | 62 | -- | -- | -- | | |
| MIDLAND | M-4772 | 51 | 126 | 118 | 89 | 98 | 120 | 99 | 106 | 74 | 15 | 76 | 14 | 58 | 64 | -- | -- | -- | | |
| DEKALB | DKS49-45 | 33 | -- | -- | -- | -- | 79 | -- | -- | -- | -- | 77 | 16 | 57 | 65 | -- | -- | -- | | |
| DYNA-GRO | 764B | 49 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | 77 | 13 | 58 | 55 | -- | -- | -- | | |
| DEKALB | DKS54-00 | 36 | 146 | 132 | 91 | 105 | 86 | 114 | 119 | 78 | 16 | 78 | 15 | 56 | 66 | -- | -- | -- | | |
| DEKALB | DKS54-03 | 39 | 156 | 143 | 97 | 113 | 92 | 122 | 129 | 78 | 15 | 78 | 13 | 58 | 64 | -- | -- | -- | | |
| DYNA-GRO | 751B | 54 | 133 | 118 | 93 | 102 | 129 | 104 | 106 | 77 | 15 | 78 | 14 | 59 | 57 | -- | -- | -- | | |
| DYNA-GRO | 772B | 55 | 125 | 132 | 90 | 104 | 132 | 98 | 118 | 76 | 15 | 78 | 12 | 59 | 64 | -- | -- | -- | | |
| SYNGENTA | H-486 | 46 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | 78 | 14 | 58 | 61 | -- | -- | -- | | |
| CHANNEL | 7B11 | 61 | -- | -- | -- | -- | 144 | -- | -- | -- | -- | 80 | 13 | 59 | 65 | -- | -- | -- | | |
| MATURITY CHECK | LATE | 50 | 144 | 126 | 97 | 107 | 119 | 113 | 113 | 78 | 16 | 80 | 15 | 56 | 64 | -- | -- | -- | | |
| TRIUMPH | TRX95005 | 49 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | 80 | 17 | 55 | 60 | -- | -- | -- | | |
| DYNA-GRO | 778B | 12 | 153 | 120 | 82 | 95 | 29 | 120 | 108 | 81 | 18 | 82 | 20 | 51 | 73 | -- | -- | -- | | |
| MIDLAND | M-4790 | 6 | 129 | -- | 67 | -- | 15 | 101 | -- | 81 | 22 | 83 | 28 | 44 | 67 | -- | -- | -- | | |
| TRIUMPH | TR 481 | 8 | 111 | 110 | 60 | 76 | 20 | 87 | 98 | 83 | 17 | 85 | 17 | 55 | 70 | -- | -- | -- | | |
| TRIUMPH | TRX85002 | 8 | -- | -- | -- | -- | 20 | -- | -- | -- | -- | 85 | 20 | 51 | 68 | -- | -- | -- | | |
| | AVERAGES | 42 | 128 | 111 | 85 | 94 | 42 | 128 | 111 | 76 | 16 | 77 | 16 | 56 | 61 | -- | -- | -- | | |
| | CV (%) | 15 | 8 | 8 | -- | -- | 15 | 8 | 8 | -- | -- | 3 | -- | 5 | 2 | -- | -- | -- | | |
| | LSD (0.05) | 9 | 15 | 13 | -- | -- | 21 | 12 | 11 | -- | -- | 3 | 6 | 4 | 2 | -- | -- | -- | | |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Keith silt loam; Sunflower in 2009

200 - 50 - 0 lb/a N, P, K

Planted on 6/2/2010; Harvested on 10/14/2010

Target stand of 90,000 plants/acre; 2.3 in. spacing

Very good growing conditions the entire season.

| Month | Precipitation | | Average Temp. | | GDU | |
|-----------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.-Mar. | 2.2 | 2.4 | 33 | 32 | | |
| April | 2.3 | 1.4 | 52 | 49 | 523 | 421 |
| May | 2.3 | 2.9 | 58 | 59 | 697 | 762 |
| June | 2.5 | 3.4 | 74 | 70 | 1105 | 1054 |
| July | 3.8 | 3.1 | 77 | 76 | 1234 | 1285 |
| August | 1.4 | 2.1 | 74 | 74 | 1149 | 1216 |
| Sept. | 0.6 | 1.6 | 67 | 66 | 926 | 910 |
| Oct. | 0.2 | 0.2 | 58 | 56 | 344 | 324 |
| Totals: | 15.2 | 17.2 | 52 | 51 | 5,979 | 5,972 |

