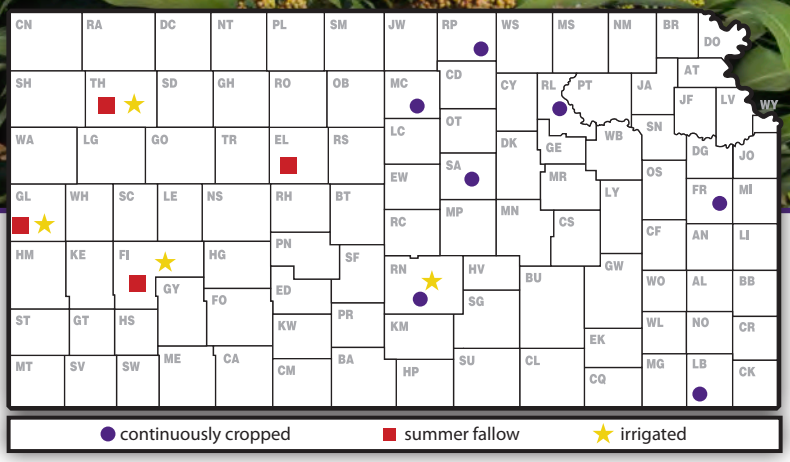
# 2014 Kansas Performance Tests with

# Grain Sorghum Hybrids




## *Report of Progress 1113*

K-STATE
Research and Extension

**Kansas State University Agricultural Experiment Station and Cooperative Extension Service**

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Contribution no. 15-019-S from the Kansas Agricultural Experiment Station.

# 2014 GRAIN SORGHUM CROP REVIEW

## Statewide Growing Conditions

The 2014 Kansas grain sorghum growing season was generally a very productive one. Conditions in the spring started with adequate levels of topsoil moisture for most of the state (Figure 1). Temperatures were uncharacteristically mild throughout the summer months, and timely rains helped the crop progress with few stresses. Some parts of the state did experience dry periods around the time of pollination that reduced the maximum yield potential, but generally the health of the sorghum crop remained consistently good throughout the growing season.

Rainfall increased in the early fall, resulting in the formation of sucker heads and slowing grain drydown into late October and November. Many fields required a freeze to be to be harvested.

The quality of the grain sorghum crop reflected the milder growing season, and the majority of the crop remained in fair to excellent condition throughout the season (Figure 2).

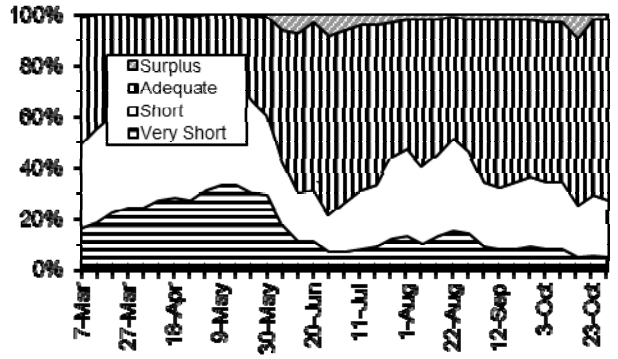



**Figure 1. Statewide status of topsoil moisture**

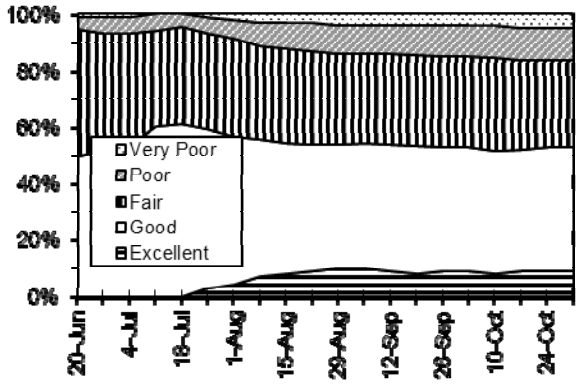



**Figure 2. Condition of 2014 Kansas sorghum crop**

(Crop-Weather Reports, Kansas Agricultural Statistics Service, Topeka)

## Diseases

The 2014 Kansas sorghum crop may have been one of the healthiest in years. Some problems were reported throughout the growing season, but most were minor in severity. Some fields around the state suffered from Fusarium seedling blight and required replanting. Sorghum downy mildew was reported in southeast and central Kansas. This disease is associated with soils that remain saturated for extended periods of time, especially early in the season. Yield losses from downy mildew are generally minimal.

At the higher altitudes of western Kansas, summer rains caused bacterial leaf diseases to develop. Although affected leaves have a distinctive purple striped appearance, no yield loss is typically associated with bacterial infections. Numerous reports of physiological problems occurred throughout the reproductive stages of sorghum growth. These are non-pathogenic problems caused by an interaction of hybrid genetics with specific environmental conditions. They often mimic diseases, but they do not spread and usually do not result in yield loss. If you looked hard enough, sooty stripe and northern corn leaf blight could be found, but little or no economic yield loss occurred.

Late in the season, a number of reports of grain mold and Fusarium stalk rot were received, but these were few in number compared with some previous years. There were no observations or reports of stalk rot associated lodging in the state. There were also no reports of sorghum ergot in 2014. (Doug Jardine, Kansas State University Department of Plant Pathology)

## Insects

Much like corn in 2014, sorghum had no large-scale, widespread pest infestations. However, there were localized problems. Fall armyworms and cattail caterpillars caused some concern throughout south central and north central Kansas on plants in the whorl stage. Whorl stage leaf feeding can be highly visible but rarely translates into yield reductions, and insecticide applications are usually ineffective anyway.

Chinch bugs increased later in the season and may be problematic in 2015. Sorghum aphids/ white sugarcane aphids were detected for the first time ever in Kansas from Sumner County in August, by Dr. Scott Armstrong, USDA in Stillwater. (Jeff Whitworth, Kansas State University Department of Entomology)

## Harvest Statistics

The Kansas Agricultural Statistics Service predicted a 182 million-bushel crop in the September 11 Crops Report, (Figure 3). The number of acres harvested was down 7% from 2013 at 2.6 million. The average yield estimate of 70 bushels per acre is 11 bushels higher than last year's yield. (Kansas Agricultural Statistics Service, Topeka)

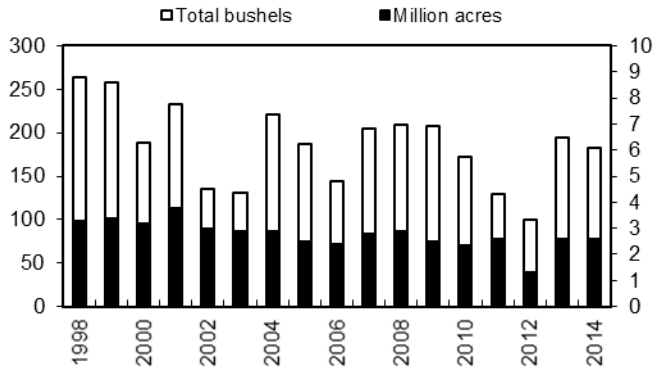



**Figure 3. Historical Kansas grain sorghum production**

# 2014 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 2014 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 19 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.

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 the 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 2014 Kansas Grain Sorghum Performance Tests**

**Alta Seeds**
Amarillo, TX
806-445-6282
altaseeds.com

**Armor Seed LLC**
Waldenburg, AR
870-579-2286
armorseed.com

**B-H Genetics**
Ganado, TX
361-771-2755
bhgenetics.com

**Browning Seed Inc.**
Plainview, TX
806-293-5271
browningseed.com

**DeKalb**
**Monsanto Seed**
St. Louis, MO
800-335-2676
dekalb.com

**Dyna-Gro Seed**
Wichita, KS
316-794-2231
cpsagu.com

**Golden Acres Genetics**
Waco, TX
254-761-9838
gaseed.com

**Heartland Genetics LLC**
Beloit, KS
785-738-5134

**Mycogen Seeds**
Indianapolis, IN
317-337-3892
dow.com

**Polansky Seed, Inc.**
Belleville, KS
785-527-2271
polanskyseed.com

**Richardson Seeds**
Vega, TX
806-267-2528
nuseed.com

**Warner Seeds, Inc.**
Hereford, TX
806-364-4470
warnerseeds.com

## NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Agronomy North Farm, Manhattan; Jane Lingenfelser, agronomist

Reading silt loam; soybean in 2013

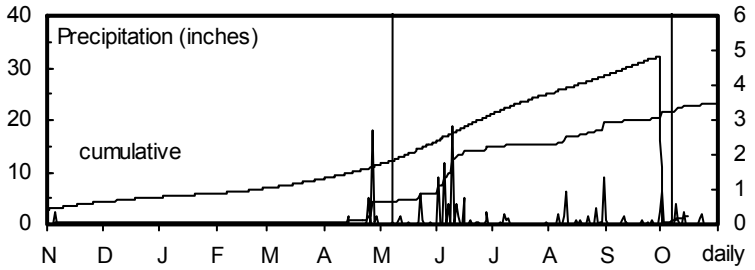
140 - 0 - 0 lb/a N, P, K

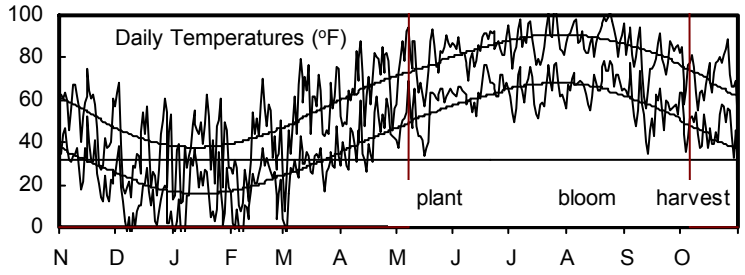
Planted on 5/8/2014; Harvested on 10/5/2014

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

Good rainfall and cooler temperatures in June could not quite offset dry weather during the bloom period in July.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.4 | 6.0 | 32 | 35 | | |
| April | 4.0 | 2.6 | 55 | 53 | 736 | 575 |
| May | 1.5 | 4.5 | 66 | 64 | 1003 | 918 |
| June | 8.8 | 5.1 | 75 | 73 | 1166 | 1158 |
| July | 0.7 | 4.0 | 77 | 79 | 1215 | 1369 |
| August | 4.0 | 3.5 | 80 | 78 | 1298 | 1317 |
| Sept. | 1.2 | 3.8 | 69 | 70 | 1010 | 1035 |
| Oct. | 2.5 | 1.4 | 59 | 60 | 821 | 387 |
| Totals: | 23.0 | 30.9 | 53 | 54 | 7,249 | 6,759 |




### Table 2. Riley County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to | 2013-2014 Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| DEKALB | DKS29-28 | **109** | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 67 | 13 | 58 | -- | -- | 47 |
| DYNA-GRO | 772B | 108 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 67 | 13 | 58 | -- | -- | 49 |
| HEARTLAND GENETICS | HG48-B | 101 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 67 | 12 | 58 | -- | -- | 44 |
| DEKALB | DKS53-53 | 107 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | 68 | 14 | 60 | -- | -- | 47 |
| MATURITY CHECK | MEDIUM (DKS38-88) | **109** | 129 | -- | 119 | -- | 104 | 97 | -- | 66 | 16 | 68 | 13 | 58 | -- | -- | 49 |
| ALTA | AG2104 | 104 | 131 | -- | 117 | -- | 98 | 98 | -- | 64 | 17 | 69 | 13 | 59 | -- | -- | 47 |
| ALTA | AG2105 | **112** | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 69 | 12 | 60 | -- | -- | 42 |
| DEKALB | DKS41-50 | **116** | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 69 | 14 | 60 | -- | -- | 45 |
| DEKALB | DKS44-20 | 107 | **143** | 97 | 125 | 116 | 101 | 107 | 98 | 69 | 21 | 69 | 13 | 61 | -- | -- | 45 |
| DYNA-GRO | M77GB52 | 103 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 69 | 13 | 59 | -- | -- | 48 |
| ALTA | AG2115 | 97 | 132 | -- | 114 | -- | 92 | 99 | -- | 66 | 16 | 70 | 13 | 60 | -- | -- | 43 |
| DYNA-GRO | GX13355 | 99 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 70 | 13 | 59 | -- | -- | 44 |
| DYNA-GRO | GX14452 | 104 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 70 | 13 | 59 | -- | -- | 41 |
| HEARTLAND GENETICS | HG52-B | **123** | -- | -- | -- | -- | 117 | -- | -- | -- | -- | 70 | 14 | 61 | -- | -- | 42 |
| POLANSKY | GS761 | **112** | -- | -- | -- | -- | 107 | -- | -- | -- | -- | 70 | 13 | 61 | -- | -- | 51 |
| ALTA | AG1203 | **112** | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 71 | 13 | 60 | -- | -- | 37 |
| ALTA | AG2101 | 108 | 119 | -- | 114 | -- | 103 | 89 | -- | 69 | 19 | 71 | 13 | 60 | -- | -- | 45 |
| ALTA | AG2102 | **109** | **150** | -- | 129 | -- | 103 | 112 | -- | 69 | 18 | 71 | 13 | 59 | -- | -- | 52 |
| ALTA | XG30003 | 101 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 71 | 13 | 59 | -- | -- | 44 |
| DYNA-GRO | GX13501 | 97 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 71 | 13 | 59 | -- | -- | 44 |
| DYNA-GRO | M75GB39 | 105 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 71 | 13 | 58 | -- | -- | 57 |
| DYNA-GRO | M75GR47 | 102 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 71 | 14 | 60 | -- | -- | 48 |
| DYNA-GRO | 766B | 102 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 71 | 13 | 60 | -- | -- | 40 |
| MATURITY CHECK | LATE (DKS54-00) | **116** | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 71 | 13 | 61 | -- | -- | 44 |
| RICHARDSON | 0413 | **118** | 128 | -- | 123 | -- | 112 | 96 | -- | 70 | 18 | 71 | 13 | 60 | -- | -- | 49 |
| RICHARDSON | 92123 | 107 | 121 | -- | 114 | -- | 101 | 90 | -- | 69 | 16 | 71 | 13 | 60 | -- | -- | 47 |
| DEKALB | DKS51-01 | 108 | 130 | 100 | 119 | 113 | 102 | 97 | 101 | 71 | 18 | 72 | 13 | 58 | -- | -- | 40 |
| POLANSKY | GS665W | 110 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | 72 | 13 | 59 | -- | -- | 43 |
| RICHARDSON | 96173 | 113 | 134 | -- | 123 | -- | 107 | 100 | -- | 70 | 18 | 72 | 13 | 60 | -- | -- | 48 |
| RICHARDSON | 68653 | 86 | 132 | -- | 109 | -- | 81 | 99 | -- | 74 | 19 | 73 | 12 | 58 | -- | -- | 42 |
| RICHARDSON | 06173 | 107 | **144** | -- | 126 | -- | 102 | 108 | -- | 74 | 19 | 73 | 13 | 59 | -- | -- | 46 |
| DYNA-GRO | M72GW14 | 105 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 74 | 13 | 61 | -- | -- | 37 |
| MATURITY CHECK | EARLY (MY. 1G557) | 100 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 75 | 13 | 58 | -- | -- | 44 |
| HEARTLAND GENETICS | HGX5000 | 79 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | 75 | 13 | 60 | -- | -- | 39 |
| DYNA-GRO | GX13363 | 91 | -- | -- | -- | -- | 87 | -- | -- | -- | -- | 76 | 13 | 60 | -- | -- | 40 |
| ALTA | AG2103 | **109** | 133 | -- | 121 | -- | 103 | 99 | -- | 71 | 19 | 78 | 13 | 59 | -- | -- | 69 |
| | Average | 105 | 134 | 99 | 120 | 113 | 100 | 100 | 100 | 69 | 18 | 71 | 13 | 59 | -- | -- | 46 |
| | CV (%) | 10 | 8 | 10 | -- | -- | 10 | 8 | 10 | -- | -- | 2 | 8 | 3 | -- | -- | 13 |
| | LSD (0.05) | 14 | 16 | 14 | -- | -- | 13 | 12 | 14 | -- | -- | 2 | 1 | 2 | -- | -- | 8 |

*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 Exp. Field, Belleville; Michael Larson and Doug Stensaas, technicians

