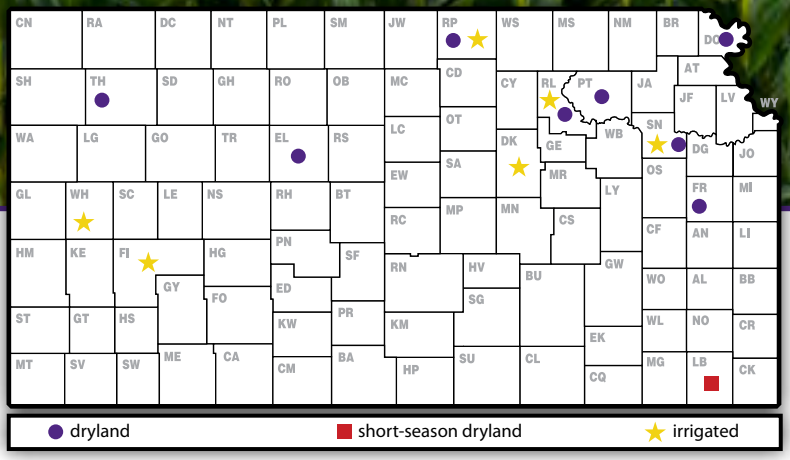
2020 Kansas Performance Tests with

Corn Hybrids



Report of Progress 1159

K-STATE
Research and Extension

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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Contribution No. 21-193-S from the Kansas Agricultural Experiment Station.

2020 CORN CROP REVIEW

Statewide Growing Conditions

The 2020 corn season had a very distinct weather pattern with different effects on the east, central, and western parts of the state. Planting progress was normal for corn, producing good conditions for early-season uniformity of the crop. Even corn stands can set the crop to a successful growing season.

Overall, for the early-planted corn, pollination was under adequate temperature and moisture conditions, but this varied across the state. Grain fill period was more favorable for corn yields for most areas of the state. Late-planted corn reached pollination later in the season with potential better weather environments, but in some situations increasing the probability of freezing before the end of the season. Dry weather conditions during August for part of the state (e.g., central and north central KS) compromised kernel formation and filling, reducing yields. Environments with adequate timing and quantity of precipitation during the growing season expressed high yield potential, with the opposite occurring when precipitation was erratic during the most critical corn growth stages (e.g., flowering or grain filling periods). For the western region, the planted corn faced more favorable weather conditions and expressed close to maximum yields in some areas, northwest and southwest, but conditions worsened in parts of the west central areas.

Hail was a problem across the state. There were 572 reports of large hail through September 30. Of those events, 201 were reported in May. Hail has a larger impact when it occurs around flowering time or during the grain filling, when the plant depends on the leaves, potentially affecting grain number and seed weight.

As related to the precipitation conditions, all divisions averaged below normal for the period of April 1 through October 31. The driest area was the northwest, where the divisional average was 11.51 inches or 66% of normal. The northeast division came closest to normal, with a divisional average of 24.32 inches, 89% of normal. The southeast division faced the challenge of a rapid switch from extremely wet to extremely dry conditions.

Temperatures weren't as much of a factor, although some late planted fields reached critical growth stages during the warmest part of the summer. The warmest readings were seen in July, with the highest read of 108°F reported on July 1 at Ashland, Clark County, and July 19 at Healy, Lane County.

The first autumn freezes were near average, with Colby dropping to 32°F on October 18, and Columbus reaching 30°F on October 27.

Table 1. 2020 temperatures by crop production district

Division	Extreme Tmax (°F)	Date	Avg Tmax (ºF)	Avg Tmin (ºF)	Avg Tmean (ºF)	Extreme Tmin (ºF)	Date
Northwest	108	19-Jul	79.1	48.2	63.7	-1	28-Oct
North Central	104	20-Jul	78.7	53.3	66.1	10	28-Oct
Northeast	100	6-Sep	76.8	54.2	65.5	10	10-Apr
West Central	108	19-Jul	80.4	49.4	64.8	2	28-Oct
Central	104	1-Jul	79.6	54.1	66.9	12	27-Oct
East Central	97	19-Jul	77.4	55.7	66.6	22	27-Oct
Southwest	108	1-Jul	82.7	52.1	67.4	12	27-Oct
South Central	105	1-Jul	80.5	55.4	68.0	17	27-Oct
Southeast	101	29-Aug	78.1	56.0	67.1	23	14-Apr

For a few areas of the state, the below-freezing temperatures arriving late in the season did affect some of the corn planted quite late, impacting the final grain weight. Corn is affected when temperatures are below or at 32°F. The colder below 32°F, the less exposure time it takes to damage the corn. However, corn is not affected once the black layer (physiologically mature) is formed.

Harvesting conditions for many regions was ideal, with a large progress achieved by mid-October, roughly 20% ahead of the 2019 growing season, and above the 5-year average for harvest progress. This is a reflection of better weather conditions and less influence of abiotic and biotic stress (e.g., diseases, insects) affecting the end of the season for corn.