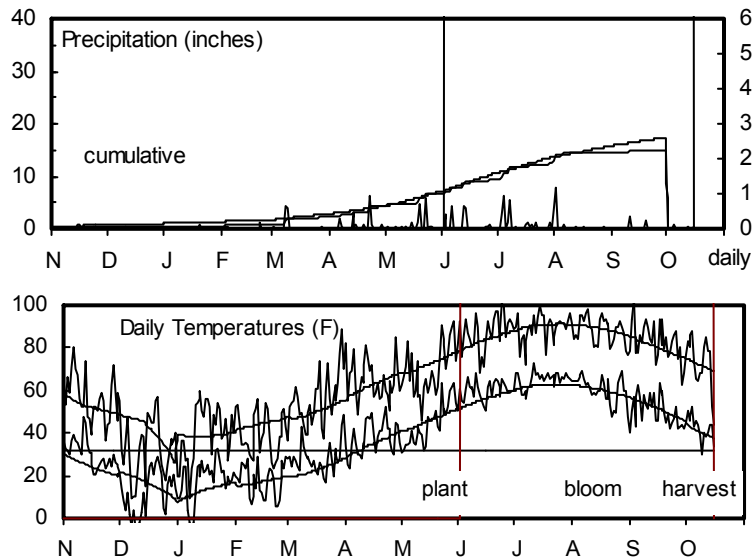


Table 19. Thomas County Irrigated Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | ACRE YIELD, BUSHELS | | YIELD AS % | | | 2009-2010 | | | | | | | | | | | | | |
|----------------|----------|---------------------|------------|------------|------|------|------------|------|------------|-----|------|-----|------|-------|------|------|------|------|-----|--|
| | | 2-Yr. 3-Yr. | | OF TEST | | | Days Grain | | Days Grain | | Test | | Plnt | | Pop. | | Hds. | | | |
| | | 2010 | 2009 | 2008 | AVG. | AVG. | 2010 | 2009 | 2008 | Blm | % | Blm | % | lb/bu | in. | % | Ldg | 1000 | per | |
| SYNGENTA | 5875 | 117 | -- | -- | -- | 63 | -- | -- | -- | -- | 52 | 10 | 57 | 38 | 0 | 65.4 | 1.1 | | | |
| MATURITY CHECK | EARLY | 148 | 152 | 175 | 150 | 158 | 81 | 86 | 105 | 59 | 12 | 53 | 11 | 58 | 52 | 0 | 58.8 | 1.3 | | |
| PIONEER | 86G08 | 196 | -- | -- | -- | 107 | -- | -- | -- | -- | 56 | 13 | 60 | 52 | 0 | 75.5 | 1.1 | | | |
| PIONEER | 86G32 | 180 | -- | -- | -- | 98 | -- | -- | -- | -- | 56 | 12 | 60 | 50 | 0 | 84.1 | 1.1 | | | |
| PHILLIPS | 595 | 160 | -- | -- | -- | 87 | -- | -- | -- | -- | 58 | 13 | 59 | 43 | 0 | 67.7 | 1.1 | | | |
| SYNGENTA | H-307 | 177 | -- | -- | -- | 96 | -- | -- | -- | -- | 58 | 13 | 59 | 52 | 0 | 78.2 | 1.1 | | | |
| PHILLIPS | 672 | 185 | -- | -- | -- | 101 | -- | -- | -- | -- | 59 | 13 | 61 | 55 | 0 | 81.7 | 1.0 | | | |
| CHANNEL | 6B10 | 181 | 195 | -- | 188 | -- | 98 | 110 | -- | 64 | 16 | 60 | 16 | 60 | 49 | 0 | 73.1 | 1.0 | | |
| DEKALB | DKS44-20 | 197 | 176 | 149 | 186 | 174 | 107 | 100 | 90 | 65 | 15 | 60 | 15 | 61 | 54 | 0 | 67.1 | 1.1 | | |
| PIONEER | 84P74 | 190 | 189 | -- | 190 | -- | 103 | 107 | -- | 65 | 17 | 61 | 16 | 61 | 54 | 0 | 69.4 | 1.0 | | |
| SYNGENTA | 5745 | 168 | -- | -- | -- | 91 | -- | -- | -- | -- | 61 | 15 | 58 | 53 | 0 | 71.7 | 1.1 | | | |
| PIONEER | 85Y40 | 195 | 177 | 176 | 186 | 183 | 106 | 100 | 106 | 66 | 16 | 62 | 15 | 62 | 52 | 0 | 73.9 | 1.0 | | |
| CHANNEL | 7B11 | 185 | 151 | -- | 168 | -- | 100 | 85 | -- | 66 | 17 | 63 | 14 | 63 | 57 | 0 | 65.9 | 1.1 | | |
| SYNGENTA | H-390W | 182 | -- | -- | -- | 99 | -- | -- | -- | -- | 63 | 14 | 59 | 48 | 0 | 71.1 | 1.0 | | | |
| DEKALB | DKS49-45 | 190 | -- | -- | -- | 103 | -- | -- | -- | -- | 64 | 15 | 61 | 56 | 0 | 73.4 | 1.1 | | | |
