# 2023 Kansas Performance Tests with



**Report of Progress 1181** 



# TABLE OF CONTENTS

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# 2023 Performance Tests

| Objectives and Procedures  |   |
|--|---|
| Companies Entering 2023 Tests  | Table 1   |
| Northeast Dryland: Manhattan, Riley County                               | Table 24  |
| Eastern Dryland: Ottawa, Franklin County<br>Rossville, Shawnee County    | Table 35   Table 46                               |
| Eastern Irrigated: Topeka, Shawnee County                                | Table 57  |
| Central Dryland: Belleville, Republic County                             | Table 6   |
| Central Irrigated: Scandia, Republic County<br>Abilene, Dickinson County | Table 79   Table 810                              |
| Short Season: Parsons, Labette County                                    | Abandoned; adverse weather                        |
| South Central Irrigated: Hutchinson, Reno County                         | Abandoned; adverse weather                        |
| Western Dryland: Hays, Ellis County<br>Colby, Thomas County              | Abandoned; drought<br>Abandoned; drought and hail |
| Western Irrigated: Colby, Thomas County<br>Leoti, Wichita County         | Abandoned; hail<br>Abandoned; hail                |
|  |   |

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# 2023 CORN CROP REVIEW

# Statewide Growing Conditions

# Spring 2023

The average temperature for April was 54.7°F, 0.8°F above normal. This ranked as the 49th warmest April out of 129 years of records, dating back to 1895. The average precipitation for April was 1.32 inches, which was 1.36 inches below normal. Southwest Kansas was the only division with above-normal precipitation (1.92 inches, 115% of normal); all other divisions were below normal. Both northwest (0.42 inches) and southeast Kansas (1.26 inches) had their 7th driest April on record. North central, central, and east central Kansas all experienced a top 15 driest April. The US Drought Monitor Update issued on April 27 listed 46% of Kansas in the most severe drought category (D4), up 10% from last month. Only 11% of the state is classified as drought-free, a decrease of 5% from March.

Starting from the beginning of 2023, Kansas's drought condition has been persistent and there were no improvements at all for the last four months. Water supply shortage affected crop growth (both wheat and corn) and yields as well as livestock conditions. Across Kansas, there were 195 total severe weather events (7 tornados, 99 hail damages, and 89 windy events) in Kansas during the month of April.

The average temperature for May was 65.8°F, 1.9°F above normal. This ranked as the 29th warmest May out of 129 years of records, dating back to 1895. Average precipitation for May was 3.58 inches, which was 0.63 inches below normal. This ranked as the 65th driest May on record. The three western climate regions all finished the month above normal. Northwest Kansas was the wettest region. When combined with April's precipitation, the growing season to date ranks in the top 20 driest in four regions: north-central, central, south-central, and southeast. Northwest and southwest Kansas were the only two regions above normal since April 1.

Growing degree days (GDD) for corn across Kansas started around normal for corn and its conditions were rated 10% very poor or very poor. By the end of May, 75% of corn had emerged, which was equal to last year. Rootzone moisture was very dry in the eastern regions in May, while the south-central and western regions were relatively wet due to rainfall in May. Subsoil moisture supplies rated 29% very short, 31% short, 39% adequate, and 1% surplus on May 28.

The average temperature for June was 73.2°F, 1.0°F below normal. The three eastern Kansas regions were above normal; all other divisions were below normal. Average precipitation for June was 4.06 inches, which was 0.01 inches above normal. The three eastern climate regions and north central had below normal precipitation while the remaining regions were above normal. South central was the wettest region (6.21 inches) while east central was the driest (2.25 inches).

The GDD conditions for corn were slightly above normal in the northwestern region, while the southeastern area experienced the lowest amount. The corn condition was assessed as 14% poor and very poor, 38% fair, and 54% good and excellent. The silking stage of corn phenology had reached approximately 20%, aligning with the recent average for the state. Soil moisture supplies were rated as follows: 44% very short and short, 55% adequate, and 3% surplus.