Crete silt loam; wheat in 2013

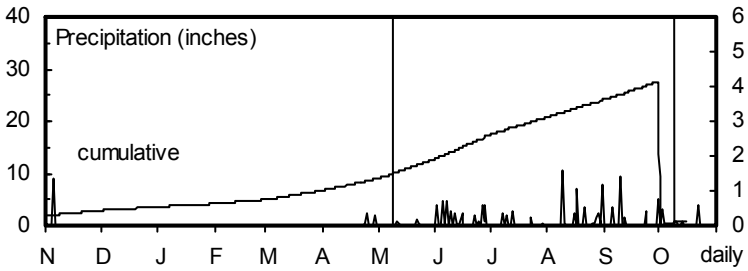
140 - 0 - 0 lb/a N, P, K

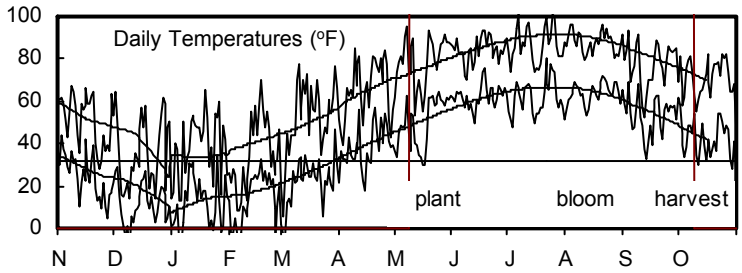
Planted on 5/9/2014; Harvested on 10/8/2014

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

Test recovered from erratic stands caused by cool temperatures at planting.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 1.4 | 4.8 | 30 | 32 | | |
| April | 0.7 | 2.3 | 52 | 52 | 699 | 534 |
| May | 0.4 | 3.7 | 64 | 63 | 968 | 886 |
| June | 5.2 | 4.6 | 73 | 73 | 1120 | 1149 |
| July | 1.4 | 3.4 | 75 | 78 | 1169 | 1368 |
| August | 5.5 | 3.4 | 76 | 77 | 1224 | 1310 |
| Sept. | 3.4 | 3.5 | 66 | 68 | 941 | 987 |
| Oct. | 1.5 | 0.8 | 56 | 59 | 792 | 375 |
| Totals: | 19.5 | 26.5 | 51 | 52 | 6,914 | 6,609 |




### Table 3. Republic County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | | | | | | | | |
| ALTA | AG1203 | 130 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | -- | 14 | 59 | -- | -- | -- |
| ALTA | AG2102 | 128 | 121 | -- | 124 | -- | 115 | 107 | -- | -- | 14 | -- | 14 | 59 | -- | -- | -- |
| ALTA | AG2103 | 113 | 124 | -- | 118 | -- | 102 | 110 | -- | -- | 15 | -- | 14 | 58 | -- | -- | -- |
| ALTA | AG2105 | 91 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | -- | 13 | 58 | -- | -- | -- |
| ALTA | AG2115 | 115 | 106 | -- | -- | -- | 104 | 94 | -- | -- | 14 | -- | 13 | 59 | -- | -- | -- |
| DEKALB | DKS29-28 | 101 | -- | **--** | -- | -- | 91 | -- | -- | -- | -- | -- | 13 | 57 | -- | -- | -- |
| DEKALB | DKS41-50 | 113 | -- | **--** | -- | -- | 102 | -- | -- | -- | -- | -- | 16 | 58 | -- | -- | -- |
| DEKALB | DKS44-20 | 120 | 125 | **122** | 122 | 122 | 108 | 110 | 115 | 65 | 15 | -- | 13 | 59 | -- | -- | -- |
| DEKALB | DKS51-01 | **150** | 121 | 108 | 136 | 126 | 135 | 107 | 101 | 72 | 14 | -- | 13 | 59 | -- | -- | -- |
| DEKALB | DKS53-53 | 133 | -- | -- | -- | -- | 120 | -- | -- | -- | -- | -- | 14 | 59 | -- | -- | -- |
| DEKALB | DKS53-67 | 121 | **148** | 89 | 134 | 119 | 109 | 131 | 84 | 78 | 14 | -- | 13 | 59 | -- | -- | -- |
| DYNA-GRO | 722B | 103 | **--** | **--** | -- | -- | 93 | -- | -- | -- | -- | -- | 12 | 57 | -- | -- | -- |
| DYNA-GRO | 766B | 123 | **--** | **--** | -- | -- | 111 | -- | -- | -- | -- | -- | 13 | 59 | -- | -- | -- |
| DYNA-GRO | 772B | 128 | -- | -- | -- | -- | 115 | -- | -- | -- | -- | -- | 14 | 59 | -- | -- | -- |
| DYNA-GRO | GX13355 | 101 | **--** | -- | -- | -- | 91 | -- | -- | -- | -- | -- | 11 | 57 | -- | -- | -- |
| DYNA-GRO | GX13363 | 121 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | -- | 13 | 59 | -- | -- | -- |
| DYNA-GRO | GX13501 | 97 | -- | **--** | -- | -- | 87 | -- | -- | -- | -- | -- | 17 | 57 | -- | -- | -- |
| DYNA-GRO | GX14452 | 109 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 14 | 58 | -- | -- | -- |
| DYNA-GRO | M71GB01 | 110 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | -- | 12 | 56 | -- | -- | -- |
| DYNA-GRO | M72GW14 | 60 | -- | **--** | -- | -- | 54 | -- | -- | -- | -- | -- | 16 | 58 | -- | -- | -- |
| DYNA-GRO | M75GB39 | 107 | **--** | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 18 | 58 | -- | -- | -- |
| DYNA-GRO | M75GR47 | 111 | -- | **--** | -- | -- | 100 | -- | -- | -- | -- | -- | 12 | 60 | -- | -- | -- |
| DYNA-GRO | M77GB52 | 108 | **--** | -- | -- | -- | 97 | -- | -- | -- | -- | -- | 12 | 59 | -- | -- | -- |
| GOLDEN ACRES | 3545 | 130 | 133 | **115** | 131 | 126 | 117 | 118 | 108 | 71 | 16 | -- | 15 | 58 | -- | -- | -- |
| GOLDEN ACRES | 3552 | 103 | -- | **--** | -- | -- | 93 | -- | -- | -- | -- | -- | 14 | 58 | -- | -- | -- |
| GOLDEN ACRES | 3637 | 103 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | -- | 12 | 58 | -- | -- | -- |
| GOLDEN ACRES | GA 5556 | 102 | 107 | 104 | 104 | 104 | 92 | 95 | 98 | 71 | 16 | -- | 16 | 58 | -- | -- | -- |
| GOLDEN ACRES | GA 5613 | 81 | 111 | **--** | 96 | -- | 73 | 98 | -- | -- | 14 | -- | 12 | 56 | -- | -- | -- |
| GOLDEN ACRES | H-390W | 91 | -- | **--** | -- | -- | 82 | -- | -- | -- | -- | -- | 15 | 57 | -- | -- | -- |
| HEARTLAND GENETICS | HG48-B | 121 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | -- | 11 | 58 | -- | -- | -- |
| HEARTLAND GENETICS | HG52-B | 118 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | -- | 13 | 59 | -- | -- | -- |
| HEARTLAND GENETICS | HGX5000 | 111 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | -- | 14 | 59 | -- | -- | -- |
| MATURITY CHECK | EARLY (MY. 1G557) | 109 | -- | **--** | -- | -- | 99 | -- | -- | -- | -- | -- | 17 | 58 | -- | -- | -- |
| MATURITY CHECK | LATE (DKS54-00) | **145** | -- | **--** | -- | -- | 131 | -- | -- | -- | -- | -- | 14 | 58 | -- | -- | -- |
| MATURITY CHECK | MEDIUM (DKS38-88) | 97 | -- | **--** | -- | -- | 87 | -- | -- | -- | -- | -- | 13 | 58 | -- | -- | -- |
| POLANSKY | GS 679 | 111 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | -- | 14 | 58 | -- | -- | -- |
| POLANSKY | GS761 | 106 | 113 | -- | 110 | -- | 96 | 100 | -- | -- | 15 | -- | 13 | 57 | -- | -- | -- |
| RICHARDSON | 0413 | 125 | 122 | -- | 123 | -- | 113 | 109 | -- | -- | 15 | -- | 14 | 58 | -- | -- | -- |
| RICHARDSON | 06173 | 104 | 118 | -- | 111 | -- | 94 | 105 | -- | -- | 15 | -- | 13 | 59 | -- | -- | -- |
| RICHARDSON | 68653 | 88 | 119 | **--** | 103 | -- | 79 | 106 | -- | -- | 17 | -- | 18 | 57 | -- | -- | -- |
| RICHARDSON | 92123 | 106 | 96 | -- | 101 | -- | 95 | 85 | -- | -- | 14 | -- | 14 | 59 | -- | -- | -- |
| RICHARDSON | 96173 | 122 | 132 | -- | 127 | -- | 110 | 117 | -- | -- | 15 | -- | 14 | 59 | -- | -- | -- |
| WARNER SEEDS | W-7012 | 104 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | -- | 14 | 58 | -- | -- | -- |
| | Average | 111 | 113 | 107 | 112 | 110 | 100 | 100 | 100 | 71 | 15 | -- | 14 | 58 | -- | -- | -- |
| | CV (%) | 9 | 8 | 10 | -- | -- | 9 | 8 | 10 | -- | -- | -- | 21 | 2 | -- | -- | -- |
| | LSD (0.05) | 17 | 15 | 19 | -- | -- | 15 | 13 | 17 | -- | -- | -- | 5 | 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.

## Table 4. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2014.

| BRAND/NAME | RLD | RPD | MTD | AVG. |
|---|---|---|---|---|
| **ALTA** | | | | |
| AG1203 | 106 | 117 | -- | 111 |
| AG2101 | 103 | -- | -- | -- |
| AG2102 | 103 | 115 | -- | 109 |
| AG2103 | 103 | 102 | -- | 102 |
| AG2104 | 98 | -- | -- | -- |
| AG2105 | 106 | 82 | -- | 94 |
| AG2115 | 92 | 104 | -- | 98 |
| XG30003 | 96 | -- | -- | -- |
| **DEKALB** | | | | |
| DKS29-28 | 103 | 91 | -- | 97 |
| DKS41-50 | 110 | 102 | -- | 106 |
| DKS44-20 | 101 | 108 | -- | 105 |
| DKS51-01 | 102 | 135 | -- | 119 |
| DKS53-53 | 101 | 120 | -- | 111 |
| DKS53-67 | -- | 109 | -- | -- |
| **DYNA-GRO** | | | | |
| 722B | -- | 93 | -- | -- |
| 766B | 97 | 111 | -- | 104 |
| 772B | 102 | 115 | -- | 109 |
| GX13355 | 94 | 91 | -- | 92 |
| GX13363 | 87 | 109 | -- | 98 |
| GX13501 | 92 | 87 | -- | 89 |
| GX14452 | 99 | 98 | -- | 99 |
| M71GB01 | -- | 99 | -- | -- |
| M72GW14 | 99 | 54 | -- | 77 |
| M75GB39 | 100 | 96 | -- | 98 |
| M75GR47 | 97 | 100 | -- | 99 |
| M77GB52 | 98 | 97 | -- | 98 |
| **GOLDEN ACRES** | | | | |
| 3545 | -- | 117 | -- | -- |
| 3552 | -- | 93 | -- | -- |
| 3637 | -- | 93 | -- | -- |
| GA 5556 | -- | 92 | -- | -- |
| GA 5613 | -- | 73 | -- | -- |
| H-390W | -- | 82 | -- | -- |
| **HEARTLAND GENETICS** | | | | |
| HG48-B | 96 | 109 | -- | 102 |
| HG52-B | 117 | 106 | -- | 111 |
| HGX5000 | 75 | 100 | -- | 87 |
| **POLANSKY** | | | | |
| GS 679 | -- | 100 | -- | -- |
| GS665W | 104 | -- | -- | -- |
| GS761 | 107 | 96 | -- | 101 |
| **RICHARDSON** | | | | |
| 0413 | 112 | 113 | -- | 112 |
| 06173 | 102 | 94 | -- | 98 |
| 68653 | 81 | 79 | -- | 80 |
| 92123 | 101 | 95 | -- | 98 |
| 96173 | 107 | 110 | -- | 108 |
| **WARNER SEEDS** | | | | |
| W-7012 | -- | 94 | -- | -- |
| **MATURITY CHECK** | | | | |
| EARLY (MY. 1G557) | 95 | 99 | -- | 97 |
| LATE (DKS54-00) | 110 | 131 | -- | 120 |
| MEDIUM (DKS38-88) | 104 | 87 | -- | 95 |
| AVERAGES (bu/a) | 105 | 111 | -- | 108 |
| CV (%) | 10 | 9 | -- | -- |
| LSD (0.05) | 13 | 15 | -- | -- |

* RLD = Riley Co., Manhattan RPD = Republic Co., Belleville MTD = Mitchell Co., Beloit; abandoned.

## SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

East Central Kansas Experiment Field, Ottawa; Eric Adee, agronomist; Jim Kimball, technician

Woodson silt loam; corn in 2013

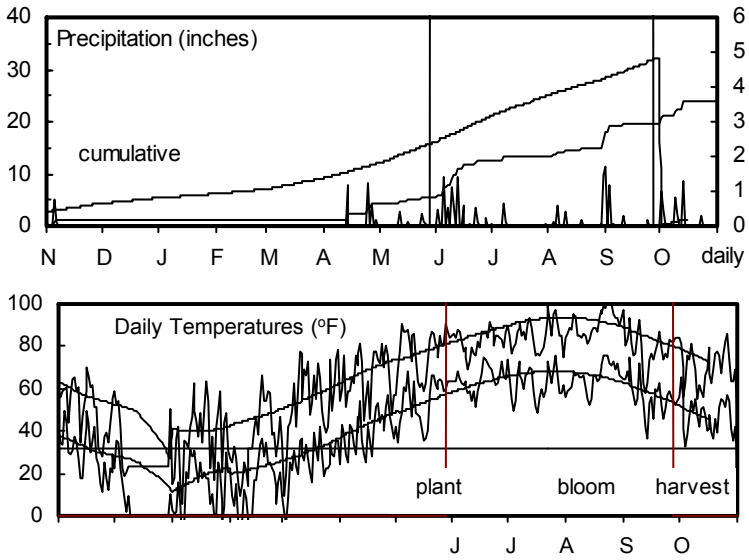
120 - 40 - 13 lb/a N, P, K

Planted on 5/29/2014; Harvested on 9/26/2014

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

Head emergence was a struggle for most hybrids due to minimal rainfall during bloom period.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 1.0 | 6.4 | 30 | 37 | | |
| April | 3.3 | 2.9 | 53 | 56 | 704 | 634 |
| May | 1.2 | 4.1 | 66 | 65 | 1004 | 953 |
| June | 7.1 | 4.9 | 74 | 74 | 1148 | 1186 |
| July | 0.8 | 4.0 | 74 | 80 | 1169 | 1401 |
| August | 2.9 | 3.2 | 79 | 79 | 1268 | 1362 |
| Sept. | 3.4 | 4.0 | 68 | 71 | 989 | 1062 |
| Oct. | 4.4 | 1.2 | 58 | 62 | 792 | 416 |
| Totals: | 24.1 | 30.8 | 52 | 56 | 7,074 | 7,014 |




### Table 5. Franklin County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | | | | | | | | |
| MATURITY CHECK | EARLY (MY. 1G557) | 102 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 58 | 16 | 53 | -- | -- | 55 |
| DEKALB | DKS29-28 | 110 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 60 | 17 | 56 | -- | -- | 55 |
| DEKALB | DKS44-20 | **124** | **153** | 56 | 139 | 111 | 107 | 103 | 134 | 65 | 16 | 64 | 18 | 56 | -- | -- | 55 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 110 | 143 | -- | 126 | -- | 95 | 96 | -- | 66 | 15 | 65 | 18 | 55 | -- | -- | 59 |
| DEKALB | DKS49-45 | 110 | **158** | 27 | 134 | 98 | 95 | 106 | 63 | 69 | 16 | 66 | 18 | 53 | -- | -- | 55 |
| DEKALB | DKS41-50 | 115 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 66 | 18 | 57 | -- | -- | 54 |
| DEKALB | DKS53-53 | **128** | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 67 | 19 | 55 | -- | -- | 54 |
| MATURITY CHECK | LATE (DKS54-00) | **127** | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 70 | 19 | 53 | -- | -- | 44 |
| | Average | 116 | 149 | 42 | 132 | 102 | 100 | 100 | 100 | 67 | 16 | 65 | 18 | 55 | -- | -- | 54 |
| | CV (%) | 6 | 6 | 11 | -- | -- | 6 | 6 | 11 | -- | -- | 1 | 2 | 1 | -- | -- | 10 |
| | LSD (0.05) | 10 | 13 | 7 | -- | -- | 8 | 9 | 7 | -- | -- | 0 | 1 | 1 | -- | -- | 8 |