| MATURITY CHECK | MEDIUM | 200 | 176 | 172 | 188 | 183 | 109 | 100 | 103 | 67 | 15 | 64 | 16 | 61 | 55 | 0 | 67.8 | 1.2 | | |
| PHILLIPS | 775 | 188 | -- | -- | -- | 102 | -- | -- | -- | -- | 64 | 15 | 60 | 55 | 0 | 63.9 | 1.1 | | | |
| DEKALB | DKS54-00 | 199 | 182 | 208 | 191 | 196 | 108 | 103 | 125 | 68 | 15 | 65 | 15 | 60 | 56 | 0 | 72.1 | 1.1 | | |
| DEKALB | DKS54-03 | 193 | 181 | 197 | 187 | 190 | 105 | 103 | 119 | 69 | 15 | 65 | 16 | 57 | 56 | 0 | 61.7 | 0.9 | | |
| MATURITY CHECK | LATE | 187 | 178 | 177 | 183 | 181 | 101 | 101 | 107 | 69 | 15 | 65 | 15 | 60 | 57 | 0 | 64.3 | 1.1 | | |
| PIONEER | 85G03 | 194 | -- | -- | -- | 106 | -- | -- | -- | -- | 65 | 17 | 60 | 55 | 0 | 64.0 | 1.1 | | | |
| DEKALB | DKS53-67 | 207 | 187 | 187 | 197 | 194 | 112 | 106 | 112 | 69 | 16 | 66 | 17 | 62 | 54 | 0 | 76.0 | 1.1 | | |
| PIONEER | 84G62 | 211 | 192 | 157 | 202 | 187 | 115 | 109 | 95 | 69 | 16 | 66 | 16 | 60 | 53 | 0 | 67.8 | 1.2 | | |
| AVERAGES | | 184 | 177 | 166 | 180 | 176 | 184 | 177 | 166 | 66 | 15 | 61 | 14 | 60 | 52 | 0 | 70.2 | 1.1 | | |
| CV (%) | | 7 | 7 | 11 | -- | -- | 7 | 7 | 11 | -- | -- | 2 | 11 | 2 | 3 | -- | -- | -- | | |
| LSD (0.05) | | 17 | 17 | 25 | -- | -- | 9 | 10 | 15 | -- | -- | 1 | 2 | 1 | 2 | 0 | 20 | 0 | | |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
 Top LSD group in bold.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST

Southwest Research-Extension Center, Garden City; Monty Spangler, technician

Keith silt loam; Grain Sorghum in 2009

200 - 50 - 0 lb/a N, P, K

Planted on 6/2/2010; Harvested on 10/15/2010

Target stand of 70,000 plants/acre; 3.0 in. spacing

Wet winter into early spring. Hot and dry from the middle of June until harvest.

| Month | Precipitation | | Average Temp. | | GDU | |
|------------|---------------|-------|---------------|-------|-------|-------|
| | 2010 | Norm. | 2010 | Norm. | 2010 | Norm. |
| Nov.- Mar. | 3.0 | 2.8 | 35 | 34 | | |
| April | 1.9 | 1.6 | 54 | 50 | 599 | 472 |
| May | 3.6 | 2.9 | 61 | 61 | 793 | 831 |
| June | 1.2 | 3.0 | 77 | 72 | 1167 | 1115 |
| July | 2.4 | 2.5 | 79 | 78 | 1254 | 1321 |
| August | 2.4 | 2.2 | 79 | 75 | 1217 | 1260 |
| Sept. | 0.2 | 1.6 | 72 | 68 | 1048 | 973 |
| Oct. | 0.1 | 0.5 | 61 | 58 | 384 | 356 |
| Totals: | 14.7 | 17.1 | 55 | 53 | 6,461 | 6,328 |