Despite the favorable season, USDA-NASS reported (11/10/2020) an overall corn yield of 132 bushels per acre for the state of Kansas for the 2020 growing season (1 bushel below from the 2019 average), and with a final production estimate of 759 millions of bushels, 40 million down from the 2019 average. (Ignacio Ciampitti and Mary Knapp, Department of Agronomy)

Diseases

In 2020, disease pressure was generally below the long-term average, largely driven by atypically dry conditions in August and September. An active tropical storm season pushed Southern Rust into the state earlier than normal. It was first reported in Kansas on July 15. This arrival was around the same time as last year, which is earlier than historic reports. In northeast and southeast Kansas, Southern Rust incidence was high but severity on the ear leaf was generally low. This was likely due to lack of adequate leaf surface wetness, which is necessary for infection. Greater loss was observed in central Kansas, where moisture was present during grain fill.

Gray leaf spot was observed in northeast and northwest Kansas, although levels did not reach high levels due to low moisture at critical growth stages. Where gray leaf spot was present, it mainly remained in the lower canopy. Bacterial leaf streak (*Xanthomonas vasicola* or Xvv) was reported in western Kansas. It was most common in no-till, continuous corn that was under irrigation. Foliar symptoms can be confused with gray leaf spot.

Bacterial leaf streak has been common in Kansas corn production areas since it first showed up in 2016. Reports of stalk rots were lower than in previous years.

There were a few reports of Diplodia and Fusarium ear rot throughout the state. Diplodia ear rot can cause entire ears to appear white and moldy and can result in kernel shrinkage and cracking. (Rodrigo Borba Onofre, Kansas State University Department of Plant Pathology)

Insects

Kansas corn fields had relatively reduced pest problems compared to most years. The first pest problems were reported from southeast Kansas, as is usually the case, because of the earlier planting, but mostly because of black cutworms. Black cutworms overwinter in the southern U.S., or farther south, and migrate into Kansas annually, usually entering the southeast part of the state first. A few black cutworm problems were reported and caused some replanting.

Another problem this year was Japanese beetles, they were most prevalent in northeast Kansas. The adults feed on a wide variety of fruits and berries, but are also known to feed on green corn silks. This silk feeding may cause concern but rarely results in yield reductions. The Japanese beetle infestation seems to be more and more common in the northeast quadrant of the state with smaller incidents of Japanese beetle feeding being noted throughout the state. (Jeff Whitworth, Kansas State University Department of Entomology)

2020 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. A column listing insecticide seed treatments for each hybrid is included in Table 18 to help interpret yield results.

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 following data for each test. Tables 3 through 10 contain results from the individual performance tests. Hybrids are listed together by company name. A summary of growing season precipitation data and the departure from the 5-year average precipitation is given for individual test discussions.

Grain yields are reported as bushels per acre of shelled grain (56 lb/bu) adjusted to a moisture content of 15.5%. Yields are also presented as percentage of test average to speed recognition of highest-yielding hybrids. Hybrids yielding greater 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.

Test results are not reported if the data is deemed inconclusive and/or affected more by environmental conditions than by genetic differences. The irrigated test at Colby in Thomas County was abandoned due to weed competition.

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 2. Companies entering hybrids in the 2020 Kansas Corn Performance Tests

Corteva AgriSciences
Johnston, IA
800-233-7333
pioneer.com
*maturity checks

Dyna-Gro Seeds
Loveland, CO
970-685-3300
nutrien.com

Frontier Seed
Concordia, MO
844-2FRONTIER
newfrontiergenetics.com

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

Heine Seeds
Vermillion, SD
605-677-8263

Midland Genetics
Ottawa, KS
800-819-7333
midlandgenetics.com

Monsanto (Dekalb)
St. Louis, MO
314-694-1000
monsanto.com
*maturity checks

Renk Seed Co
Sun Prairie, WI
800-289-7365
renkseed.com

Rob-See-Co
Phillips, NE
308-379-3495
robseeco.com

Table 3. Manhattan, Kansas Dryland Corn Performance Test, Riley County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	158.5	90.2	57.7	11.6
DEKALB	DKC60-88 RIB	191.9	109.2	59.8	14.6
DEKALB	DKC65-95 RIB	175.2	99.7	59.3	19.5
MATURITY CHECK	FULL	166.0	94.4	58.3	11.8
MATURITY CHECK	MID	192.1	109.3	57.9	13.2
MATURITY CHECK	SHORT	181.7	103.4	57.6	12.9
MIDLAND	429PR RIB	178.9	101.8	58.5	15.2
MIDLAND	430PR RIB	173.3	98.6	58.0	12.7
MIDLAND	570PR RIB	192.1	109.3	59.4	18.5
MIDLAND	656PR RIB	141.2	80.3	59.1	18.0
MIDLAND	770PR DG RIB	172.7	98.2	58.3	15.6
	Average	175.8	175.8	58.5	14.9
	CV (%)	7.4	7.4	0.8	6.2
	LSD (0.05)	18.6	10.6	0.6	1.3