*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; wheat in 2013

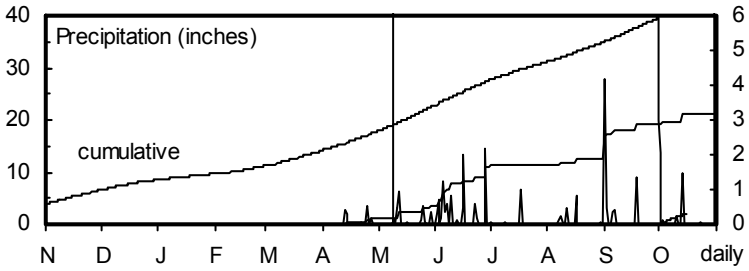
120 - 16 - 12 lb/a N, P, K

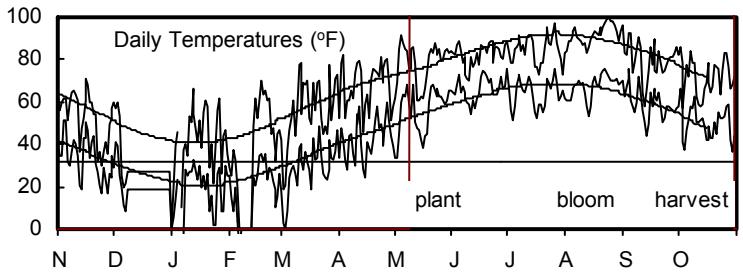
Planted on 5/9/2014; Harvested on 10/29/2014

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

Summer was cool and wet. Drydown was delayed by the presence of suckerheads.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.0 | 10.3 | 33 | 39 | | |
| April | 1.5 | 3.7 | 56 | 57 | 744 | 668 |
| May | 2.8 | 5.0 | 67 | 65 | 1037 | 952 |
| June | 9.7 | 4.8 | 74 | 74 | 1169 | 1178 |
| July | 1.1 | 3.6 | 75 | 80 | 1198 | 1385 |
| August | 1.8 | 3.8 | 80 | 79 | 1294 | 1345 |
| Sept. | 6.7 | 4.5 | 70 | 71 | 1034 | 1075 |
| Oct. | 1.8 | 1.9 | 60 | 63 | 836 | 421 |
| Totals: | 25.6 | 37.5 | 54 | 57 | 7,312 | 7,022 |




### Table 6. Labette County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| MATURITY CHECK | EARLY (MY. 1G557) | 82 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | 50 | 13 | -- | 44 | -- | 54 |
| DEKALB | DKS29-28 | 90 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | 51 | 13 | -- | 42 | -- | 57 |
| ALTA | AG2104 | 103 | 105 | -- | 104 | -- | 94 | 83 | -- | 59 | 14 | 56 | 13 | -- | 47 | -- | 55 |
| ALTA | AG2115 | 114 | 126 | -- | 120 | -- | 104 | 100 | -- | 60 | 14 | 57 | 13 | -- | 49 | -- | 54 |
| MATURITY CHECK | MEDIUM (DKS38-88) | **146** | **135** | -- | 141 | -- | 133 | 107 | -- | 58 | 14 | 57 | 13 | -- | 58 | -- | 51 |
| DEKALB | DKS38-88 | **133** | -- | -- | -- | -- | 121 | -- | -- | -- | -- | 58 | 14 | -- | 56 | -- | 53 |
| ALTA | AG1203 | 107 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 59 | 13 | -- | 49 | -- | 52 |
| ALTA | XG30003 | **130** | -- | -- | -- | -- | 119 | -- | -- | -- | -- | 60 | 14 | -- | 49 | -- | 48 |
| DEKALB | DKS41-50 | **131** | -- | -- | -- | -- | 120 | -- | -- | -- | -- | 60 | 14 | -- | 55 | -- | 49 |
| ALTA | AG2105 | 48 | -- | -- | -- | -- | 44 | -- | -- | -- | -- | 61 | 14 | -- | 50 | -- | 50 |
| DEKALB | DKS53-67 | **146** | **148** | 35 | 147 | 110 | 134 | 117 | 137 | 63 | 14 | 61 | 13 | -- | 53 | -- | 48 |
| ALTA | AG2102 | 124 | 126 | -- | 125 | -- | 113 | 100 | -- | 62 | 14 | 62 | 13 | -- | 49 | -- | 57 |
| DEKALB | DKS53-53 | 128 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | 62 | 14 | -- | 54 | -- | 48 |
| WARNER SEEDS | W-7012 | 68 | -- | -- | -- | -- | 62 | -- | -- | -- | -- | 62 | 13 | -- | 56 | -- | 46 |
| DEKALB | DKS51-01 | **140** | -- | -- | -- | -- | 128 | -- | -- | -- | -- | 63 | 14 | -- | 57 | -- | 41 |
| MATURITY CHECK | LATE (DKS54-00) | 61 | -- | -- | -- | -- | 56 | -- | -- | -- | -- | 63 | 13 | -- | 49 | -- | 7 |
| | Average | 110 | 126 | 26 | 118 | 87 | 100 | 100 | 100 | 60 | 14 | 59 | 13 | -- | 51 | -- | 48 |
| | CV (%) | 11 | 8 | 13 | 9 | 11 | 11 | 8 | 13 | -- | -- | 2 | 4 | -- | 5 | -- | 7 |
| | LSD (0.05) | 17 | 14 | 5 | 15 | 12 | 16 | 11 | 18 | -- | -- | 2 | 1 | -- | 4 | -- | 5 |

*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 7. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2014

| BRAND/NAME | FRD | LBD | AVG. |
|---|---|---|---|
| **ALTA** | | | |
| AG1203 | -- | 98 | -- |
| AG2102 | -- | 113 | -- |
| AG2104 | -- | 94 | -- |
| AG2105 | -- | 44 | -- |
| AG2115 | -- | 104 | -- |
| XG30003 | -- | 119 | -- |
| **DEKALB** | | | |
| DKS29-28 | 95 | 82 | 89 |
| DKS38-88 | -- | 121 | -- |
| DKS41-50 | 99 | 120 | 110 |
| DKS44-20 | 107 | -- | -- |
| DKS49-45 | 95 | -- | -- |
| DKS51-01 | -- | 128 | -- |
| DKS53-53 | 110 | 117 | 114 |
| DKS53-67 | -- | 134 | -- |
| **WARNER SEEDS** | | | |
| W-7012 | -- | 62 | -- |
| **MATURITY CHECK** | | | |
| EARLY (MY. 1G557) | 88 | 75 | 82 |
| LATE (DKS54-00) | 110 | 56 | 83 |
| MEDIUM (DKS38-88) | 95 | 133 | 114 |
| AVERAGES (bu/a) | 116 | 110 | 113 |
| CV (%) | 6 | 11 | -- |
| LSD (0.05) | 8 | 16 | -- |

FRD = Franklin Co., Ottawa LBD = Labette Co., Parsons

## CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

Clayton Short farm, Assaria; Jane Lingenfelser, agronomist

Hord silt loam; soybean in 2013

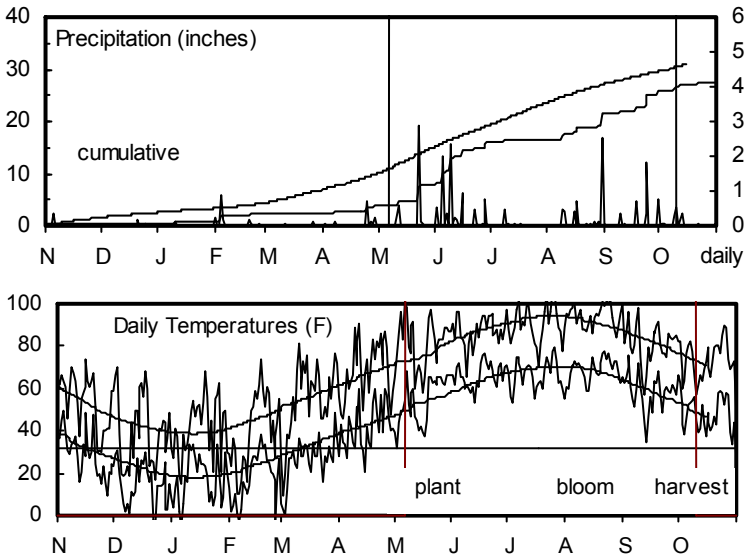
120 - 0 - 0 lb/a N, P, K

Planted on 5/7/2014; Harvested on 10/9/2014

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

Cooler temperatures and timely rains minimized the stresses on the sorghum crop.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar | 2.4 | 6.9 | 34 | 37 | | |
| April | 1.3 | 3.0 | 55 | 55 | 756 | 593 |
| May | 4.0 | 5.1 | 68 | 65 | 1029 | 923 |
| June | 8.2 | 4.2 | 77 | 75 | 1197 | 1211 |
| July | 0.7 | 4.3 | 79 | 81 | 1259 | 1431 |
| August | 5.0 | 3.5 | 82 | 80 | 1316 | 1394 |
| Sept. | 4.1 | 2.5 | 70 | 71 | 1043 | 1072 |
| Oct. | 1.6 | 1.3 | 60 | 62 | 848 | 407 |
| Totals: | 27.3 | 30.9 | 55 | 56 | 7,447 | 7,031 |







### Table 8. Saline County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| **BRAND** | **NAME** | **2014** | **2013** | **2012** | **AVG.** | **AVG.** | **2014** | **2013** | **2012** | | | | | | | | |
| ARMOR | 3108 | 109 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | 49 |
| ARMOR | 3197R | 93 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 21 | 59 | -- | -- | 48 |
| ARMOR | AXM11043 | 108 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 16 | 56 | -- | -- | 46 |
| ARMOR | AXM12423 | 89 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | -- | 16 | 55 | -- | -- | 46 |
| ARMOR | AXM68653 | 86 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | -- | 17 | 55 | -- | -- | 48 |
| ARMOR | AXM8041 | 112 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | 53 |
| ARMOR | AXM9010 | 94 | -- | -- | -- | -- | 89 | -- | -- | -- | -- | -- | 16 | 57 | -- | -- | 49 |
| ARMOR | AXM9033 | 103 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | -- | 17 | 57 | -- | -- | 48 |
| ARMOR | AXM9058 | **113** | -- | -- | -- | -- | 107 | -- | -- | -- | -- | -- | 14 | 59 | -- | -- | 50 |
| ARMOR | AXM91743 | 104 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 17 | 55 | -- | -- | 53 |
| ARMOR | AXM9813 | 105 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | -- | 17 | 61 | -- | -- | 52 |
| ARMOR | BANDIT | 108 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 17 | 60 | -- | -- | 59 |
| ARMOR | LSB50 | 100 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | -- | 16 | 57 | -- | -- | 56 |
| DEKALB | DKS29-28 | 100 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | -- | 14 | 52 | -- | -- | 56 |
| DEKALB | DKS41-50 | 110 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 21 | 60 | -- | -- | 52 |
| DEKALB | DKS51-01 | 111 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | -- | 18 | 59 | -- | -- | 52 |
| DEKALB | DKS53-53 | **114** | -- | -- | -- | -- | 107 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | 47 |
| DEKALB | DKS53-67 | **126** | **144** | -- | 135 | -- | 119 | 117 | -- | -- | 20 | -- | 16 | 60 | -- | -- | 62 |
| HEARTLAND GENETICS | HG48-B | **118** | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 15 | 58 | -- | -- | 55 |
| HEARTLAND GENETICS | HG52-B | **122** | -- | -- | -- | -- | 115 | -- | -- | -- | -- | -- | 14 | 57 | -- | -- | 63 |
| HEARTLAND GENETICS | HGX5000 | 104 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 15 | 59 | -- | -- | 55 |
| MATURITY CHECK | EARLY (MY. 1G557) | 101 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 12 | 61 | -- | -- | 57 |
| MATURITY CHECK | LATE (DKS54-00) | **118** | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | 54 |
| MATURITY CHECK | MEDIUM (DKS38-88) | **113** | 114 | -- | 114 | -- | 107 | 92 | -- | -- | 19 | -- | 16 | 59 | -- | -- | 54 |
| POLANSKY | GS718 | 111 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 17 | 60 | -- | -- | 49 |
| POLANSKY | GS761 | 102 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 18 | 60 | -- | -- | 50 |
| WARNER SEEDS | W-7012 | 90 | -- | -- | -- | -- | 85 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | 54 |
| | Average | 106 | 124 | -- | -- | -- | 100 | 100 | -- | -- | 20 | -- | 16 | 58 | -- | -- | 53 |
| | CV (%) | 9 | 6 | -- | -- | -- | 9 | 6 | -- | -- | -- | -- | 12 | 3 | -- | -- | 7 |
| | LSD (0.05) | 14 | 11 | -- | -- | -- | 13 | 9 | -- | -- | -- | -- | 3 | 2 | -- | -- | 5 |

*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 DRYLAND GRAIN SORGHUM TEST

South Central Kansas Experiment Field, Hutchinson; Gary Cramer, agronomist; Keith Thompson, technician

Ost loam; soybean in 2013

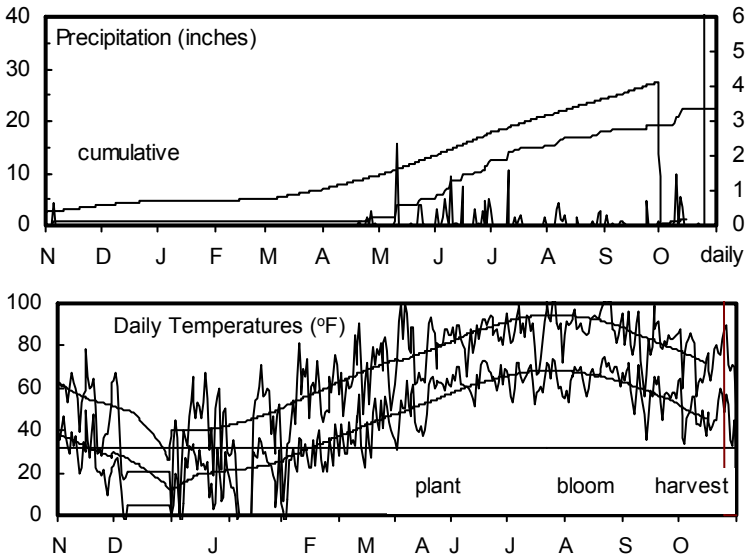
140 - 0 - 0 lb/a N, P, K

Planted on 5/16/2014; Harvested on 10/24/2014

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

Extensive lodging throughout test.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.7 | 4.4 | 30 | 37 | | |
| April | 0.8 | 2.6 | 54 | 55 | 731 | 617 |
| May | 3.8 | 3.8 | 67 | 65 | 1002 | 927 |
| June | 6.9 | 4.3 | 75 | 75 | 1163 | 1196 |
| July | 2.9 | 3.5 | 76 | 81 | 1197 | 1416 |
| August | 2.8 | 3.1 | 79 | 79 | 1271 | 1361 |
| Sept. | 1.5 | 3.3 | 70 | 70 | 1041 | 1053 |
| Oct. | 3.0 | 1.1 | 60 | 62 | 850 | 407 |
| Totals: | 22.3 | 26.1 | 53 | 56 | 7,255 | 6,977 |