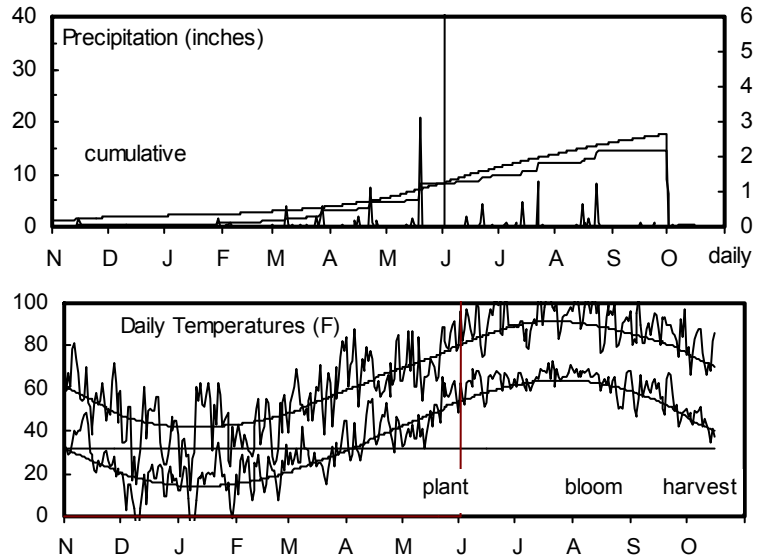


Table 20. Finney County Irrigated Grain Sorghum Performance Test, 2008-2010

| BRAND | NAME | YIELD AS % 2009-2010 | | | | | | | | | | | | | | | | | | |
|----------------|------------|----------------------|------------|------------|------------|------------|---------|------|------|------------|-------------|------|-------|-----|-------------|-------|---------|-------|----------|----------|
| | | ACRE YIELD, BUSHELS | | | | | OF TEST | | | Days Grain | | | Test | | | Plnt | | Pop. | | Hds. |
| | | 2010 | 2009 | 2008 | 2-Yr. AVG. | 3-Yr. AVG. | 2010 | 2009 | 2008 | Blm | to Moist. % | Days | Grain | Blm | to Moist. % | lb/bu | Ht. in. | Ldg % | 1000 ppa | per Plnt |
| MATURITY CHECK | EARLY | 115 | 96 | 137 | 106 | 116 | 82 | 71 | 112 | 55 | 12 | 51 | 11 | 58 | 47 | 0 | 49.7 | 1.8 | | |
| MIDLAND | M-4595 | 113 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | 56 | 11 | 59 | 42 | 0 | 44.0 | 1.8 | | |
| MIDLAND | M-4748 | 139 | 117 | 111 | 128 | 122 | 99 | 87 | 91 | 59 | 13 | 56 | 13 | 60 | 51 | 2 | 45.1 | 1.7 | | |
| DEKALB | DKS44-20 | 133 | 129 | 129 | 131 | 130 | 95 | 96 | 105 | 60 | 13 | 57 | 13 | 62 | 52 | 0 | 47.5 | 1.7 | | |
| MIDLAND | M-4665 | 135 | 126 | -- | 130 | -- | 96 | 94 | -- | 60 | 12 | 57 | 12 | 60 | 49 | 0 | 48.4 | 1.6 | | |
| PIONEER | 84P74 | 154 | 141 | -- | 148 | -- | 110 | 105 | -- | 60 | 16 | 57 | 15 | 61 | 53 | 0 | 45.0 | 1.5 | | |
| SYNGENTA | 5745 | 117 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 57 | 11 | 59 | 48 | 0 | 56.7 | 1.5 | | |
| SYNGENTA | H-390W | 139 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 57 | 12 | 60 | 48 | 0 | 50.7 | 1.7 | | |
| MIDLAND | M-4765 | 132 | 120 | -- | 126 | -- | 94 | 89 | -- | 60 | 13 | 58 | 13 | 61 | 49 | 0 | 53.1 | 1.5 | | |
| PIONEER | 85Y40 | 149 | 142 | 92 | 146 | 128 | 106 | 106 | 75 | 60 | 14 | 58 | 13 | 62 | 52 | 0 | 39.4 | 1.8 | | |
| DEKALB | DKS49-45 | 156 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 59 | 13 | 60 | 56 | 0 | 47.4 | 1.9 | | |