The average temperature for July was 78.3°F, 0.7°F below normal. This ranked as the 56th coldest July out of 129 years of records, dating back to 1895. Seven of Kansas' nine climate regions were below normal; only east central and southeast were above normal. Average precipitation for June was 4.39 inches, or 114% of normal. Southwest (6.09 inches) and south central (6.01 inches) Kansas were the two wettest regions; their totals ranked as the 6th and 7th wettest Julys on record, respectively. North central and central Kansas tied for driest region (3.14 inches). When combined with April, May, and June, the past 4-month period is the 5th wettest on record in southwest Kansas. Their total of 16.29 inches is 5.80 inches above normal.

For the corn growing conditions, temperature-based GDDs are slightly above the normal, indicating a nearly normal growing season for corn. On the other hand, accumulated precipitation during the past month showed variations from very dry conditions in the northeast to very wet for the northwest of the state. For soil moisture, the central and west regions were under water-stressed conditions. The root zone moisture indicated drought conditions across the eastern portion of the state.

Across Kansas, the number of severe weather events was 157 events including 2 tornadoes, 49 hail damage reports, and 106 high wind reports. Most of these severe events were occurred in northwestern regions during August. (Matthew Sittel, Kansas State University Assistant State Climatologist)

#### Diseases

Aspergillus ear mold is favored by hot and dry conditions, and for that reason was a concern for the 2023 Kansas corn season. Aspergillus can produce aflatoxin, a known carcinogen that is highly regulated by the Food and Drug Administration (FDA). On the ear, colonies of Aspergillus flavus are a greenishyellow, dime- to quarter-sized mold that grows between the kernels. In severe cases, the mold may cover much larger portions of the ear. Often there is little correlation between the percent moldy ears in a field and actual level of aflatoxin. Corn that dries down rapidly may accumulate less toxin and some field strains are poor producers of aflatoxin. On the other hand, strains that produce copious amounts of aflatoxin may need to be present on a relatively low percentage of ears to cause problems at the elevator.

Southern rust was detected in northeast. Unlike some other corn diseases, such as gray leaf spot, southern rust does not survive in Kansas during winter months and blows in annually from more tropical regions. The severity is dependent on the weather and southern rust likes 90-degree days, warm nights, and high humidity.

Two common causes of stalk lodging are stalk rot disease organisms or corn borer damage. Stalk rotting diseases in Kansas included charcoal rot, Fusarium, Gibberella, anthracnose, and Diplodia. Stalk rotting diseases are present in the soil or on old crop debris every year, but disease only develops when certain other factors predispose the plants to disease infection, such as drought and heat stress.

Tar spot of corn, a disease caused by the fungus *Phyllachora maydis*, was confirmed in Doniphan (6/26), Atchison (6/30), Jefferson (6/30), Brown (7/05), Nemaha (7/28), and Jackson (8/8) counties, Kansas. Tar spot lesions are black, raised, and have a round/elliptical shape. This pathogen can survive in crop residue. (Rodrigo Onofre, Kansas State University Department of Plant Pathology)

# Insects

Very few insect problems in corn were noted throughout the state in 2023. The heat and drought played havoc with corn all across the state, especially dryland corn, so that insect pests in many cases seemed insignificant.

There was some concern, and consequently treatment, for Japanese beetles feeding in silks in places in eastern Kansas. These beetles have become more common and thus a cause for concern across about the eastern threefourths of the state in recent years. There were also a few reports of spider mites, but not really more than usual. (Jeff Whitworth, Kansas State University Department of Entomology)

# 2023 PERFORMANCE TESTS

# **Objectives and Procedures**

Corn 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 corn hybrids marketed in the state. Entry fees from private seed companies finance the tests. 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 uniformly at all test locations. Most companies submit seed treated with systemic insecticides, which can affect yield in some situations.

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

Explanatory information is given in summaries preceding data for each test. Tables 2 through 8 contain results from the individual performance tests. Hybrids are listed together by company name. A summary of growing season precipitation data is given for individual test discussions. General trends in precipitation relative to normal are readily observed in the graphs.

Grain yields are reported as bushels per acre of shelled grain (56 lb/bu) adjusted to a moisture content of 15.5%. Yields also are presented as 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 also must be considered.

Small differences in yield should not be overemphasized. Relative ranking and large differences are better indicators of performance. Least significant differences (LSD) are shown at the bottom of each table. Unless two hybrids differ by at least the LSD shown, little confidence can be placed in one being superior to the other. Yield values in the top LSD group in each test are displayed in bold. The coefficient of variability (CV) can be used in combination with the LSD to estimate the degree of confidence one can have in published data from replicated tests.