### Table 9. Reno County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | | | | | | | | |
| ALTA | AG1203 | 56 | -- | -- | -- | -- | 71 | -- | -- | -- | -- | -- | 17 | 60 | -- | 78 | -- |
| ALTA | AG2101 | 82 | 100 | -- | 91 | -- | 104 | 103 | -- | -- | 16 | -- | 17 | 60 | -- | 49 | -- |
| ALTA | AG2102 | 69 | **107** | -- | 88 | -- | 87 | 110 | -- | -- | 14 | -- | 14 | 57 | -- | 42 | -- |
| ALTA | AG2103 | 92 | 97 | -- | 95 | -- | 117 | 100 | -- | -- | 16 | -- | 17 | 61 | -- | 88 | -- |
| ALTA | AG2104 | 86 | 76 | -- | 81 | -- | 109 | 79 | -- | -- | 16 | -- | 16 | 60 | -- | 38 | -- |
| ALTA | AG2105 | 84 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | -- | 16 | 61 | -- | 59 | -- |
| ALTA | AG2115 | 93 | 94 | -- | 94 | -- | 118 | 98 | -- | -- | 16 | -- | 16 | 60 | -- | 60 | -- |
| ALTA | AG3101 | 87 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 16 | 61 | -- | 75 | -- |
| ALTA | AG3201 | **109** | -- | -- | -- | -- | 139 | -- | -- | -- | -- | -- | 16 | 60 | -- | 80 | -- |
| ARMOR | 3108 | 69 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 17 | 59 | -- | 50 | -- |
| ARMOR | 3197R | 71 | -- | -- | -- | -- | 91 | -- | -- | -- | -- | -- | 20 | 59 | -- | 31 | -- |
| ARMOR | AXM11043 | 79 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 16 | 60 | -- | 85 | -- |
| ARMOR | AXM12423 | 83 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | -- | 16 | 60 | -- | 60 | -- |
| ARMOR | AXM68653 | 65 | -- | -- | -- | -- | 83 | -- | -- | -- | -- | -- | 17 | 57 | -- | 34 | -- |
| ARMOR | AXM8041 | 79 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 16 | 59 | -- | 90 | -- |
| ARMOR | AXM9010 | 63 | -- | -- | -- | -- | 80 | -- | -- | -- | -- | -- | 16 | 58 | -- | 89 | -- |
| ARMOR | AXM9033 | 81 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | -- | 16 | 60 | -- | 78 | -- |
| ARMOR | AXM9058 | 69 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 18 | 60 | -- | 79 | -- |
| ARMOR | AXM91743 | 86 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | -- | 15 | 59 | -- | 80 | -- |
| ARMOR | AXM9813 | 77 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 16 | 60 | -- | 65 | -- |
| ARMOR | BANDIT | **114** | -- | -- | -- | -- | 145 | -- | -- | -- | -- | -- | 17 | 60 | -- | 78 | -- |
| ARMOR | LSB50 | 86 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | -- | 15 | 60 | -- | 38 | -- |
| BROWNING | 775W | 76 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | -- | 15 | 59 | -- | 80 | -- |
| BROWNING | CHALLENGER BMX | 70 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 17 | 60 | -- | 14 | -- |
| DEKALB | DKS29-28 | 72 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- | 16 | 60 | -- | 29 | -- |
| DEKALB | DKS38-88 | 64 | 100 | -- | 82 | -- | 81 | 103 | -- | -- | 17 | -- | 17 | 60 | -- | 48 | -- |
| DEKALB | DKS41-50 | 100 | -- | -- | -- | -- | 128 | -- | -- | -- | -- | -- | 16 | 61 | -- | 80 | -- |
| DEKALB | DKS51-01 | 81 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | -- | 17 | 60 | -- | 36 | -- |
| DEKALB | DKS53-53 | 79 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 18 | 61 | -- | 18 | -- |
| DEKALB | DKS53-67 | 66 | **119** | -- | 93 | -- | 84 | 123 | -- | -- | 18 | -- | 19 | 59 | -- | 40 | -- |
| DYNA-GRO | 766B | 102 | -- | -- | -- | -- | 130 | -- | -- | -- | -- | -- | 16 | 61 | -- | 46 | -- |
| DYNA-GRO | 772B | 53 | -- | -- | -- | -- | 68 | -- | -- | -- | -- | -- | 17 | 60 | -- | 90 | -- |
| DYNA-GRO | GX13363 | 86 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | -- | 15 | 61 | -- | 68 | -- |
| DYNA-GRO | GX13364 | 69 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 17 | 60 | -- | 85 | -- |
| DYNA-GRO | GX13501 | 63 | -- | -- | -- | -- | 80 | -- | -- | -- | -- | -- | 15 | 59 | -- | 80 | -- |
| DYNA-GRO | GX14171 | 75 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 16 | 61 | -- | 44 | -- |
| DYNA-GRO | GX14452 | 77 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 16 | 59 | -- | 65 | -- |
| DYNA-GRO | GX14577 | 62 | -- | -- | -- | -- | 79 | -- | -- | -- | -- | -- | 18 | 58 | -- | 20 | -- |
| DYNA-GRO | M72GW14 | 75 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 17 | 61 | -- | 34 | -- |
| DYNA-GRO | M75GB39 | 92 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | -- | 16 | 60 | -- | 90 | -- |
| DYNA-GRO | M75GR47 | **109** | -- | -- | -- | -- | 138 | -- | -- | -- | -- | -- | 16 | 60 | -- | 53 | -- |
| DYNA-GRO | M77GB52 | 79 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 16 | 60 | -- | 73 | -- |
| HEARTLAND GENETICS | HG48-B | 100 | -- | -- | -- | -- | 128 | -- | -- | -- | -- | -- | 15 | 61 | -- | 67 | -- |
| HEARTLAND GENETICS | HG52-B | 75 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 15 | 59 | -- | 33 | -- |
| HEARTLAND GENETICS | HGX5000 | 75 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 16 | 59 | -- | 39 | -- |
| MATURITY CHECK | EARLY (MY. 1G557) | 88 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 16 | 60 | -- | 85 | -- |
| MATURITY CHECK | LATE (DKS54-00) | 70 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 17 | 57 | -- | 65 | -- |
| MATURITY CHECK | MEDIUM (DKS38-88) | 72 | 100 | -- | -- | -- | 92 | 103 | -- | -- | 17 | -- | 17 | 60 | -- | 44 | -- |

## Table 9 continued. Reno County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRAND | NAME | 2014 | 2013 | 2012 | 2-yr. AVG. | 3-yr. AVG. | 2014 | 2013 | 2012 | Days to blm | Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
| POLANSKY | GS665W | 74 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | -- | 18 | 60 | -- | 85 | -- |
| POLANSKY | GS761 | 97 | -- | -- | -- | -- | 123 | -- | -- | -- | -- | -- | 16 | 60 | -- | 83 | -- |
| RICHARDSON | 0413 | 74 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 15 | 58 | -- | 75 | -- |
| RICHARDSON | 06173 | 64 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | -- | 21 | 58 | -- | 34 | -- |
| RICHARDSON | 68653 | 48 | -- | -- | -- | -- | 61 | -- | -- | -- | -- | -- | 20 | 57 | -- | 30 | -- |
| RICHARDSON | 92123 | 80 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 15 | 60 | -- | 53 | -- |
| RICHARDSON | 96173 | 75 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 17 | 61 | -- | 45 | -- |
| | Average | 79 | 97 | -- | 88 | -- | 100 | 100 | -- | -- | 16 | -- | 17 | 60 | -- | 59 | -- |
| | CV (%) | 12 | 11 | -- | 11 | -- | 12 | 11 | -- | -- | -- | -- | 12 | 2 | -- | -- | -- |
| | LSD (0.05) | 13 | 15 | -- | 14 | -- | 17 | 15 | -- | -- | -- | -- | 3 | 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.

## Table 10. CENTRAL Kansas Sorghum Hybrid Yield Summary (% of test avg.), 2014

| BRAND/NAME | SAD | RND | AVG. |
|---|---|---|---|
| **ALTA** | | | |
| AG1203 | -- | 71 | -- |
| AG2101 | -- | 104 | -- |
| AG2102 | -- | 87 | -- |
| AG2103 | -- | 117 | -- |
| AG2104 | -- | 109 | -- |
| AG2105 | -- | 106 | -- |
| AG2115 | -- | 118 | -- |
| AG3101 | -- | 111 | -- |
| AG3201 | -- | 139 | -- |
| **ARMOR** | | | |
| 3108 | 103 | 88 | 96 |
| 3197R | 88 | 91 | 89 |
| AXM11043 | 102 | 101 | 101 |
| AXM12423 | 84 | 106 | 95 |
| AXM68653 | 81 | 83 | 82 |
| AXM8041 | 105 | 101 | 103 |
| AXM9010 | 89 | 80 | 84 |
| AXM9033 | 97 | 103 | 100 |
| AXM9058 | 107 | 88 | 97 |
| AXM91743 | 98 | 110 | 104 |
| AXM9813 | 99 | 98 | 98 |
| BANDIT | 102 | 145 | 124 |
| LSB50 | 94 | 109 | 102 |
| **BROWNING** | | | |
| 775W | -- | 97 | -- |
| CHALLENGER BMX | -- | 88 | -- |
| **DEKALB** | | | |
| DKS29-28 | 94 | 92 | 93 |
| DKS38-88 | -- | 81 | -- |
| DKS41-50 | 104 | 128 | 116 |
| DKS51-01 | 105 | 103 | 104 |
| DKS53-53 | 107 | 101 | 104 |
| DKS53-67 | 119 | 84 | 102 |
| **DYNA-GRO** | | | |
| 766B | -- | 130 | -- |
| 772B | -- | 68 | -- |
| GX13363 | -- | 110 | -- |
| GX13364 | -- | 88 | -- |
| GX13501 | -- | 80 | -- |
| GX14171 | -- | 95 | -- |
| GX14452 | -- | 98 | -- |
| GX14577 | -- | 79 | -- |
| M72GW14 | -- | 96 | -- |
| M75GB39 | -- | 117 | -- |
| M75GR47 | -- | 138 | -- |
| M77GB52 | -- | 101 | -- |
| **HEARTLAND GENETICS** | | | |
| HG48-B | 111 | 128 | 119 |
| HG52-B | 115 | 96 | 105 |
| HGX5000 | 98 | 96 | 97 |
| **POLANSKY** | | | |
| GS665W | -- | 94 | -- |
| GS718 | 104 | -- | -- |
| GS761 | 96 | 123 | 109 |
| **RICHARDSON** | | | |
| 0413 | -- | 95 | -- |
| 06173 | -- | 82 | -- |
| 68653 | -- | 61 | -- |
| 92123 | -- | 102 | -- |
| 96173 | -- | 95 | -- |
| **WARNER SEEDS** | | | |
| W-7012 | 85 | -- | -- |
| **MATURITY CHECK** | | | |
| EARLY (MY. 1G557) | 95 | 111 | 103 |
| LATE (DKS54-00) | 111 | 88 | 100 |
| MEDIUM (DKS38-88) | 107 | 92 | 99 |
| AVERAGES (bu/a) | 106 | 79 | 92 |
| CV (%) | 9 | 12 | -- |
| LSD (0.05) | 13 | 17 | -- |

SAD = Saline Co., Assaria RND = Reno Co., Hutchinson

## WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

Agricultural Research Center, Hays; Wayne Aschwege, technician

Harney silt loam; wheat in 2013

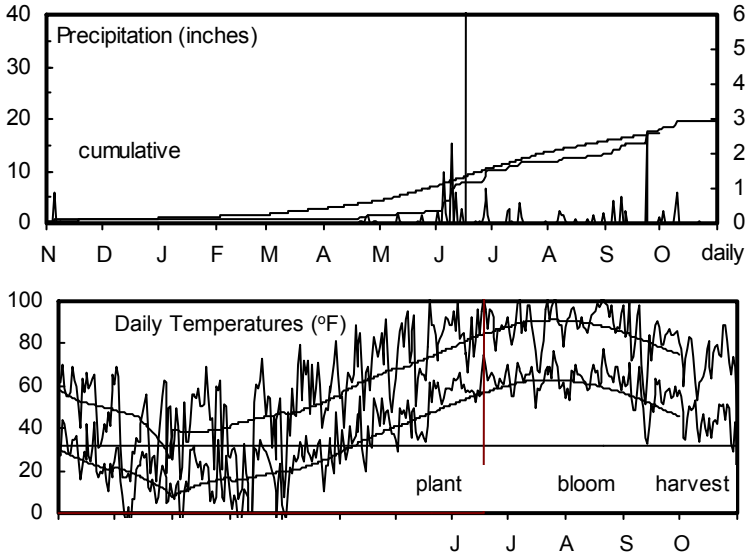
80 - 0 - 0 lb/a N, P, K

Planted on 6/18/2014; Harvested on 11/4/2014

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

Cooler temperatures and wetter summer than normal.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.9 | 2.4 | 32 | 32 | | |
| April | 0.7 | 1.4 | 53 | 49 | 724 | 478 |
| May | 0.6 | 2.9 | 64 | 59 | 957 | 833 |
| June | 7.9 | 3.4 | 75 | 70 | 1127 | 1109 |
| July | 1.7 | 3.1 | 76 | 76 | 1194 | 1344 |
| August | 1.6 | 2.1 | 79 | 74 | 1248 | 1286 |
| Sept. | 4.6 | 1.6 | 69 | 66 | 1001 | 984 |
| Oct. | 1.8 | 0.7 | 58 | 28 | 807 | 454 |
| Totals: | 19.7 | 21.3 | 53 | 50 | 7,058 | 6,488 |




### Table 11. Ellis County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | | | | | | | | |
| DEKALB | DKS29-28 | 73 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 55 | 10 | 57 | 43 | -- | 33 |
| MATURITY CHECK | EARLY (MY. 1G557) | 60 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | 55 | 10 | 56 | 42 | -- | 36 |
| DEKALB | DKS28-05 | 66 | 61 | -- | 64 | -- | 83 | 90 | -- | 60 | 11 | 56 | 10 | 57 | 46 | -- | 28 |
| DEKALB | DKS37-07 | 88 | 73 | -- | 80 | -- | 110 | 108 | -- | 66 | 13 | 59 | 12 | 59 | 51 | -- | 38 |
| POLANSKY | GS524 | 81 | 60 | -- | 70 | -- | 101 | 88 | -- | 69 | 11 | 61 | 10 | 56 | 46 | -- | 27 |
| DEKALB | DKS41-50 | 81 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | 62 | 15 | 59 | 49 | -- | 32 |
| BROWNING | 775W | 65 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | 63 | 10 | 56 | 44 | -- | 30 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 89 | 58 | -- | 74 | -- | 112 | 86 | -- | 70 | 13 | 63 | 12 | 58 | 49 | -- | 33 |
| DEKALB | DKS44-20 | 84 | 59 | -- | 72 | -- | 106 | 87 | -- | 70 | 13 | 63 | 13 | 60 | 48 | -- | 36 |
| HEARTLAND GENETICS | HG48-B | **91** | -- | -- | -- | -- | 114 | -- | -- | -- | -- | 63 | 12 | 60 | 47 | -- | 24 |
| HEARTLAND GENETICS | HG52-B | 89 | -- | -- | -- | -- | 112 | -- | -- | -- | -- | 64 | 12 | 58 | 50 | -- | 36 |
| POLANSKY | GS665W | **101** | **76** | -- | 88 | -- | 126 | 112 | -- | 75 | 13 | 65 | 12 | 59 | 51 | -- | 30 |
| BROWNING | CHALLENGER BMX | 69 | -- | -- | -- | -- | 86 | -- | -- | -- | -- | 65 | 15 | 57 | 43 | -- | 25 |
| MATURITY CHECK | LATE (DKS54-00) | 81 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 66 | 13 | 57 | 40 | -- | 14 |
| | Average | 80 | 68 | -- | 74 | -- | 100 | 100 | -- | 68 | 12 | 61 | 12 | 58 | 46 | -- | 34 |
| | CV (%) | 9 | 13 | -- | 11 | -- | 9 | 13 | -- | -- | -- | 1 | 11 | 2 | 9 | -- | 3 |
| | LSD (0.05) | 10 | 12 | -- | 11 | -- | 12 | 18 | -- | -- | -- | 1 | 2 | 1 | 6 | -- | 1 |

*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.

## WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

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

Keith silt loam; fallow in 2013

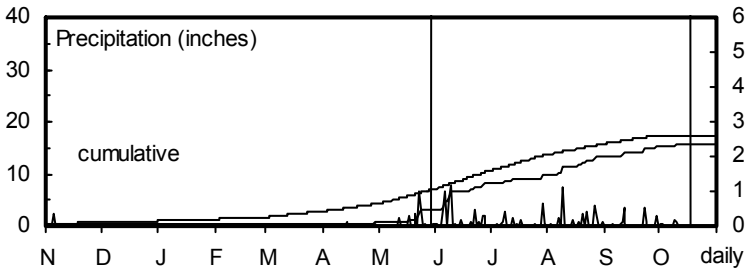
50 - 20 - 0 lb/a N, P, K

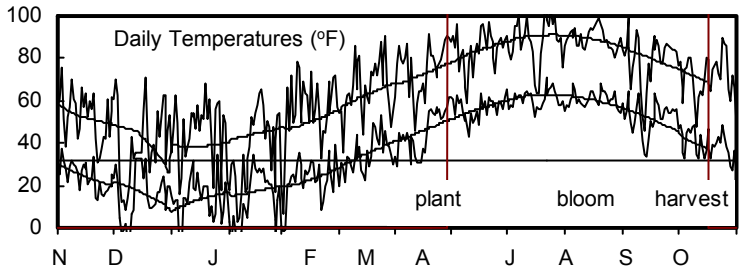
Planted on 5/30/2014; Harvested on 10/16/2014

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

Summer was cooler and wetter than recent years.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.4 | 2.4 | 32 | 32 | | |
| April | 0.2 | 1.4 | 50 | 49 | 688 | 421 |
| May | 2.6 | 2.9 | 60 | 59 | 891 | 762 |
| June | 5.0 | 3.4 | 70 | 70 | 1023 | 1054 |
| July | 1.8 | 3.1 | 75 | 76 | 1144 | 1285 |
| August | 3.4 | 2.1 | 75 | 74 | 1182 | 1216 |
| Sept. | 1.7 | 1.6 | 66 | 66 | 939 | 910 |
| Oct. | 0.4 | 0.2 | 55 | 56 | 785 | 324 |
| Totals: | 15.5 | 17.2 | 51 | 51 | 6,652 | 5,972 |




### Table 12. Thomas County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| B-H GENETICS | BH 3400 | 95 | -- | -- | -- | -- | 90 | -- | -- | -- | -- | 59 | 13 | 57 | 37 | 1 | 29 |
| DEKALB | DKS28-05 | 105 | **50** | -- | 78 | -- | 100 | 128 | -- | 67 | 12 | 66 | 13 | 55 | 39 | 2 | 27 |
| MATURITY CHECK | EARLY (MY. 1G557) | 96 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 66 | 13 | 55 | 37 | 1 | 30 |
| DEKALB | DKS29-28 | 108 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 67 | 13 | 57 | 37 | -- | 30 |
| B-H GENETICS | BH 3600 | 86 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | 67 | 14 | 55 | 34 | 2 | 29 |
| ALTA | AG1201 | 86 | 43 | -- | 64 | -- | 82 | 110 | -- | 70 | 13 | 70 | 14 | 55 | 35 | 5 | 28 |
| DYNA-GRO | GX13501 | 85 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | 71 | 14 | 57 | 41 | -- | 12 |
| B-H GENETICS | BH 3808 | 109 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | 72 | 15 | 57 | 41 | -- | 28 |
| B-H GENETICS | BH 4200C | 93 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 72 | 14 | 56 | 39 | 3 | 29 |
| POLANSKY | GS524 | 120 | -- | -- | -- | -- | 114 | -- | -- | -- | -- | 72 | 15 | 56 | 40 | 3 | 28 |
| DEKALB | DKS44-20 | 108 | 44 | -- | 76 | -- | 103 | 114 | -- | 74 | 14 | 73 | 16 | 57 | 41 | -- | 27 |
| MATURITY CHECK | MEDIUM (DKS38-88) | **116** | 46 | -- | 81 | -- | 110 | 118 | -- | 73 | 15 | 73 | 17 | 55 | 42 | -- | 28 |
| ALTA | AG1401 | 94 | 37 | -- | 65 | -- | 89 | 95 | -- | 74 | 14 | 74 | 14 | 56 | 39 | 1 | 25 |
| ALTA | AG2104 | 103 | 32 | -- | 67 | -- | 97 | 82 | -- | 76 | 14 | 74 | 15 | 56 | 40 | -- | 28 |
| DEKALB | DKS41-50 | **116** | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 74 | 18 | 57 | 44 | -- | 28 |
| ALTA | AG2115 | 106 | 30 | -- | 68 | -- | 101 | 77 | -- | 77 | 15 | 75 | 16 | 56 | 40 | -- | 30 |
| B-H GENETICS | BH 5224 | **117** | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 75 | 17 | 57 | 40 | -- | 29 |
| DEKALB | DKS38-88 | **122** | 46 | -- | 84 | -- | 115 | 118 | -- | 73 | 15 | 75 | 17 | 54 | 44 | -- | 29 |
| ALTA | AG2105 | 97 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 76 | 18 | 56 | 40 | -- | 26 |
| B-H GENETICS | BH 4100 | 107 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 76 | 19 | 56 | 41 | -- | 26 |
| ALTA | AG1203 | **130** | -- | -- | -- | -- | 123 | -- | -- | -- | -- | 77 | 19 | 57 | 40 | -- | 27 |
| RICHARDSON | 92123 | 98 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | 77 | 18 | 56 | 43 | -- | 26 |
| POLANSKY | GS 651 Y | 104 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 78 | 21 | 55 | 42 | -- | 20 |
| ALTA | XG02008 | **115** | -- | -- | -- | -- | 109 | -- | -- | -- | -- | 79 | 20 | 54 | 41 | -- | 26 |
| RICHARDSON | 0413 | 94 | 49 | -- | 72 | -- | 90 | 127 | -- | 78 | 16 | 79 | 18 | 52 | 40 | -- | 23 |
| DYNA-GRO | 722B | **120** | -- | -- | -- | -- | 114 | -- | -- | -- | -- | 81 | 21 | 53 | 40 | -- | 26 |
| RICHARDSON | 96173 | **126** | 35 | -- | 81 | -- | 120 | 89 | -- | 77 | 16 | 81 | 20 | 55 | 43 | -- | 27 |
| DYNA-GRO | M72GW14 | 83 | -- | -- | -- | -- | 79 | -- | -- | -- | -- | 83 | 24 | 52 | 39 | -- | 21 |
| ALTA | AG2101 | 100 | 37 | -- | 68 | -- | 95 | 96 | -- | 82 | 20 | 84 | 24 | 53 | 39 | -- | 27 |
| MATURITY CHECK | LATE (DKS54-00) | 109 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | 84 | 21 | 51 | 43 | -- | 19 |
| RICHARDSON | 06173 | 108 | 32 | -- | 70 | -- | 102 | 82 | -- | 82 | 19 | 84 | 21 | 52 | 44 | -- | 28 |
| RICHARDSON | 68653 | 110 | 30 | -- | 70 | -- | 104 | 78 | -- | 83 | 18 | 85 | 20 | 49 | 44 | -- | 22 |
| DYNA-GRO | M71GB01 | 107 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 87 | 23 | 48 | 43 | -- | 27 |
| | Average | 105 | 39 | -- | 72 | -- | 100 | 100 | -- | 76 | 15 | 75 | 17 | 55 | 40 | 1 | 26 |
| | CV (%) | 11 | 12 | -- | 11 | -- | 11 | 12 | -- | -- | -- | 2 | 7 | 2 | 4 | -- | 7 |
| | LSD (0.05) | 16 | 17 | -- | 16 | -- | 15 | 17 | -- | -- | -- | 2 | 2 | 2 | 3 | 2 | 3 |

*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.

## WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist; DeWayne Bond; technician

Ulysses silt loam; fallow in 2013

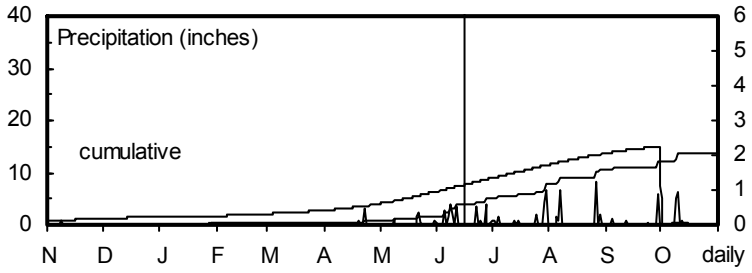
90 - 40 - 0 lb/a N, P, K

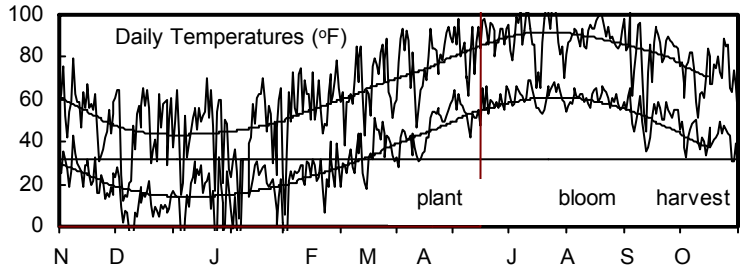
Planted on 6/16/2014; Harvested on 11/9/2014

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

Conditions improved after June 1.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.2 | 2.1 | 34 | 34 | | |
| April | 0.6 | 1.3 | 51 | 49 | 705 | 430 |
| May | 0.9 | 2.3 | 62 | 59 | 909 | 772 |
| June | 3.3 | 2.5 | 72 | 70 | 1050 | 1063 |
| July | 2.7 | 2.6 | 76 | 76 | 1155 | 1287 |
| August | 2.9 | 2.3 | 76 | 74 | 1185 | 1209 |
| Sept. | 1.4 | 1.3 | 67 | 66 | 957 | 934 |
| Oct. | 1.8 | 0.3 | 56 | 57 | 798 | 340 |
| Totals: | 13.8 | 14.7 | 52 | 52 | 6,760 | 6,035 |




### Table 13. Greeley County Dryland Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| MATURITY CHECK | EARLY (MY. 1G557) | 105 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 64 | 10 | 59 | 40 | -- | 34 |
| DEKALB | DKS28-05 | **129** | 118 | -- | 124 | -- | 123 | 94 | -- | 66 | 11 | 65 | 9 | 59 | 49 | -- | 34 |
| DEKALB | DKS29-28 | 102 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 66 | 10 | 59 | 42 | -- | 36 |
| DEKALB | DKS37-07 | 113 | **136** | -- | 124 | -- | 107 | 109 | -- | 75 | 14 | 71 | 12 | 56 | 51 | -- | 34 |
| DEKALB | DKS38-88 | 113 | **145** | -- | 129 | -- | 107 | 116 | -- | 74 | 14 | 72 | 13 | 56 | 56 | -- | 33 |
| DEKALB | DKS41-50 | **129** | -- | -- | -- | -- | 123 | -- | -- | -- | -- | 72 | 13 | 56 | 60 | -- | 36 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 117 | **145** | -- | 131 | -- | 111 | 116 | -- | 74 | 14 | 72 | 13 | 56 | 56 | -- | 33 |
| RICHARDSON | 92123 | 107 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 72 | 13 | 56 | 54 | -- | 30 |
| DEKALB | DKS44-20 | 108 | 125 | -- | 117 | -- | 103 | 100 | -- | 76 | 14 | 74 | 12 | 57 | 53 | -- | 36 |
| RICHARDSON | 0413 | 87 | **--** | -- | -- | -- | 83 | -- | -- | -- | -- | 80 | 12 | 56 | 52 | -- | 27 |
| MATURITY CHECK | LATE (DKS54-00) | 92 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 83 | 15 | 54 | 55 | -- | 21 |
| RICHARDSON | 96173 | 98 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 84 | 17 | 53 | 60 | -- | 29 |
| RICHARDSON | 06173 | 92 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 85 | 17 | 53 | 61 | -- | 33 |
| RICHARDSON | 68653 | 80 | -- | -- | -- | -- | 76 | -- | -- | -- | -- | 87 | 16 | 54 | 61 | -- | 25 |
| | Average | 105 | 125 | -- | 115 | -- | 100 | 100 | -- | 73 | 13 | 75 | 13 | 56 | 53 | -- | 32 |
| | CV (%) | 6 | 8 | -- | 7 | -- | 6 | 8 | -- | -- | -- | 2 | 6 | 1 | 4 | -- | 7 |
| | LSD (0.05) | 9 | 13 | -- | 11 | -- | 9 | 11 | -- | -- | -- | 2 | 1 | 1 | 3 | -- | 3 |

*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 14. WESTERN Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2014

| BRAND/NAME | ELD | THD | GRD | FND | AVG. |
|---|---|---|---|---|---|
| **ALTA** | | | | | |
| AG1201 | -- | 82 | -- | -- | -- |
| AG1203 | -- | 123 | -- | -- | -- |
| AG1401 | -- | 89 | -- | -- | -- |
| AG2101 | -- | 95 | -- | -- | -- |
| AG2104 | -- | 97 | -- | -- | -- |
| AG2105 | -- | 92 | -- | -- | -- |
| AG2115 | -- | 101 | -- | -- | -- |
| XG02008 | -- | 109 | -- | -- | -- |
| **B-H GENETICS** | | | | | |
| BH 3400 | -- | 90 | -- | -- | -- |
| BH 3600 | -- | 82 | -- | -- | -- |
| BH 3808 | -- | 104 | -- | -- | -- |
| BH 4100 | -- | 102 | -- | -- | -- |
| BH 4200C | -- | 88 | -- | -- | -- |
| BH 5224 | -- | 111 | -- | -- | -- |
| **BROWNING** | | | | | |
| 775W | 81 | -- | -- | -- | -- |
| CHALLENGER BMX | 86 | -- | -- | -- | -- |
| **DEKALB** | | | | | |
| DKS28-05 | 83 | 100 | 123 | -- | 102 |
| DKS29-28 | 92 | 103 | 97 | -- | 97 |
| DKS37-07 | 110 | -- | 107 | -- | -- |
| DKS38-88 | -- | 115 | 107 | -- | -- |
| DKS41-50 | 101 | 110 | 123 | -- | 111 |
| DKS44-20 | 106 | 103 | 103 | -- | 104 |
| **DYNA-GRO** | | | | | |
| 722B | -- | 114 | -- | -- | -- |
| GX13501 | -- | 81 | -- | -- | -- |
| M71GB01 | -- | 102 | -- | -- | -- |
| M72GW14 | -- | 79 | -- | -- | -- |
| **HEARTLAND GENETICS** | | | | | |
| HG48-B | 114 | -- | -- | -- | -- |
| HG52-B | 112 | -- | -- | -- | -- |
| **POLANSKY** | | | | | |
| GS 651 Y | -- | 99 | -- | -- | -- |
| GS524 | 101 | 114 | -- | -- | -- |
| GS665W | 126 | -- | -- | -- | -- |
| **RICHARDSON** | | | | | |
| 0413 | -- | 90 | 83 | -- | -- |
| 06173 | -- | 102 | 88 | -- | -- |
| 68653 | -- | 104 | 76 | -- | -- |
| 92123 | -- | 93 | 102 | -- | -- |
| 96173 | -- | 120 | 94 | -- | -- |
| **MATURITY CHECK** | | | | | |
| EARLY (MY. 1G557) | 75 | 92 | 100 | -- | 89 |
| LATE (DKS54-00) | 102 | 104 | 88 | -- | 98 |
| MEDIUM (DKS38-88) | 112 | 110 | 111 | -- | 111 |
| AVERAGES (bu/a) | 80 | 105 | 105 | -- | 97 |
| CV (%) | 9 | 11 | 6 | -- | -- |
| LSD (0.05) | 12 | 15 | 9 | -- | -- |

ELD = Ellis Co., Hays THD = Thomas Co., Colby GRD = Greeley Co., Tribune FND = Finney Co., Garden City; abandoned.