| DEKALB | DKS54-03 | 148 | 149 | 130 | 148 | 142 | 105 | 111 | 106 | 62 | 13 | 59 | 13 | 59 | 56 | 1 | 51.9 | 1.6 | | |
| MATURITY CHECK | MEDIUM | 157 | 126 | 113 | 141 | 132 | 112 | 93 | 93 | 61 | 12 | 59 | 14 | 60 | 54 | 0 | 53.9 | 1.7 | | |
| MIDLAND | M-4772 | 148 | 127 | 136 | 137 | 137 | 105 | 94 | 111 | 61 | 14 | 59 | 14 | 60 | 54 | 0 | 48.8 | 1.6 | | |
| PIONEER | 84G62 | 168 | 147 | 112 | 157 | 142 | 119 | 109 | 92 | 62 | 13 | 59 | 13 | 62 | 53 | 1 | 48.6 | 1.5 | | |
| TRIUMPH | TRX84732 | 106 | -- | -- | -- | -- | 76 | -- | -- | -- | -- | 59 | 11 | 60 | 48 | 1 | 33.2 | 2.0 | | |
| SYNGENTA | 5556 | 132 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 60 | 10 | 60 | 48 | 0 | 48.5 | 1.6 | | |
| TRIUMPH | TRX05361 | 154 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 60 | 12 | 58 | 59 | 0 | 37.3 | 1.6 | | |
| TRIUMPH | TRX95005 | 159 | -- | -- | -- | -- | 113 | -- | -- | -- | -- | 60 | 13 | 61 | 52 | 0 | 44.9 | 1.7 | | |
| DEKALB | DKS53-67 | 160 | 152 | 148 | 156 | 153 | 114 | 113 | 121 | 63 | 15 | 61 | 15 | 61 | 54 | 1 | 45.6 | 1.7 | | |
| DEKALB | DKS54-00 | 144 | 137 | 139 | 140 | 140 | 103 | 102 | 114 | 62 | 12 | 61 | 13 | 59 | 54 | 1 | 47.6 | 1.6 | | |
| MATURITY CHECK | LATE | 158 | 150 | 125 | 154 | 144 | 112 | 112 | 103 | 63 | 13 | 62 | 13 | 59 | 54 | 0 | 48.5 | 1.5 | | |
| MIDLAND | M-4790 | 121 | 136 | -- | 129 | -- | 86 | 101 | -- | 65 | 14 | 63 | 14 | 61 | 60 | 0 | 39.9 | 1.7 | | |
| TRIUMPH | TRX85001 | 130 | 140 | -- | 135 | -- | 92 | 104 | -- | 70 | 16 | 71 | 17 | 58 | 58 | 0 | 38.9 | 1.8 | | |
| | AVERAGES | 140 | 134 | 122 | 137 | 132 | 140 | 134 | 122 | 61 | 13 | 59 | 13 | 60 | 52 | 0 | 46.5 | 1.7 | | |
| | CV (%) | 8 | 5 | 11 | -- | -- | 8 | 5 | 11 | -- | -- | 2 | 7 | 1 | 1 | -- | 15 | 14 | | |
| | LSD (0.05) | 15 | 10 | 19 | -- | -- | 11 | 8 | 16 | -- | -- | 2 | 1 | 1 | 1 | 1 | 10 | 0 | | |

Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.
Top LSD group in bold.