#### Table 1. Companies entering hybrids in the 2023 Kansas Corn Performance Tests

Corteva AgriSciences Johnston, IA 800-233-7333 pioneer.com \*maturity checks Lewis Hybrids Ursa, IL 800-252-7851 lewishybrids.com

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

| Golden Harvest Brand Seed |
|---------------------------|
| Minnetonka, MN            |
| 800-455-0956              |
| syngentaseeds.com         |

**Monsanto (DeKalb)** St. Louis, MO 314-694-1000 monsanto.com

#### Table 2. Manhattan, Kansas Dryland Corn Performance Test, Riley County, 2023

Agronomy North Farm, Kansas State University, Manhattan Planted: 4/28/2023 Harvested: 9/14/2023 180-0-0 lb/ac N, P, K Herbicide: 3 qts/ac Lexar, 24 oz/ac glyphosate 53.8%



#### BRAND YIELD PAVG MOIST тw NAME (bu/a) (%) (lb/bu) (%) LEWIS 11DT912 160.2 113.8 10.0 54.0 LEWIS 134.4 10.6 57.4 13DT644 95.5 LEWIS 14DT603 142.1 101.0 11.2 57.0 LEWIS 15DT664 146.8 104.3 13.3 57.4 LEWIS 17DP651 96.5 68.6 13.4 56.0 MATURITY CHECK FULL 145.3 10.2 56.1 103.3 MATURITY CHECK MID 186.8 132.7 11.2 57.8 MATURITY CHECK SHORT 149.4 10.4 55.6 106.2 57.6 NK NK0367-AA 141.9 100.8 10.7 NK0922-V NK 126.7 90.0 11.5 57.2 NK NK1082-DV 113.9 80.9 10.6 54.7 NK NK1188-AA 132.8 94.4 10.3 56.1 NK NK1701-V 140.1 99.5 11.4 55.2 97.4 69.2 10.2 53.5 NK NK1755-DV PHILLIPS PS0943 V32 161.0 114.4 10.9 55.5 PHILLIPS PS1063 VPR 133.6 94.9 10.5 56.1 PHILLIPS **PS1366 VPR** 118.1 83.9 10.5 56.7 PHILLIPS **PS1372 TRE** 154.3 109.7 12.0 56.4 11.6 PIONEER P1170AM 147.3 104.7 57.5 PIONEER P1359AM 136.8 97.2 10.3 56.0 AVERAGE 140.7 100.0 11.0 56.4 10.4 10.4 1.7 CV (%) 1.1 LSD (0.05) 20.0 14.2 0.9 1.1

\*Yields must differ by more than the LSD value to be considered statistically different.

# Table 3. Ottawa, Kansas Dryland Corn Performance Test, Franklin County, 2023

East Central Experiment Field, Kansas State University, Ottawa Planted: 4/25/23 Harvested: 9/20/23 117-38-25-20 lb/ac N, P, K, S