## SOUTH CENTRAL KANSAS IRRIGATED GRAIN SORGHUM TEST

South Central Kansas Experiment Field, Hutchinson; Gary Cramer, agronomist; Keith Thompson, technician

Ost loam; soybean in 2013

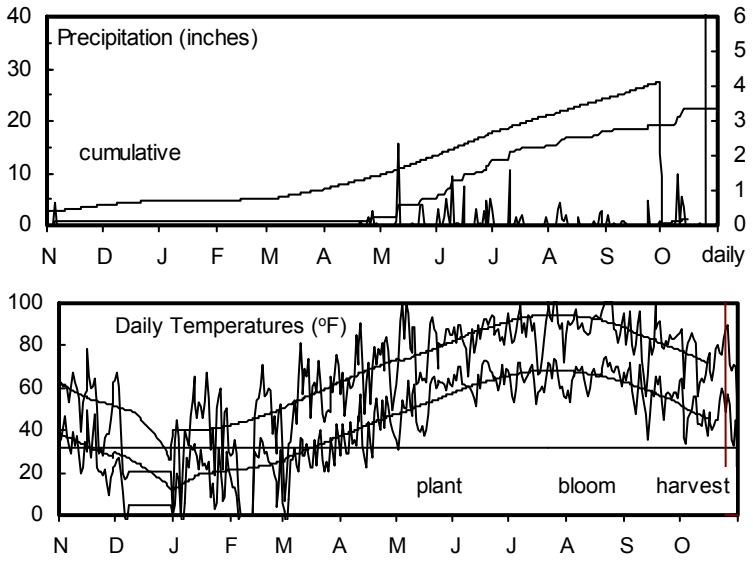
100 - 0 - 0 lb/a N, P, K

Planted on 5/16/2014; Harvested on 10/24/2014

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

Some bird feeding prior to harvest.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.7 | 4.4 | 30 | 37 | | |
| April | 0.8 | 2.6 | 54 | 55 | 731 | 617 |
| May | 3.8 | 3.8 | 67 | 65 | 1002 | 927 |
| June | 6.9 | 4.3 | 75 | 75 | 1163 | 1196 |
| July | 2.9 | 3.5 | 76 | 81 | 1197 | 1416 |
| August | 2.8 | 3.1 | 79 | 79 | 1271 | 1361 |
| Sept. | 1.5 | 3.3 | 70 | 70 | 1041 | 1053 |
| Oct. | 3.0 | 1.1 | 60 | 62 | 850 | 407 |
| Totals: | 22.3 | 26.1 | 53 | 56 | 7,255 | 6,977 |







### Table 15. Reno County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| ALTA | AG1203 | 162 | -- | -- | -- | -- | 108 | -- | -- | -- | -- | -- | 17 | 58 | -- | -- | -- |
| ALTA | AG2101 | 144 | 134 | -- | 139 | -- | 96 | 99 | -- | -- | 17 | -- | 18 | 55 | -- | -- | -- |
| ALTA | AG2102 | 155 | 129 | -- | 142 | -- | 104 | 96 | -- | -- | 15 | -- | 16 | 56 | -- | -- | -- |
| ALTA | AG2103 | 111 | 131 | -- | 121 | -- | 75 | 97 | -- | -- | 18 | -- | 20 | 56 | -- | -- | -- |
| ALTA | AG2104 | 103 | 122 | -- | 113 | -- | 69 | 90 | -- | -- | 17 | -- | 18 | 55 | -- | -- | -- |
| ALTA | AG2105 | 95 | -- | -- | -- | -- | 63 | -- | -- | -- | -- | -- | 20 | 56 | -- | -- | -- |
| ALTA | AG2115 | 118 | 130 | -- | 124 | -- | 79 | 96 | -- | -- | 17 | -- | 17 | 56 | -- | -- | -- |
| ALTA | XG30003 | 163 | -- | -- | -- | -- | 109 | -- | -- | -- | -- | -- | 18 | 58 | -- | -- | -- |
| ARMOR | 3108 | 159 | -- | -- | -- | -- | 107 | -- | -- | -- | -- | -- | 19 | 56 | -- | -- | -- |
| ARMOR | 3197R | 165 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | -- | 19 | 57 | -- | -- | -- |
| ARMOR | AXM11043 | 158 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | -- | 21 | 54 | -- | -- | -- |
| ARMOR | AXM12423 | 134 | -- | -- | -- | -- | 89 | -- | -- | -- | -- | -- | 17 | 55 | -- | -- | -- |
| ARMOR | AXM68653 | 168 | -- | -- | -- | -- | 113 | -- | -- | -- | -- | -- | 18 | 55 | -- | -- | -- |
| ARMOR | AXM8041 | 125 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | -- | 21 | 55 | -- | -- | -- |
| ARMOR | AXM9010 | 153 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 18 | 56 | -- | -- | -- |
| ARMOR | AXM9033 | 156 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 17 | 57 | -- | -- | -- |
| ARMOR | AXM9058 | 116 | -- | -- | -- | -- | 78 | -- | -- | -- | -- | -- | 18 | 53 | -- | -- | -- |
| ARMOR | AXM91743 | 100 | -- | -- | -- | -- | 67 | -- | -- | -- | -- | -- | 23 | 53 | -- | -- | -- |
| ARMOR | AXM9813 | 167 | -- | -- | -- | -- | 112 | -- | -- | -- | -- | -- | 18 | 57 | -- | -- | -- |
| ARMOR | BANDIT | 175 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | -- | 18 | 58 | -- | -- | -- |
| ARMOR | LSB50 | 156 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 18 | 54 | -- | -- | -- |
| DEKALB | DKS29-28 | 119 | -- | -- | -- | -- | 80 | -- | -- | -- | -- | -- | 17 | 52 | -- | -- | -- |
| DEKALB | DKS49-45 | **176** | **156** | -- | 166 | -- | 118 | 116 | -- | -- | 16 | -- | 16 | 60 | -- | -- | -- |
| DEKALB | DKS51-01 | **186** | **150** | -- | 168 | -- | 125 | 111 | -- | -- | 17 | -- | 16 | 59 | -- | -- | -- |
| DEKALB | DKS53-53 | **196** | -- | -- | -- | -- | 131 | -- | -- | -- | -- | -- | 17 | 58 | -- | -- | -- |
| DEKALB | DKS54-00 | **176** | 148 | -- | 162 | -- | 118 | 109 | -- | -- | 16 | -- | 16 | 58 | -- | -- | -- |
| DYNA-GRO | 766B | 142 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | -- | 18 | 57 | -- | -- | -- |
| DYNA-GRO | 772B | 135 | -- | -- | -- | -- | 91 | -- | -- | -- | -- | -- | 18 | 52 | -- | -- | -- |
| DYNA-GRO | GX13355 | 151 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| DYNA-GRO | GX13363 | 157 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | -- | 19 | 58 | -- | -- | -- |
| DYNA-GRO | GX13364 | 155 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| DYNA-GRO | GX13492 | 166 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 16 | 56 | -- | -- | -- |
| DYNA-GRO | GX14171 | 143 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | -- | 22 | 57 | -- | -- | -- |
| DYNA-GRO | GX14452 | 146 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | -- | 16 | 57 | -- | -- | -- |
| DYNA-GRO | GX14577 | 165 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| DYNA-GRO | M75GR47 | 131 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | 16 | 57 | -- | -- | -- |
| DYNA-GRO | M77GB52 | 157 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | -- | 18 | 56 | -- | -- | -- |
| DYNA-GRO | M77GR61 | 167 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | -- | 16 | 55 | -- | -- | -- |
| HEARTLAND GENETICS | HG48-B | 96 | -- | -- | -- | -- | 64 | -- | -- | -- | -- | -- | 18 | 56 | -- | -- | -- |
| HEARTLAND GENETICS | HG52-B | **178** | -- | -- | -- | -- | 119 | -- | -- | -- | -- | -- | 16 | 57 | -- | -- | -- |
| HEARTLAND GENETICS | HGX5000 | 137 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| MATURITY CHECK | EARLY (MY. 1G557) | 110 | -- | -- | -- | -- | 74 | -- | -- | -- | -- | -- | 16 | 56 | -- | -- | -- |
| MATURITY CHECK | LATE (DKS54-00) | 148 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | -- | 17 | 58 | -- | -- | -- |
| MATURITY CHECK | MEDIUM (DKS38-88) | 139 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | -- | 19 | 56 | -- | -- | -- |
| MYCOGEN | 627 | 137 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| MYCOGEN | 737 | **199** | -- | -- | -- | -- | 133 | -- | -- | -- | -- | -- | 15 | 58 | -- | -- | -- |
| MYCOGEN | IG588 | 138 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- | 16 | 59 | -- | -- | -- |
| MYCOGEN | IG688 | **176** | -- | -- | -- | -- | 118 | -- | -- | -- | -- | -- | 20 | 55 | -- | -- | -- |

## Table 15 continued. Reno County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| MYCOGEN | IG741 | 156 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | -- | 17 | 56 | -- | -- | -- |
| MYCOGEN | M3838 | 138 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | -- | 17 | 58 | -- | -- | -- |
| RICHARDSON | 0413 | 160 | 133 | -- | 147 | -- | 107 | 98 | -- | -- | 15 | -- | 16 | 55 | -- | -- | -- |
| RICHARDSON | 06173 | 167 | 146 | -- | 157 | -- | 112 | 108 | -- | -- | 18 | -- | 17 | 56 | -- | -- | -- |
| RICHARDSON | 68653 | 164 | 125 | -- | 144 | -- | 110 | 93 | -- | -- | 19 | -- | 19 | 55 | -- | -- | -- |
| RICHARDSON | 92123 | 161 | 128 | -- | 144 | -- | 108 | 94 | -- | -- | 18 | -- | 19 | 54 | -- | -- | -- |
| RICHARDSON | 96173 | 159 | 143 | -- | 151 | -- | 107 | 106 | -- | -- | 19 | -- | 19 | 56 | -- | -- | -- |
| WARNER SEEDS | W-7012 | 152 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | -- | 18 | 56 | -- | -- | -- |
| | Average | 149 | 135 | -- | 142 | -- | 100 | 100 | -- | -- | 17 | -- | 18 | 56 | -- | -- | -- |
| | CV (%) | 11 | 6 | -- | 9 | -- | 11 | 6 | -- | -- | -- | -- | 12 | 3 | -- | -- | -- |
| | LSD (0.05) | 24 | 11 | -- | 17 | -- | 16 | 8 | -- | -- | -- | -- | 3 | 3 | -- | -- | -- |

*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.

## WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

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

Keith silt loam; sunflower in 2013

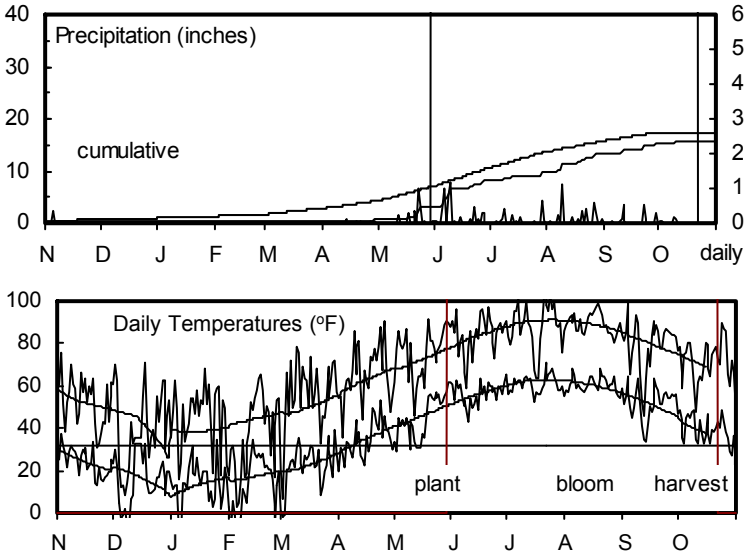
160 - 35 - 0 lb/a N, P, K

Planted on 5/30/2014; Harvested on 10/21/2014

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

Good stands were established, and the growing season was about normal.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.4 | 2.4 | 32 | 32 | | |
| April | 0.2 | 1.4 | 50 | 49 | 688 | 421 |
| May | 2.6 | 2.9 | 60 | 59 | 891 | 762 |
| June | 5.0 | 3.4 | 70 | 70 | 1023 | 1054 |
| July | 1.8 | 3.1 | 75 | 76 | 1144 | 1285 |
| August | 3.4 | 2.1 | 75 | 74 | 1182 | 1216 |
| Sept. | 1.7 | 1.6 | 66 | 66 | 939 | 910 |
| Oct. | 0.4 | 0.2 | 55 | 56 | 785 | 324 |
| Totals: | 15.5 | 17.2 | 51 | 51 | 6,652 | 5,972 |




### Table 16. Thomas County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 Days to blm | 2013-2014 Grain moist. % | Days to blm | Grain moist. % | Test wt. lb/bu | Plnt ht. in. | Ldg % | Pop. 1000 ppa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | | | | | | | | |
| **BRAND** | **NAME** | **2014** | **2013** | **2012** | **AVG.** | **AVG.** | **2014** | **2013** | **2012** | | | | | | | | |
| MATURITY CHECK | EARLY (MY. 1G557) | 139 | -- | -- | -- | -- | 75 | -- | -- | -- | -- | 62 | 13 | 57 | 43 | -- | 90 |
| B-H GENETICS | BH 3600 | 122 | -- | -- | -- | -- | 66 | -- | -- | -- | -- | 64 | 14 | 56 | 38 | -- | 78 |
| DEKALB | DKS29-28 | 160 | -- | -- | -- | -- | 87 | -- | -- | -- | -- | 64 | 13 | 57 | 43 | -- | 87 |
| B-H GENETICS | BH 3808 | 169 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 68 | 14 | 58 | 47 | -- | 81 |
| GOLDEN ACRES | GA 5515 | 179 | -- | -- | -- | -- | 97 | -- | -- | -- | -- | 68 | 15 | 58 | 50 | -- | 66 |
| MYCOGEN | IG588 | 169 | -- | -- | -- | -- | 92 | -- | -- | -- | -- | 68 | 14 | 59 | 51 | -- | 88 |
| B-H GENETICS | BH 5224 | **206** | -- | -- | -- | -- | 112 | -- | -- | -- | -- | 70 | 16 | 59 | 55 | -- | 55 |
| DYNA-GRO | GX13501 | 185 | -- | -- | -- | -- | 101 | -- | -- | -- | -- | 70 | 14 | 58 | 49 | -- | 33 |
| GOLDEN ACRES | GA 5613 | **204** | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 70 | 16 | 59 | 53 | -- | 77 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 189 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 70 | 16 | 59 | 57 | -- | 85 |
| MYCOGEN | 627 | 154 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 70 | 17 | 57 | 51 | -- | 56 |
| B-H GENETICS | BH 4100 | 189 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 71 | 16 | 60 | 51 | -- | 81 |
| MYCOGEN | M3838 | 168 | -- | -- | -- | -- | 91 | -- | -- | -- | -- | 71 | 15 | 59 | 48 | -- | 52 |
| DEKALB | DKS54-00 | **207** | 174 | 145 | 191 | 175 | 113 | 104 | 97 | 74 | 16 | 72 | 17 | 58 | 56 | -- | 75 |
| GOLDEN ACRES | 3545 | 181 | 168 | 137 | 175 | 162 | 99 | 100 | 92 | 71 | 16 | 72 | 16 | 59 | 54 | -- | 74 |
| DEKALB | DKS51-01 | 190 | 172 | 145 | 181 | 169 | 104 | 103 | 97 | 72 | 16 | 73 | 17 | 60 | 60 | -- | 61 |
| DYNA-GRO | 722B | 187 | -- | -- | -- | -- | 102 | -- | -- | -- | -- | 73 | 17 | 59 | 54 | -- | 69 |
| GOLDEN ACRES | H-390W | 196 | -- | -- | -- | -- | 107 | -- | -- | -- | -- | 73 | 16 | 58 | 50 | -- | 67 |
| HEARTLAND GENETICS | HG48-B | 184 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 73 | 16 | 59 | 49 | -- | 82 |
| HEARTLAND GENETICS | HGX5000 | 175 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 73 | 15 | 59 | 51 | -- | 67 |
| RICHARDSON | 0413 | 176 | 162 | -- | 169 | -- | 96 | 97 | -- | 73 | 16 | 73 | 17 | 56 | 55 | -- | 59 |
| RICHARDSON | 92123 | 182 | 161 | -- | 171 | -- | 99 | 96 | -- | 72 | 15 | 73 | 16 | 60 | 56 | -- | 82 |
| DEKALB | DKS53-53 | **226** | -- | -- | -- | -- | 123 | -- | -- | -- | -- | 74 | 20 | 58 | 54 | -- | 83 |
| DEKALB | DKS53-67 | 201 | **183** | 165 | 192 | 183 | 110 | 109 | 110 | 74 | 18 | 74 | 18 | 59 | 51 | -- | 75 |
| MYCOGEN | 737 | 185 | 161 | -- | 173 | -- | 101 | 96 | -- | 73 | 15 | 74 | 16 | 58 | 49 | -- | 85 |
| DYNA-GRO | M72GW14 | 153 | -- | -- | -- | -- | 83 | -- | -- | -- | -- | 76 | 18 | 59 | 52 | -- | 55 |
| GOLDEN ACRES | 3637 | 190 | -- | -- | -- | -- | 104 | -- | -- | -- | -- | 76 | 19 | 58 | 53 | -- | 86 |
| HEARTLAND GENETICS | HG52-B | 170 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | 76 | 19 | 58 | 54 | -- | 81 |
| MATURITY CHECK | LATE (DKS54-00) | **212** | -- | -- | -- | -- | 115 | -- | -- | -- | -- | 76 | 20 | 57 | 54 | -- | 78 |
| MYCOGEN | IG688 | 190 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 76 | 22 | 56 | 53 | -- | 70 |
| MYCOGEN | IG741 | **213** | -- | -- | -- | -- | 116 | -- | -- | -- | -- | 76 | 18 | 58 | 54 | -- | 78 |
| RICHARDSON | 06173 | 194 | **179** | -- | 186 | -- | 105 | 107 | -- | 77 | 18 | 76 | 20 | 57 | 62 | -- | 80 |
| RICHARDSON | 96173 | 197 | 176 | -- | 186 | -- | 107 | 105 | -- | 76 | 18 | 76 | 19 | 58 | 60 | -- | 69 |
| RICHARDSON | 68653 | 196 | 174 | -- | 185 | -- | 107 | 104 | -- | 76 | 19 | 77 | 20 | 57 | 63 | -- | 63 |
| DYNA-GRO | M71GB01 | 190 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 79 | 21 | 57 | 61 | -- | 67 |
| | Average | 184 | 168 | 150 | 176 | 167 | 100 | 100 | 100 | 74 | 17 | 72 | 17 | 58 | 52 | -- | 71 |
| | CV (%) | 9 | 7 | 8 | 8 | 8 | 9 | 7 | 8 | -- | -- | 1 | 7 | 1 | 3 | -- | 18 |
| | LSD (0.05) | 24 | 15 | 18 | 20 | 19 | 13 | 9 | 12 | -- | -- | 1 | 2 | 1 | 2 | -- | 18 |

*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.

## WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist; Dewayne Bond, technician

Ulysses silt loam; wheat in 2013

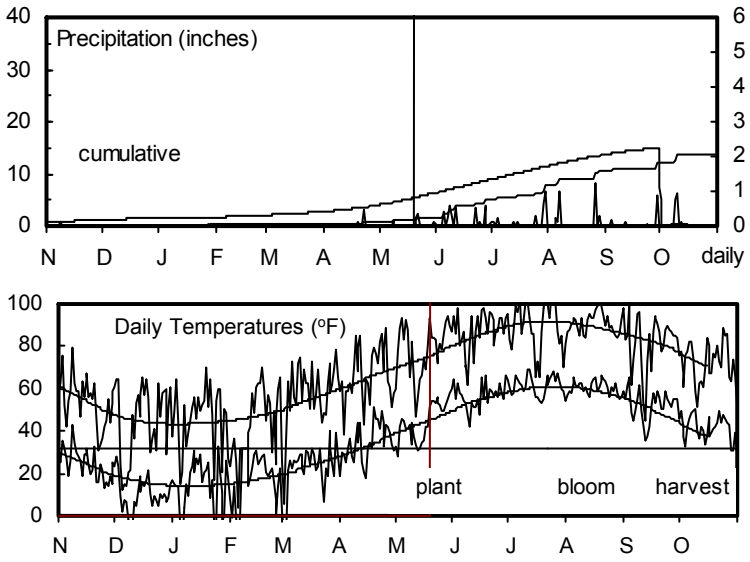
130 - 40 - 0 lb/a N, P, K

Planted on 5/20/2014; Harvested on 11/7/2014

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

Irrigation totaled 12.7 inches.

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.2 | 2.1 | 34 | 34 | | |
| April | 0.6 | 1.3 | 51 | 49 | 705 | 430 |
| May | 0.9 | 2.3 | 62 | 59 | 909 | 772 |
| June | 3.3 | 2.5 | 72 | 70 | 1050 | 1063 |
| July | 2.7 | 2.6 | 76 | 76 | 1155 | 1287 |
| August | 2.9 | 2.3 | 76 | 74 | 1185 | 1209 |
| Sept. | 1.4 | 1.3 | 67 | 66 | 957 | 934 |
| Oct. | 1.8 | 0.3 | 56 | 57 | 798 | 340 |
| Totals: | 13.8 | 14.7 | 52 | 52 | 6,760 | 6,035 |







### Table 17. Greeley County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| MATURITY CHECK | EARLY (MY. 1G557) | 101 | -- | -- | -- | -- | 62 | -- | -- | -- | -- | 69 | 9 | 59 | 39 | -- | 68 |
| DEKALB | DKS29-28 | 127 | -- | -- | -- | -- | 78 | -- | -- | -- | -- | 71 | 9 | 59 | 41 | -- | 63 |
| MYCOGEN | IG588 | 151 | -- | -- | -- | -- | 93 | -- | -- | -- | -- | 75 | 9 | 59 | 49 | -- | 60 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 172 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 76 | 10 | 59 | 53 | -- | 68 |
| MYCOGEN | 627 | 143 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | 78 | 10 | 59 | 50 | -- | 58 |
| DEKALB | DKS49-45 | 179 | **139** | 168 | 159 | 162 | 110 | 104 | 100 | 79 | 13 | 79 | 10 | 59 | 55 | -- | 68 |
| DEKALB | DKS54-00 | 176 | **143** | **181** | 160 | 167 | 108 | 107 | 108 | 80 | 13 | 79 | 10 | 59 | 57 | -- | 61 |
| MYCOGEN | M3838 | 142 | -- | -- | -- | -- | 87 | -- | -- | -- | -- | 79 | 11 | 58 | 48 | -- | 49 |
| RICHARDSON | 92123 | 164 | 128 | -- | 146 | -- | 101 | 96 | -- | 77 | 12 | 79 | 10 | 59 | 55 | -- | 67 |
| DEKALB | DKS51-01 | 167 | **139** | 168 | 153 | 158 | 103 | 104 | 100 | 81 | 13 | 81 | 11 | 58 | 59 | -- | 67 |
| RICHARDSON | 0413 | 166 | 122 | -- | 144 | -- | 102 | 91 | -- | 79 | 13 | 81 | 11 | 58 | 54 | -- | 51 |
| DEKALB | DKS53-53 | **209** | -- | -- | -- | -- | 128 | -- | -- | -- | -- | 83 | 11 | 58 | 55 | -- | 69 |
| MATURITY CHECK | LATE (DKS54-00) | 169 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 83 | 10 | 59 | 52 | -- | 29 |
| MYCOGEN | IG688 | 179 | -- | -- | -- | -- | 110 | -- | -- | -- | -- | 85 | 11 | 58 | 53 | -- | 66 |
| RICHARDSON | 96173 | 179 | 129 | -- | 154 | -- | 110 | 96 | -- | 85 | 13 | 85 | 11 | 58 | 62 | -- | 59 |
| RICHARDSON | 06173 | 182 | **153** | -- | 167 | -- | 112 | 114 | -- | 84 | 13 | 87 | 10 | 59 | 62 | -- | 62 |
| RICHARDSON | 68653 | 165 | 120 | -- | 143 | -- | 101 | 89 | -- | 87 | 13 | 87 | 11 | 58 | 60 | -- | 42 |
| | Average | 163 | 132 | 168 | 148 | 154 | 100 | 100 | 100 | 82 | 13 | 80 | 10 | 59 | 53 | -- | 59 |
| | CV (%) | 9 | 12 | 8 | 10 | 10 | 9 | 12 | 8 | -- | -- | 2 | 7 | 1 | 4 | -- | 18 |
| | LSD (0.05) | 20 | 27 | 19 | 24 | 22 | 12 | 20 | 11 | -- | -- | 2 | 1 | 1 | 3 | -- | 15 |

*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.

## WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

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

Keith silt loam; wheat in 2013

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

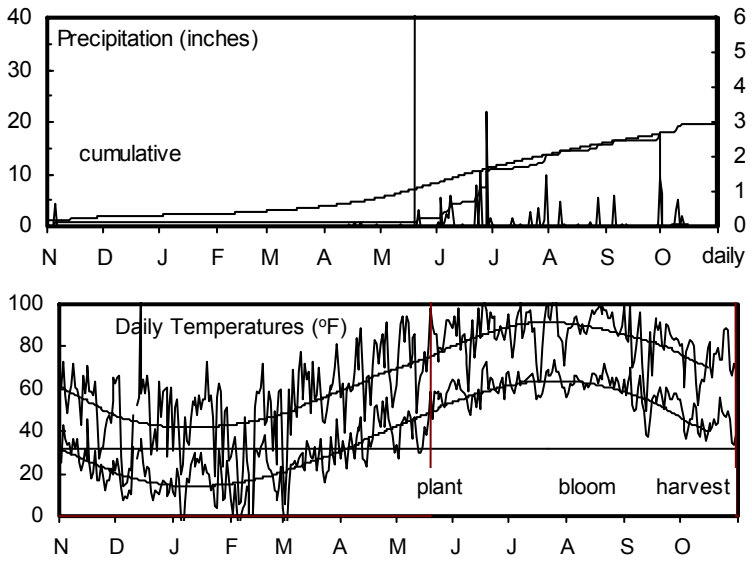
Planted on 5/20/2014; Harvested on 10/29/2014

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

Test recovered from a hailstorm on 6/24/2014.

Irrigation totaled 18.34 inches..

| | Precipitation | | Average Temp. | | GDU | |
|---|---|---|---|---|---|---|
| Month | 2014 | Norm. | 2014 | Norm. | 2014 | Norm. |
| Nov.-Mar. | 0.6 | 2.8 | 34 | 34 | | |
| April | 0.3 | 1.6 | 53 | 50 | 723 | 472 |
| May | 0.6 | 2.9 | 64 | 61 | 958 | 831 |
| June | 9.4 | 3.0 | 74 | 72 | 1099 | 1115 |
| July | 3.0 | 2.5 | 76 | 78 | 1179 | 1321 |
| August | 1.8 | 2.2 | 78 | 75 | 1238 | 1260 |
| Sept. | 2.5 | 1.6 | 69 | 68 | 995 | 973 |
| Oct. | 1.6 | 0.5 | 58 | 58 | 823 | 356 |
| Totals: | 19.7 | 17.1 | 54 | 53 | 7,014 | 6,328 |




### Table 18. Finney County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| ARMOR | AXM91743 | 138 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 67 | 13 | 57 | 57 | -- | 56 |
| MATURITY CHECK | EARLY (MY. 1G557) | 120 | -- | -- | -- | -- | 82 | -- | -- | -- | -- | 67 | 12 | 56 | 48 | -- | 65 |
| DEKALB | DKS29-28 | 127 | -- | -- | -- | -- | 87 | -- | -- | -- | -- | 68 | 12 | 56 | 47 | -- | 60 |
| ARMOR | AXM11043 | 138 | -- | -- | -- | -- | 94 | -- | -- | -- | -- | 73 | 14 | 57 | 56 | -- | 56 |
| MYCOGEN | IG588 | 154 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 73 | 13 | 58 | 57 | -- | 61 |
| ALTA | AG2103 | 146 | 110 | -- | 128 | -- | 100 | 103 | -- | 70 | 14 | 75 | 13 | 60 | 54 | -- | 62 |
| ARMOR | AXM9058 | 144 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 75 | 13 | 56 | 53 | -- | 64 |
| HEARTLAND GENETICS | HG48-B | 146 | -- | -- | -- | -- | 100 | -- | -- | -- | -- | 75 | 13 | 60 | 56 | -- | 63 |
| ALTA | AG2104 | 139 | 100 | -- | 120 | -- | 96 | 94 | -- | 72 | 14 | 76 | 13 | 57 | 52 | -- | 59 |
| ARMOR | AXM12423 | 139 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 76 | 12 | 58 | 56 | -- | 56 |
| GOLDEN ACRES | GA 5613 | 152 | 103 | -- | 127 | -- | 104 | 97 | -- | 68 | 15 | 76 | 14 | 59 | 59 | -- | 64 |
| MYCOGEN | 627 | 123 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 76 | 14 | 58 | 54 | -- | 54 |
| MYCOGEN | M3838 | 123 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 76 | 13 | 60 | 51 | -- | 46 |
| ALTA | AG1203 | 155 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 77 | 13 | 60 | 56 | -- | 62 |
| ALTA | AG2115 | 123 | 107 | -- | 115 | -- | 84 | 100 | -- | 72 | 15 | 77 | 14 | 58 | 55 | -- | 61 |
| GOLDEN ACRES | GA 5515 | 117 | 107 | -- | 112 | -- | 80 | 100 | -- | 73 | 15 | 77 | 14 | 58 | 54 | -- | 60 |
| MATURITY CHECK | MEDIUM (DKS38-88) | 154 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 77 | 15 | 59 | 62 | -- | 58 |
| MYCOGEN | 737 | 168 | 106 | -- | 137 | -- | 116 | 99 | -- | 69 | 14 | 77 | 13 | 59 | 52 | -- | 59 |
| ALTA | AG2105 | 123 | -- | -- | -- | -- | 84 | -- | -- | -- | -- | 78 | 14 | 60 | 57 | -- | 59 |
| ALTA | XG02008 | 150 | -- | -- | -- | -- | 103 | -- | -- | -- | -- | 78 | 15 | 58 | 55 | -- | 52 |
| ARMOR | AXM8041 | 118 | -- | -- | -- | -- | 81 | -- | -- | -- | -- | 78 | 14 | 59 | 60 | -- | 56 |
| GOLDEN ACRES | H-390W | 138 | -- | -- | -- | -- | 95 | -- | -- | -- | -- | 78 | 13 | 58 | 52 | -- | 65 |
| RICHARDSON | 92123 | 136 | 101 | -- | 118 | -- | 93 | 95 | -- | 70 | 15 | 78 | 15 | 59 | 59 | -- | 59 |
| ALTA | AG3101 | 141 | **123** | -- | 132 | -- | 97 | 115 | -- | 73 | 16 | 79 | 15 | 61 | 62 | -- | 61 |
| ARMOR | AXM9010 | 143 | -- | -- | -- | -- | 98 | -- | -- | -- | -- | 79 | 15 | 58 | 61 | -- | 50 |
| ARMOR | LSB50 | 144 | -- | -- | -- | -- | 99 | -- | -- | -- | -- | 79 | 14 | 59 | 59 | -- | 61 |
| DEKALB | DKS49-45 | 148 | 116 | 159 | 132 | 141 | 102 | 109 | 108 | 74 | 15 | 79 | 15 | 59 | 62 | -- | 62 |
| GOLDEN ACRES | 3545 | 151 | 103 | 150 | 127 | 135 | 104 | 96 | 101 | 72 | 15 | 79 | 14 | 59 | 58 | -- | 58 |
| HEARTLAND GENETICS | HGX5000 | 139 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 79 | 13 | 59 | 56 | -- | 59 |
| MYCOGEN | IG741 | 162 | -- | -- | -- | -- | 111 | -- | -- | -- | -- | 79 | 13 | 59 | 58 | -- | 61 |
| RICHARDSON | 0413 | 135 | 96 | -- | 116 | -- | 93 | 90 | -- | 72 | 15 | 79 | 14 | 56 | 58 | -- | 48 |
| ALTA | AG2101 | 140 | 97 | -- | 119 | -- | 96 | 91 | -- | 77 | 15 | 80 | 14 | 59 | 55 | -- | 60 |
| ALTA | AG2102 | 149 | 108 | -- | 128 | -- | 102 | 101 | -- | 71 | 14 | 80 | 14 | 58 | 51 | -- | 62 |
| ALTA | AG3201 | 161 | **128** | -- | 144 | -- | 110 | 120 | -- | 72 | 15 | 80 | 14 | 59 | 59 | -- | 62 |
| ARMOR | AXM9033 | 154 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 80 | 16 | 60 | 63 | -- | 59 |
| DEKALB | DKS53-53 | **193** | -- | -- | -- | -- | 132 | -- | -- | -- | -- | 80 | 15 | 60 | 60 | -- | 61 |
| DEKALB | DKS54-00 | 156 | 108 | 162 | 132 | 142 | 107 | 102 | 109 | 78 | 16 | 80 | 15 | 58 | 61 | -- | 63 |
| GOLDEN ACRES | 3637 | 157 | -- | -- | -- | -- | 108 | -- | -- | -- | -- | 80 | 13 | 59 | 57 | -- | 63 |
| DEKALB | DKS53-67 | 168 | 119 | 158 | 144 | 148 | 116 | 111 | 107 | 77 | 16 | 81 | 15 | 61 | 58 | -- | 66 |
| ARMOR | AXM9813 | 156 | -- | -- | -- | -- | 107 | -- | -- | -- | -- | 82 | 15 | 61 | 61 | -- | 52 |
| ARMOR | BANDIT | 167 | -- | -- | -- | -- | 115 | -- | -- | -- | -- | 82 | 15 | 62 | 61 | -- | 66 |
| HEARTLAND GENETICS | HG52-B | 154 | -- | -- | -- | -- | 106 | -- | -- | -- | -- | 82 | 14 | 59 | 57 | -- | 62 |
| ARMOR | 3108 | 126 | -- | -- | -- | -- | 86 | -- | -- | -- | -- | 83 | 15 | 59 | 60 | -- | 49 |
| MATURITY CHECK | LATE (DKS54-00) | 153 | -- | -- | -- | -- | 105 | -- | -- | -- | -- | 83 | 14 | 58 | 58 | -- | 52 |
| RICHARDSON | 96173 | 156 | 119 | -- | 138 | -- | 107 | 111 | -- | 77 | 17 | 83 | 16 | 60 | 66 | -- | 56 |
| ARMOR | 3197R | 164 | -- | -- | -- | -- | 112 | -- | -- | -- | -- | 84 | 16 | 60 | 66 | -- | 57 |
| MYCOGEN | IG688 | 140 | -- | -- | -- | -- | 96 | -- | -- | -- | -- | 84 | 15 | 58 | 56 | -- | 55 |
| RICHARDSON | 06173 | 151 | 116 | -- | 133 | -- | 104 | 109 | -- | 77 | 17 | 84 | 16 | 58 | 67 | -- | 60 |