Table 21. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2010

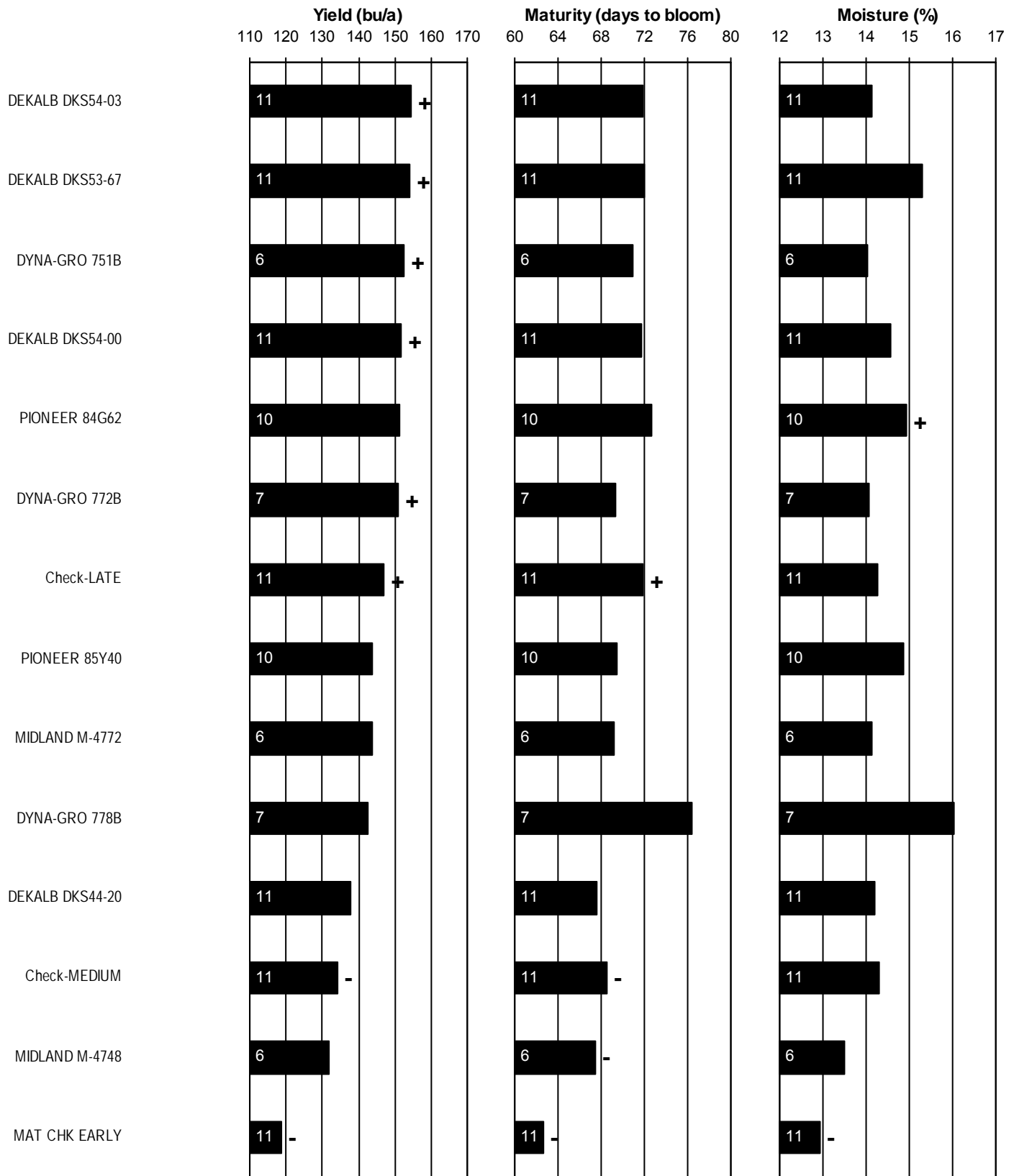
| BRAND/NAME | RNI | THI | GRI | FNI | AVG. | BRAND/NAME | RNI | THI | GRI | FNI | AVG. |
|-----------------|-----|-----|-----|-----|------|-----------------------|-----|-----|-----|-----|------|
| CHANNEL | | | | | | SYNGENTA | | | | | |
| 6B10 | 109 | 98 | -- | -- | -- | 5556 | -- | -- | -- | 94 | -- |
| 7B11 | 144 | 100 | -- | -- | -- | 5613 | 78 | -- | -- | -- | -- |
| DEKALB | | | | | | 5745 | 108 | 91 | -- | 84 | 94 |
| DKS44-20 | 128 | 107 | -- | 95 | 110 | 5875 | -- | 63 | -- | -- | -- |
| DKS49-45 | 79 | 103 | -- | 111 | 98 | H-307 | -- | 96 | -- | -- | -- |
| DKS53-67 | 111 | 112 | -- | 114 | 112 | H-390W | -- | 99 | -- | 99 | -- |
| DKS54-00 | 86 | 108 | -- | 103 | 99 | H-486 | 109 | -- | -- | -- | -- |
| DKS54-03 | 92 | 105 | -- | 105 | 101 | TRIUMPH | | | | | |
| DYNA-GRO | | | | | | TR 481 | 20 | -- | -- | -- | -- |
| 742C | 110 | -- | -- | -- | -- | TRX05361 | -- | -- | -- | 110 | -- |
| 751B | 129 | -- | -- | -- | -- | TRX84732 | -- | -- | -- | 76 | -- |
| 764B | 117 | -- | -- | -- | -- | TRX85001 | -- | -- | -- | 92 | -- |