# Ottawa 2SE 365 Day Accumulated Precipitation

| BRAND          | NAME       | YIELD  | PAVG  | MOIST | TW      |
|----------------|------------|--------|-------|-------|---------|
|                |            | (bu/a) | (%)   | (%)   | (lb/bu) |
| LEWIS          | 11DT912    | 145.9  | 84.1  | 13.7  | 59.0    |
| LEWIS          | 13DT644    | 189.6  | 109.3 | 13.9  | 58.8    |
| LEWIS          | 14DT603    | 197.9  | 114.1 | 14.2  | 60.4    |
| LEWIS          | 15DT664    | 211.8  | 122.1 | 14.5  | 59.6    |
| LEWIS          | 17DP651    | 170.5  | 98.3  | 14.2  | 59.6    |
| MATURITY CHECK | FULL       | 174.1  | 100.4 | 13.7  | 59.4    |
| MATURITY CHECK | MID        | 142.7  | 82.3  | 13.6  | 60.5    |
| MATURITY CHECK | SHORT      | 177.5  | 102.3 | 13.4  | 59.3    |
| NK             | NK0367-AA  | 155.2  | 89.5  | 13.3  | 59.5    |
| NK             | NK0922-V   | 147.9  | 85.2  | 13.6  | 59.6    |
| NK             | NK1082-DV  | 181.1  | 104.4 | 13.2  | 58.2    |
| NK             | NK1188-AA  | 160.1  | 92.3  | 13.8  | 59.5    |
| NK             | NK1701-V   | 181.8  | 104.8 | 13.6  | 57.8    |
| NK             | NK1755-DV  | 144.6  | 83.3  | 13.5  | 57.8    |
| PHILLIPS       | PS0943 V32 | 178.7  | 103.0 | 13.5  | 59.5    |
| PHILLIPS       | PS1063 VPR | 192.6  | 111.0 | 13.7  | 60.1    |
| PHILLIPS       | PS1366 VPR | 182.9  | 105.4 | 13.7  | 60.0    |
| PHILLIPS       | PS1372 TRE | 193.1  | 111.3 | 13.8  | 59.7    |
| PIONEER        | P1170AM    | 202.8  | 116.9 | 13.8  | 60.4    |
| PIONEER        | P1359AM    | 169.2  | 97.5  | 13.7  | 60.2    |
|                | AVERAGE    | 173.5  | 100.0 | 13.7  | 59.7    |
|                | CV (%)     | 10.7   | 10.7  | 0.1   | 0.4     |
|                | LSD (0.05) | 18.6   | 10.7  | 0.3   | 0.9     |

\*Yields must differ by more than the LSD value to be considered statistically different. Top LSD group in bold.

#### Table 4. Rossville, Kansas Dryland Corn Performance Test, Shawnee County, 2023

Farmer's Field, Wolf Farm, Rossville Planted: 4/24/23 Harvested: 9/13/23 120-0-0 lb/ac N, P, K as NH<sub>3</sub> Herbicide: 1.5 qt/ac Callisto Xtra, 1.3 lb/ac Aatrex 90, 1 oz/ac Armezon, 12 oz/ac Outlook + HSOC



#### Rossville 2SE 365 Day Accumulated Precipitation

| BRAND          | NAME       | YIELD  | PAVG  | MOIST | тw      | PLANTS   | DAYS      | LODGE |
|----------------|------------|--------|-------|-------|---------|----------|-----------|-------|
|                |            | (bu/a) | (%)   | (%)   | (lb/bu) | per acre | (silk)    | (%)   |
| LEWIS          | 11DT912    | 172.9  | 93.6  | 14.4  | 58.4    | 24750    | 6/30/2023 | 47    |
| LEWIS          | 13DT644    | 218.3  | 118.2 | 15.8  | 58.2    | 24250    | 7/2/2023  | 20    |
| LEWIS          | 14DT603    | 196.8  | 106.6 | 15.9  | 60.0    | 23500    | 7/1/2023  | 40    |
| LEWIS          | 15DT664    | 214.2  | 116.0 | 15.8  | 59.1    | 23750    | 7/1/2023  | 40    |
| LEWIS          | 17DP651    | 170.1  | 92.1  | 15.9  | 58.7    | 23500    | 7/4/2023  | 70    |
| MATURITY CHECK | FULL       | 201.4  | 109.0 | 15.9  | 58.7    | 24000    | 7/3/2023  | 50    |
| MATURITY CHECK | MID        | 164.8  | 89.2  | 14.1  | 59.9    | 22250    | 7/4/2023  | 40    |
| MATURITY CHECK | SHORT      | 165.6  | 89.7  | 13.7  | 60.0    | 23500    | 6/30/2023 | 45    |
| NK             | NK0367-AA  | 188.1  | 101.8 | 13.1  | 59.9    | 24000    | 6/30/2023 | 65    |
| NK             | NK0922-V   | 167.5  | 90.7  | 14.2  | 59.0    | 23250    | 7/1/2023  | 70    |
| NK             | NK1082-DV  | 177.9  | 96.3  | 15.8  | 57.9    | 24250    | 7/2/2023  | 80    |
| NK             | NK1188-AA  | 170.0  | 92.0  | 15.0  | 58.4    | 25000    | 7/3/2023  | 45    |
| NK             | NK1701-V   | 154.1  | 83.4  | 14.8  | 57.9    | 23250    | 6/30/2023 | 50    |
| NK             | NK1755-DV  | 182.5  | 98.8  | 17.6  | 57.1    | 24000    | 7/5/2023  | 60    |
| PHILLIPS       | PS0943 V32 | 181.0  | 98.0  | 14.1  | 59.4    | 23250    | 7/1/2023  | 60    |
| PHILLIPS       | PS1063 VPR | 193.5  | 104.8 | 14.9  | 59.5    | 22500    | 6/30/2023 | 75    |
| PHILLIPS       | PS1366 VPR | 184.8  | 100.0 | 15.2  | 59.4    | 23000    | 6/30/2023 | 50    |
| PHILLIPS       | PS1372 TRE | 186.2  | 100.8 | 14.6  | 59.2    | 22000    | 7/1/2023  | 70    |
|                | AVERAGE    | 184.8  | 100.0 | 14.8  | 59.2    | 23522    | 7/2/2023  | 52    |
|                | CV (%)     | 11.8   | 11.8  | 0.7   | 0.7     |          |           |       |
|                | LSD (0.05) | 16.5   | 8.9   | 1.1   | 1.0     |          |           |       |