## Table 18 continued. Finney County Irrigated Grain Sorghum Performance Test, 2012-2014

| | | ACRE YIELD, BUSHELS | | | | | YIELD AS % OF TEST AVERAGE | | | 2013-2014 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2-yr. | 3-yr. | | | | Days to | Grain moist. | Days to | Grain moist. | Test wt. | Plnt ht. | Ldg | Pop. 1000 |
| BRAND | NAME | 2014 | 2013 | 2012 | AVG. | AVG. | 2014 | 2013 | 2012 | blm | % | blm | % | lb/bu | in. | % | ppa |
| ARMOR | AXM68653 | 157 | -- | -- | -- | -- | 108 | -- | -- | -- | -- | 86 | 16 | 58 | 67 | -- | 46 |
| RICHARDSON | 68653 | 151 | 118 | -- | 135 | -- | 104 | 110 | -- | 80 | 18 | 86 | 17 | 58 | 66 | -- | 47 |
| | Average | 146 | 107 | 148 | 126 | 134 | 100 | 100 | 100 | 73 | 15 | 78 | 14 | 59 | 58 | -- | 58 |
| | CV (%) | 9 | 7 | 6 | 8 | 7 | 9 | 7 | 6 | -- | -- | 2 | 5 | 1 | 3 | -- | 7 |
| | LSD (0.05) | 18 | 11 | 13 | 14 | 14 | 12 | 10 | 9 | -- | -- | 2 | 1 | 1 | 2 | -- | 5 |

*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 19. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2014

| BRAND/NAME | RNI | THI | GRI | FNI | AVG. |
|---|---|---|---|---|---|
| **ALTA** | | | | | |
| AG1203 | 108 | -- | -- | 106 | -- |
| AG2101 | 96 | -- | -- | 96 | -- |
| AG2102 | 104 | -- | -- | 102 | -- |
| AG2103 | 75 | -- | -- | 100 | -- |
| AG2104 | 69 | -- | -- | 96 | -- |
| AG2105 | 63 | -- | -- | 84 | -- |
| AG2115 | 79 | -- | -- | 84 | -- |
| AG3101 | -- | -- | -- | 97 | -- |
| AG3201 | -- | -- | -- | 110 | -- |
| XG02008 | -- | -- | -- | 103 | -- |
| XG30003 | 109 | -- | -- | -- | -- |
| **ARMOR** | | | | | |
| 3108 | 107 | -- | -- | 86 | -- |
| 3197R | 110 | -- | -- | 112 | -- |
| AXM11043 | 106 | -- | -- | 94 | -- |
| AXM12423 | 89 | -- | -- | 96 | -- |
| AXM68653 | 113 | -- | -- | 108 | -- |
| AXM8041 | 84 | -- | -- | 81 | -- |
| AXM9010 | 102 | -- | -- | 98 | -- |
| AXM9033 | 104 | -- | -- | 105 | -- |
| AXM9058 | 78 | -- | -- | 99 | -- |
| AXM91743 | 67 | -- | -- | 95 | -- |
| AXM9813 | 112 | -- | -- | 107 | -- |
| BANDIT | 117 | -- | -- | 115 | -- |
| LSB50 | 104 | -- | -- | 99 | -- |
| **B-H GENETICS** | | | | | |
| BH 3600 | -- | 66 | -- | -- | -- |
| BH 3808 | -- | 92 | -- | -- | -- |
| BH 4100 | -- | 103 | -- | -- | -- |
| BH 5224 | -- | 112 | -- | -- | -- |
| **DEKALB** | | | | | |
| DKS29-28 | 80 | 87 | 78 | 87 | 83 |
| DKS49-45 | 118 | -- | 110 | 102 | -- |
| DKS51-01 | 125 | 104 | 103 | -- | -- |
| DKS53-53 | 131 | 123 | 128 | 132 | 129 |
| DKS53-67 | -- | 110 | -- | 116 | -- |
| DKS54-00 | 118 | 113 | 108 | 107 | 112 |
| **DYNA-GRO** | | | | | |
| 722B | -- | 102 | -- | -- | -- |
| 766B | 95 | -- | -- | -- | -- |
| 772B | 91 | -- | -- | -- | -- |
| GX13355 | 101 | -- | -- | -- | -- |
| GX13363 | 105 | -- | -- | -- | -- |
| GX13364 | 104 | -- | -- | -- | -- |
| GX13492 | 111 | -- | -- | -- | -- |
| GX13501 | -- | 101 | -- | -- | -- |
| GX14171 | 96 | -- | -- | -- | -- |
| GX14452 | 98 | -- | -- | -- | -- |
| GX14577 | 110 | -- | -- | -- | -- |
| M71GB01 | -- | 103 | -- | -- | -- |
| M72GW14 | -- | 83 | -- | -- | -- |
| M75GR47 | 88 | -- | -- | -- | -- |
| M77GB52 | 105 | -- | -- | -- | -- |
| M77GR61 | 111 | -- | -- | -- | -- |
| **GOLDEN ACRES** | | | | | |
| 3545 | -- | 99 | -- | 104 | -- |
| 3637 | -- | 104 | -- | 108 | -- |
| GA 5515 | -- | 97 | -- | 80 | -- |
| GA 5613 | -- | 111 | -- | 104 | -- |
| H-390W | -- | 107 | -- | 95 | -- |
| **HEARTLAND** | | | | | |
| HG48-B | 64 | 100 | -- | 100 | -- |
| HG52-B | 119 | 93 | -- | 106 | -- |
| HGX5000 | 92 | 95 | -- | 96 | -- |

RNI = Reno Co., Hutchinson THI = Thomas Co., Colby GRI = Greeley Co., Tribune FNI = Finney Co., Garden City

## Table 19 continued. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2014

| BRAND/NAME | RNI | THI | GRI | FNI | AVG. |
|---|---|---|---|---|---|
| **MYCOGEN** | | | | | |
| 627 | 92 | 84 | 88 | 84 | 87 |
| 737 | 133 | 101 | -- | 116 | -- |
| IG588 | 92 | 92 | 93 | 106 | 96 |
| IG688 | 118 | 103 | 110 | 96 | 107 |
| IG741 | 104 | 116 | -- | 111 | -- |
| M3838 | 93 | 91 | 87 | 84 | 89 |
| **RICHARDSON** | | | | | |
| 0413 | 107 | 96 | 102 | 93 | 99 |
| 06173 | 112 | 105 | 112 | 104 | 108 |
| 68653 | 110 | 107 | 101 | 104 | 105 |
| 92123 | 108 | 99 | 101 | 93 | 100 |
| 96173 | 107 | 107 | 110 | 107 | 108 |
| **WARNER SEEDS** | | | | | |
| W-7012 | 102 | -- | -- | -- | -- |
| **MATURITY CHECK** | | | | | |
| EARLY (MY. 1G557) | 74 | 75 | 62 | 82 | 73 |
| LATE (DKS54-00) | 99 | 115 | 103 | 105 | 106 |
| MEDIUM (DKS38-88) | 93 | 103 | 105 | 105 | 102 |
| AVERAGES (bu/a) | 149 | 184 | 163 | 146 | 160 |
| CV (%) | 11 | 9 | 9 | 9 | -- |
| LSD (0.05) | 16 | 13 | 12 | 12 | -- |

RNI = Reno Co., Hutchinson THI = Thomas Co., Colby GRI = Greeley Co., Tribune FNI = Finney Co., Garden City

## Table 20. Entries in the 2014 Kansas Grain Sorghum Performance Tests

| BRAND | GC | EC | PC | Mat. | Days | GB |
|---|---|---|---|---|---|---|
| **ALTA** | | | | | | |
| AG1201 | B | - | P | E | - | - |
| AG1203 | B | - | P | ME | - | - |
| AG1401 | W | - | T | ME | - | - |
| AG2102 | R | - | P | M | - | - |
| AG2104 | R | - | P | ME | - | - |
| AG2105 | R | - | P | M | - | - |
| AG2115 | R | - | P | M | - | - |
| AG3201 | B | - | P | ML | - | - |
| XG02008 | R | - | P | M | - | - |
| XG30003 | R | - | P | M | - | - |
| AG2103 | R | - | P | M | 65 | - |
| AG2101 | R | - | P | M | 67 | - |
| AG3101 | R | - | P | L | 68 | - |
| **ARMOR** | | | | | | |
| 3108 | - | - | - | - | - | - |
| 3197R | - | - | - | - | - | - |
| AXM11043 | - | - | - | - | - | - |
| AXM12423 | - | - | - | - | - | - |
| AXM68653 | - | - | - | - | - | - |
| AXM8041 | - | - | - | - | - | - |
| AXM9010 | - | - | - | - | - | - |
| AXM9033 | - | - | - | - | - | - |
| AXM9058 | - | - | - | - | - | - |
| AXM91743 | - | - | - | - | - | - |
| AXM9813 | - | - | - | - | - | - |
| BANDIT | - | - | - | - | - | - |
| LSB50 | - | - | - | - | - | - |
| **B-H GENETICS** | | | | | | |
| BH 3400 | B | - | - | VE | - | - |
| BH 3600 | B | - | - | E | - | C |
| BH 3808 | R | - | - | ME | - | C |
| BH 4100 | B | - | - | M | - | - |
| BH 4200C | C | - | - | ME | - | C |
| BH 5224 | B | - | - | M | - | C,D,E |
| **BROWNING** | | | | | | |
| 775W | C | HY | P | M | 63 | N |
| CHALLENGER BMX | B | HY | P | M | 67 | N |

| BRAND | GC | EC | PC | Mat. | Days | GB |
|---|---|---|---|---|---|---|
| **DEKALB** | | | | | | |
| DKS28-05 | B | HY | P | E | 58 | - |
| DKS29-28 | B | HY | P | E | 58 | CE |
| DKS38-88 | B | HY | P | E | 64 | I |
| DKS37-07 | B | HY | P | E | 67 | CEI |
| DKS41-50 | B | HY | P | M | 67 | - |
| DKS44-20 | B | HY | P | M | 67 | - |
| DKS49-45 | B | HY | P | M | 70 | E,I |
| DKS51-01 | B | HY | P | M | 70 | E,I |
| DKS53-67 | B | HY | P | L | 71 | CEI |
| DKS53-53 | B | HY | P | L | 72 | I |
| DKS54-00 | B | HY | P | L | 75 | CEI |
| **DYNA-GRO** | | | | | | |
| GX13501 | R | HY | P | E | 55 | C,D,E |
| M71GB01 | B | HY | P | E | 55 | C |
| M72GW14 | W | W | T | E | 58 | C,D,E |
| 722B | B | HY | T | E | 60 | CE |
| 766B | B | HY | T | ME | 65 | CDE |
| M75GB39 | R | HY | P | M | 66 | C |
| GX13355 | B | HY | P | M | 67 | C,D,E |
| M75GR47 | R | HY | T | M | 67 | - |
| 772B | B | HY | T | M | 68 | CE |
| GX14452 | B | HY | P | M | 68 | C,E |
| GX13363 | B | HY | P | M | 70 | C,E |
| M77GB52 | B | HY | P | M | 70 | C |
| GX13364 | B | HY | P | L | 71 | C,D,E |
| GX14171 | R | HY | P | L | 72 | C,D,E |
| GX14577 | W | W | T | L | 74 | C,D,E |
| GX13492 | B | HY | P | L | 75 | C,D,E |
| M77GR61 | R | HY | P | L | 76 | C,E |
| **GOLDEN ACRES** | | | | | | |
| GA 5556 | R | HY | P | E | 62 | C,E |
| H-390W | W | W | P | E | 62 | C,E |
| GA 5515 | R | Y | P | M | 64 | C,E |
| 3545 | B | Y | P | M | 66 | CE |
| 3552 | B | Y | P | M | 66 | CE |
| GA 5613 | B | Y | P | M | 66 | C,E |
| 3637 | B | Y | P | M | 67 | C,E |
| **HEARTLAND GENETICS** | | | | | | |
| HG48-B | B | HY | P | M | 67 | C,E |
| HGX5000 | B | HY | P | M | 70 | C,E |
| HG52-B | B | HY | P | ML | 73 | C,E |

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.

## Table 20 continued. Entries in the 2014 Kansas Grain Sorghum Performance Tests

| BRAND | GC | EC | PC | Mat. | Days | GB |
|---|---|---|---|---|---|---|
| **MYCOGEN** | | | | | | |
| IG688 | R | W | P | L | 47 | E |
| IG741 | B | HY | P | L | 48 | - |
| IG588 | B | - | P | E | 58 | - |
| 627 | B | W | P | ME | 64 | - |
| M3838 | C | - | P | ME | 68 | - |
| 737 | B | W | P | M | 69 | - |
| **POLANSKY** | | | | | | |
| GS524 | B | - | P | ME | 60 | C |
| GS 651 Y | Y | - | - | M | 65 | - |
| GS 679 | B | - | P | M | 65 | - |
| GS665W | C | - | P | M | 65 | C |
| GS761 | R | HY | P | M | 65 | C,E |
| GS718 | R | HY | P | ML | 70 | C,E |
| **RICHARDSON** | | | | | | |
| 0413 | - | - | - | - | - | - |
| 06173 | - | - | - | - | - | - |
| 68653 | - | - | - | - | - | - |
| 92123 | - | - | - | - | - | - |
| 96173 | - | - | - | - | - | - |
| **WARNER SEEDS** | | | | | | |
| W-7012 | B | W | P | M | 69 | - |
| **MATURITY CHECK** | | | | | | |
| EARLY (MY. 1G557) | R | W | P | E | 65 | E |
| MEDIUM (DKS38-88) | W | W | P | M | 69 | - |
| LATE (DKS54-00) | 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:

***www.agronomy.k-state.edu/services/crop-performance-tests/index.html***

Excerpts from the
University Research Policy Agreement with Cooperating Seed Companies

Permission is hereby given to Kansas State University (KSU) to test varieties and/or hybrids designated on the attached entry forms in the manner indicated in the test announcements. I certify that seed submitted for testing is a true sample of the seed being offered for sale.

I understand that all results from Kansas Crop Performance Tests belong to the University and the public and shall be controlled by the University so as to produce the greatest benefit to the public. Performance data may be used in the following ways: 1) Tables may be reproduced in their entirety provided the source is referenced and data are not manipulated or reinterpreted; 2) Advertising statements by an individual company about the performance of its entries may be made as long as they are accurate statements about the data as published, with no reference to other companies' names or cultivars. In both cases, the following must be included with the reprint or ad citing the appropriate publication number and title: "See the official Kansas State University Agricultural Experiment Station and Cooperative Extension Service Report of Progress 1113, '2014 Kansas Performance Tests with Grain Sorghum Hybrids,' or the Kansas Crop Performance Test website, *www.agronomy.k-state.edu/services/crop-performance-tests/index.html*, for details. Endorsement or recommendation by Kansas State University is not implied."

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