| 766B | 134 | -- | -- | -- | -- | TRX85002 | 20 | -- | -- | -- | -- |
| 772B | 132 | -- | -- | -- | -- | TRX95005 | 117 | -- | -- | 113 | -- |
| 778B | 29 | -- | -- | -- | -- | MATURITY CHECK | | | | | |
| MIDLAND | | | | | | EARLY | 88 | 81 | -- | 82 | 83 |
| M-4595 | 156 | -- | -- | 81 | -- | LATE | 119 | 101 | -- | 112 | 111 |
| M-4665 | 103 | -- | -- | 96 | -- | MEDIUM | 84 | 109 | -- | 112 | 101 |
| M-4748 | 123 | -- | -- | 99 | -- | AVERAGES (bu/a) | 42 | 184 | -- | 140 | 122 |
| M-4765 | 141 | -- | -- | 94 | -- | CV (%) | 15 | 7 | -- | 8 | -- |
| M-4772 | 120 | -- | -- | 105 | -- | LSD (0.05) | 21 | 9 | -- | 11 | -- |
| M-4790 | 15 | -- | -- | 86 | -- | | | | | | |
| PHILLIPS | | | | | | | | | | | |
| 595 | -- | 87 | -- | -- | -- | | | | | | |
| 672 | -- | 101 | -- | -- | -- | | | | | | |
| 775 | -- | 102 | -- | -- | -- | | | | | | |
| PIONEER | | | | | | | | | | | |
| 84G62 | -- | 115 | -- | 119 | -- | | | | | | |
| 84P74 | -- | 103 | -- | 110 | -- | | | | | | |
| 85G03 | -- | 106 | -- | -- | -- | | | | | | |
| 85Y40 | -- | 106 | -- | 106 | -- | | | | | | |
| 86G08 | -- | 107 | -- | -- | -- | | | | | | |
| 86G32 | -- | 98 | -- | -- | -- | | | | | | |