\*Yields must differ by more than the LSD value to be considered statistically different. Top LSD group in bold.

#### Table 5. Topeka, Kansas Irrigated Corn Performance Test, Shawnee County, 2023

Kansas River Valley Experiment Field, Kansas State University, Topeka Planted: 4/24/23 at 30 K seeds/acre Harvested: 9/15/23 150-0-0 lb/ac N, P, K as NH<sub>3</sub> Herbicide: 1.5 qt/ac Callisto Xtra, 1.3 lb/ac Aatrex 90, 1 oz/ac Armezon, 12 oz/ac Outlook + HSOC Irrigation: 6.1 inches 6/13-8/21



#### BRAND DAYS LODGE NAME YIELD PAVG MOIST тw PLANTS (bu/a) (%) (%) (lb/bu) per acre (silk) (%) LEWIS 11DT912 227.5 95.1 13.6 59.2 28750 6/30/2023 25 LEWIS 13DT644 236.4 98.8 15.5 60.5 27750 6/30/2023 30 LEWIS 14DT603 258.9 108.2 17.5 60.9 28750 6/29/2023 45 254.4 60.7 27500 6/30/2023 25 LEWIS 15DT664 106.4 16.2 LEWIS 17DP651 240.7 100.6 16.1 60.0 28250 7/4/2023 55 MATURITY CHECK FULL 255.6 106.9 19.0 58.4 30250 7/2/2023 55 MATURITY CHECK MID 252.2 25500 25 105.5 14.0 61.7 7/3/2023 MATURITY CHECK 230.4 35 SHORT 96.4 13.9 60.7 28750 6/29/2023 35 NK NK0367-AA 221.5 92.6 12.4 60.8 27750 6/29/2023 NK NK0922-V 239.8 100.3 14.6 60.0 27000 6/30/2023 60 NK 238.2 99.6 16.1 58.1 28250 50 NK1082-DV 7/1/2023 NK NK1188-AA 225.0 94.1 15.0 60.5 29000 7/1/2023 30 NK NK1701-V 225.7 94.4 16.4 58.6 28250 6/29/2023 30 236.6 19.5 29250 7/2/2023 35 NK NK1755-DV 98.9 56.7 PHILLIPS 238.1 60.3 26500 6/30/2023 40 PS0943 V32 99.6 14.0 PHILLIPS 226.0 94.5 16.1 60.1 28500 6/29/2023 55 PS1063 VPR PHILLIPS PS1366 VPR 220.4 92.2 15.6 60.8 28500 6/30/2023 30 PHILLIPS PS1372 TRE 242.1 101.2 14.5 60.9 28250 6/28/2023 45 239.2 39 Average 100.0 15.5 60.1 27909 6/30/2023 12.9 CV (%) 12.9 1.1 0.7 ---------LSD (0.05) 12.0 5.0 1.6 1.2 ---

\*Yields must differ by more than the LSD value to be considered statistically different. Top LSD group in bold.

#### Table 6. Belleville, Kansas Dryland Corn Performance Test, Republic County, 2023

North Central Experiment Field, Kanas State University, Belleville Plant: 5/19/23 Harvested: 10/19/23 120-0-0 lb/ac N, P, K as NH<sub>3</sub> Herbicide: 16 oz/ac Salvo, 4.5 qt/ac Makaze, 5 oz/ac Status, 3 qt/ac Acuron, 2 qt/100 Liberate, 3 qt/100 Choice Trio, 12 oz/ac MSO Previous crop: Wheat





| BRAND          | NAME       | YIELD  | PAVG  | MOIST | тw      |
|----------------|------------|--------|-------|-------|---------|
|                |            | (bu/a) | (%)   | (%)   | (lb/bu) |
| LEWIS          | 15DT664    | 183.1  | 108.6 | 16.4  | 59.4    |
| LEWIS          | 13DT644    | 176.8  | 104.9 | 16.1  | 60.1    |
| LEWIS          | 11DT912    | 175.5  | 104.1 | 13.3  | 57.9    |
| LEWIS          | 17DP651    | 173.9  | 103.2 | 15.7  | 58.7    |
| LEWIS          | 14DT603    | 167.3  | 99.3  | 15.1  | 60.4    |
| MATURITY CHECK | FULL       | 175.5  | 104.1 | 15.3  | 58.6    |
| MATURITY CHECK | SHORT      | 174.2  | 103.3 | 13.6  | 59.3    |
| MATURITY CHECK | MID        | 163.5  | 97.0  | 13.9  | 60.5    |
| NK             | NK1082-DV  | 167.8  | 99.5  | 14.5  | 57.6    |
| NK             | NK1755-DV  | 166.9  | 99.0  | 16.7  | 57.3    |
| NK             | NK1701-V   | 156.5  | 92.9  | 18.6  | 58.0    |
| NK             | NK0922-V   | 154.5  | 91.7  | 14.3  | 57.9    |
| NK             | NK1188-AA  | 150.7  | 89.4  | 14.4  | 59.3    |
| NK             | NK0367-AA  | 144.7  | 85.9  | 12.9  | 59.0    |
| PHILLIPS       | PS1063 VPR | 174.1  | 103.3 | 14.7  | 59.0    |
| PHILLIPS       | PS1372 TRE | 171.4  | 101.7 | 12.9  | 58.7    |
| PHILLIPS       | PS1366 VPR | 160.6  | 95.3  | 14.5  | 59.1    |
| PHILLIPS       | PS0943 V32 | 157.4  | 93.4  | 14.4  | 58.0    |
| PIONEER        | P1170AM    | 185.8  | 110.2 | 14.4  | 59.4    |
| PIONEER        | P1359AM    | 168.4  | 99.9  | 14.6  | 59.5    |
|                | Average    | 168.6  | 100.0 | 14.6  | 59.2    |
|                | CV (%)     | 6.4    | 6.4   | 0.7   | 0.5     |
|                | LSD (0.05) | 10.1   | 6.0   | 1.3   | 1.1     |

\*Yields must differ by more than the LSD value to be considered statistically different.

#### Table 7. Scandia, Kansas Irrigated Corn Performance Test, Republic County, 2023

North Central Experiment Field Irrigated Unit, Kansas State University, Scandia Plant: 5/23/13 Harvested: 11/13/23 160-0-0 lb/ac N, P, K Herbicide: 3 qt/ac Acuron, 1.5 qt/ac Makaze, 1 qt/100 Liberate, 1 qt/100 Choice Trio, 5 oz/ac Status, 43 oz/ac Forfeit, 1 oz/ac Armezon, ~.6 lb/a AMS, 12 oz/ac MSO Irrigation: 11.25 inches 6/27-09/15 Previous crop: Soybeans

\*Sprayed with Liberty, which killed several plots. Those plots were removed from dataset.