RNI=Reno Co., Hutchinson

THI=Thomas Co., Colby

FNI=Finney Co., Garden City

GRI=Greeley Co., Tribune; abandoned, hail damage.



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 8. Kansas IRRIGATED sorghum hybrid standardized performance summary, 2008-2010

Table 22. Entries in the 2010 Kansas Grain Sorghum Performance Tests

| BRAND | GC | EC | PC | Mat. | Days | GB | BRAND | GC | EC | PC | Mat. | Days | GB |
|---------------------|----|----|----|------|------|------|-----------------------|----|----|----|------|------|------|
| ASGROW | | | | | | | PHILLIPS | | | | | | |
| PULSAR | B | HY | P | E | 68 | CEI | 672 | B | B | P | M | 64 | EI |
| CHANNEL | | | | | | | 595 | C | W | T | M | 65 | E, I |
| 5B90 | B | HY | P | E | 61 | E | 670 | C | B | T | M | 65 | E, I |
| 6B10 | B | HY | P | ME | 62 | - | 775 | B | B | P | M | 67 | EI |
| 7B11 | B | HY | P | M | 68 | - | PIONEER | | | | | | |
| DEKALB | | | | | | | 84P74 | - | - | - | - | - | - |
| DKS28-05 | B | HY | P | E | 58 | - | 86G08 | R | W | P | - | 65 | - |
| DKS29-28 | B | HY | P | E | 58 | CE | 86G32 | R | W | P | E | 65 | - |
| DKS36-06 | B | HY | P | E | 63 | - | 85G03 | R | W | P | M | 69 | - |
| DKS37-07 | B | HY | P | E | 67 | CEI | 85Y40 | W | Y | P | M | 70 | - |
| DKS44-20 | B | HY | P | M | 67 | - | 84G62 | B | Y | P | L | 72 | E |
| DKS49-45 | B | HY | P | M | 70 | E,I | PRODUCERS | | | | | | |
| DKS53-67 | B | HY | P | L | 71 | CEI | PH246W | W | - | P | E | 58 | C, E |
| DKS54-03 | B | HY | P | L | 74 | - | PH256 | R | - | P | M | 62 | C, E |
| DKS54-00 | B | HY | P | L | 75 | CEI | PH266 | C | - | P | M | 63 | C, D |
| DRUSSEL SEED | | | | | | | PH276 | R | - | P | ML | 70 | C,E |
| DSS B64 | B | W | P | ME | 64 | C | SYNGENTA | | | | | | |
| DSS B6506 | B | W | P | ME | 65 | CDE | 5464 | - | - | - | - | - | - |
| DYNA-GRO | | | | | | | 5556 | - | - | - | - | - | - |
| GX08365 | - | - | - | - | - | - | 5613 | - | - | - | - | - | - |
| 742C | C | HY | P | ME | 63 | C | 5745 | - | - | - | - | - | - |
| 764B | B | HY | T | ME | 64 | CDE | 5875 | - | - | - | - | - | - |
| 766B | B | HY | T | ME | 65 | CDE | H-307 | - | - | - | - | - | - |
| 772B | B | HY | T | M | 68 | CE | H-390W | - | - | - | - | - | - |
| 751B | B | W | T | ML | 69 | CE | H-486 | - | - | - | - | - | - |
| 778B | B | HY | T | ML | 74 | CE | TRIUMPH | | | | | | |
| MIDLAND | | | | | | | TR 458 | - | - | - | - | - | - |
| M-4595 | - | - | - | - | - | - | TR 424 | - | - | - | - | - | - |
| M-4665 | B | W | P | M | 63 | C | TR 448 | - | - | - | - | - | - |
| M-4748 | B | - | P | M | 65 | CDE | TRX05361 | - | - | - | - | - | - |
| M-4765 | R | - | - | M | 66 | C | TRX84732 | - | - | - | - | - | - |
| M-4772 | B | - | P | M | 68 | CE | TRX85001 | - | - | - | - | - | - |
| M-4790 | R | - | - | L | 75 | C, E | TRX85002 | - | - | - | - | - | - |
| OHLDE | | | | | | | TRX95005 | - | - | - | - | - | - |
| O-525 | B | W | P | E | 64 | - | TR 438 | B | W | P | E | 60 | CE |
| O-530 | C | Y | P | ME | 67 | CE | TR 452 | R | W | P | ME | 60 | CE |
| O-567 | B | W | P | M | 70 | CEIK | TR 463 | R | W | P | M | 62 | CE |
| O-575 | R | W | P | M | 70 | - | TR 481 | R | W | P | ML | 72 | CE |
| O-587 | R | W | P | ML | 72 | - | MATURITY CHECK | | | | | | |
| | | | | | | | EARLY | R | W | P | E | 65 | E |
| | | | | | | | MEDIUM | W | W | P | M | 69 | - |
| | | | | | | | LATE | B | W | P | L | 73 | - |

Information provided by entrants:
 GC = grain color: bronze, cream, red, yellow, white
 EC = endosperm color: white, yellow, hetero-yellow
 PC = plant color: purple, tan
 Mat. = relative maturity: early, medium, late
 Days = days to half bloom
 G-bug = resistance to specific greenbug biotypes: C, E, I, K, etc.

To access crop performance testing information electronically, visit our website. The information contained in this publication, plus more, is available for viewing or downloading at:

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Contributors

Main Station, Manhattan

Jane Lingenfelter, Assistant Agronomist (Senior Author)
Doug Jardine, Extension Plant Pathologist
Jeff Whitworth, Extension Entomologist
Mary Knapp, KSU State Climatologist
Scott Staggenborg, Agronomy
Edward O. Quigley, Agricultural Technician

Research Centers

Wayne Aschwege, Hays
Patrick Evans, Colby
Lucas Haag, Tribune
Kelly Kusel, Parsons
Alan Schlegel, Tribune
Monty Spangler, Garden City

Experiment Fields

William Heer, Hutchinson
James Kimball, Ottawa
Michael Larson, Scandia
Larry Maddux, Topeka
Doug Stensaas, Scandia

Cooperators

Scott Chapman, Beloit
Gene Eidman, Emporia
Richard Seek, Hutchinson
Clayton Short, Assaria

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