Scandia 365 Day Accumulated Precipitation

| BRAND          | NAME       | YIELD<br>(bu/a) | PAVG<br>(%) | MOIST<br>(%) | TW<br>(lb/bu) |
|----------------|------------|-----------------|-------------|--------------|---------------|
| MATURITY CHECK | FULL       | 150.7           | 78.2        | 17.1         | 59.7          |
| MATURITY CHECK | MID        | 221.1           | 114.7       | 13.6         | 61.2          |
| MATURITY CHECK | SHORT      | 183.8           | 95.4        | 13.5         | 59.5          |
| NK             | NK0367-AA  | 137.2           | 71.2        | 13.1         | 58.7          |
| NK             | NK0922-V   | 160.9           | 83.5        | 13.3         | 59.5          |
| NK             | NK1082-DV  | 165.2           | 85.7        | 14.1         | 59.3          |
| NK             | NK1188-AA  | 235.2           | 122.0       | 14.4         | 60.5          |
| NK             | NK1701-V   | 224.5           | 116.5       | 14.3         | 58.5          |
| NK             | NK1755-DV  | 184.9           | 95.9        | 16.1         | 59.2          |
| PHILLIPS       | PS0943 V32 | 153.6           | 79.7        | 13.1         | 59.9          |
|                | Average    | 192.7           | 100.0       | 14.1         | 60.2          |
|                | CV (%)     | 11.0            | 11.0        | 0.4          | 0.4           |
|                | LSD (0.05) | 34.0            | 17.7        | 1.1          | 1.1           |

\*\*Yields must differ by more than the LSD value to be considered stastically different.

# Table 8. Abilene, Kansas Irrigated Corn Performance Test, Dickinson County, 2023

Farmer's Field, 38.68289327, -97.58464375, Abilene Plant: 5/1/23 Harvested: 9/22/23 Tillage Type: Conventional Previous Crop: Wheat/Fallow



# Gypsum 365 Day Accumulated Precipitation

| BRAND          | NAME       | YIELD  | PAVG  | MOIST | тw      |
|----------------|------------|--------|-------|-------|---------|
|                |            | (bu/a) | (%)   | (%)   | (lb/bu) |
| LEWIS          | 11DT912    | 265.3  | 109.6 | 19.7  | 56.2    |
| LEWIS          | 13DT644    | 259.5  | 107.2 | 21.1  | 57.7    |
| LEWIS          | 14DT603    | 270.8  | 111.8 | 21.9  | 58.2    |
| LEWIS          | 15DT664    | 280.1  | 115.7 | 21.5  | 58.3    |
| LEWIS          | 17DP651    | 262.6  | 108.4 | 22.5  | 58.3    |
| MATURITY CHECK | FULL       | 262.7  | 108.5 | 21.3  | 56.7    |
| MATURITY CHECK | MID        | 239.9  | 99.1  | 19.7  | 59.1    |
| MATURITY CHECK | SHORT      | 215.1  | 88.8  | 19.0  | 56.7    |
| NK             | NK0367-AA  | 232.8  | 96.2  | 18.5  | 58.8    |
| NK             | NK0922-V   | 215.4  | 89.0  | 20.0  | 57.0    |
| NK             | NK1082-DV  | 211.3  | 87.3  | 20.5  | 56.3    |
| NK             | NK1188-AA  | 223.3  | 92.2  | 18.3  | 58.2    |
| NK             | NK1701-V   | 215.5  | 89.0  | 22.7  | 55.3    |
| NK             | NK1755-DV  | 244.4  | 101.0 | 23.0  | 55.5    |
| PHILLIPS       | PS0943 V32 | 220.4  | 91.0  | 18.2  | 58.2    |
| PHILLIPS       | PS1063 VPR | 226.3  | 93.5  | 20.3  | 57.5    |
| PHILLIPS       | PS1366 VPR | 230.9  | 95.4  | 19.2  | 57.5    |
| PHILLIPS       | PS1372 TRE | 256.8  | 106.1 | 20.7  | 57.8    |
| PIONEER        | P1170AM    | 265.3  | 109.6 | 19.5  | 58.6    |
| PIONEER        | P1359AM    | 243.3  | 100.5 | 20.3  | 58.2    |
|                | Average    | 242.1  | 100.0 | 20.4  | 57.5    |
|                | CV (%)     | 9.5    | 9.5   | 1.4   | 0.9     |
|                | LSD (0.05) | 19.5   | 8.1   | 1.3   | 1.1     |

\*Yields must differ by more than the LSD value to be considered statistically different.

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/outreach-and-services/crop-performance-tests/corn/

Excerpts from the

University Research Policy Agreement with Cooperating Seed Companies

Permission is hereby given to Kansas State University 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.

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