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

Cooperator: Agronomy North Farm — Soil Series: Reading silt loam
Fertilizer: 180-0-0 lb/a N, P, K — No-till after soybean
Herbicide: 2 qt/a glyphosate, 1.5 pt/a Dual II Magnum, 2 oz/a Atrazine, 2 oz/a 2,4-D
Target population: 28,000 plants
Planted: 4/23/20 — Harvested: 9/24/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.5	1.9	5.6	3.5	6.6	**20.1**
Long-term average	2.5	3.2	5.1	5.7	4.4	**20.9**
Departure						**-0.8**

Table 4. Severance, Kansas Corn Performance Test, Doniphan County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	218.4	101.1	62.0	18.6
DEKALB	DKC60-88 RIB	216.7	100.4	62.0	19.6
DEKALB	DKC65-95 RIB	202.2	93.6	61.3	19.7
MATURITY CHECK	FULL	208.6	96.6	61.7	20.0
MATURITY CHECK	MID	241.5	111.8	62.4	20.1
MATURITY CHECK	SHORT	185.7	86.0	62.3	18.8
MIDLAND	381VLGA EZ1	239.4	110.9	61.4	20.0
MIDLAND	429PR RIB	216.8	100.4	62.0	19.6
MIDLAND	430PR RIB	213.3	98.8	61.6	20.2
MIDLAND	570PR RIB	237.7	110.1	61.7	19.7
MIDLAND	656PR RIB	191.0	88.4	61.8	19.2
MIDLAND	660PR DG RIB	215.2	99.7	61.7	19.5
MIDLAND	770PR DG RIB	236.2	109.4	62.0	20.3
MIDLAND	801PR RIB	216.0	100.0	61.4	19.0
	Average	216.0	216.0	61.8	19.6
	CV (%)	6.8	6.8	1.9	7.3
	LSD (0.05)	20.9	9.7	1.7	2.0

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

Cooperator: Fuhrman Farms Soil Series: Ulysses silt loam
Fertilizer: 180-0-0 lb/a N, P, K
Herbicide: 2 qt/a Acuron, 17 lb/100 gal AMS, 1 qt/100 gal crop oil
Target population: 32,000 plants Strip-till after soybeans
Planted: 4/23/20 Harvested: 9/30/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.6	3.0	5.9	6.1	11.6	**29.2**
Long-term average	2.2	3.4	4.7	4.7	4.2	**19.2**
Departure						**+10.0**

Table 5. Onaga, Kansas Corn Performance Test, Pottawatomie County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	120.5	86.5	61.2	13.5
DEKALB	DKC60-88 RIB	150.0	107.7	63.2	14.9
DEKALB	DKC65-95 RIB	151.6	108.9	63.8	16.2
MATURITY CHECK	SHORT	126.1	90.6	63.5	14.7
MATURITY CHECK	FULL	132.6	95.2	64.8	15.7
MATURITY CHECK	MID	84.1	60.4	62.8	14.9
MIDLAND	429PR RIB	142.4	102.3	62.5	15.1
MIDLAND	430PR RIB	148.5	106.7	62.3	14.8
MIDLAND	570PR RIB	159.9	114.9	64.2	15.6
MIDLAND	656PR RIB	125.9	90.4	63.1	16.3
MIDLAND	660PR DG RIB	167.1	120.0	64.2	15.5
MIDLAND	721PR RIB	145.6	104.6	65.4	16.0
	Average	139.2	139.2	63.2	15.2
	CV (%)	7.5	7.5	0.9	2.1
	LSD (0.05)	14.9	10.7	0.8	0.5

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

Cooperator: Rezac Farms
Soil Series: Kipson silty clay loam
Fertilizer: 185-0-0 lb/a N, P, K
No-till after soybean
Herbicide: 2 qt/a Acuron pre-emergence
Target population: 24,000 plants
Planted: 4/23/20
Harvested: 9/30/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.7	2.1	5.2	3.3	6.5	**19.8**
Long-term average	2.2	3.0	4.8	5.2	4.2	**19.4**
Departure						**+0.4**

Table 6. Ashland Bottoms, Kansas Irrigated Corn Performance Test, Riley County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	155.0	93.3	55.0	16.9
DEKALB	DKC60-88 RIB	159.9	96.2	55.6	15.6
DEKALB	DKC65-95 RIB	162.1	97.6	56.4	18.0
MATURITY CHECK	SHORT	143.2	86.2	56.0	19.0
MATURITY CHECK	FULL	195.4	117.6	56.1	15.8
MATURITY CHECK	MID	177.7	106.9	57.4	14.4
MIDLAND	381VLGA EZ1	183.5	110.5	57.2	14.8
MIDLAND	429PR RIB	172.9	104.1	57.5	17.1
MIDLAND	430PR RIB	190.1	114.4	57.5	18.5
MIDLAND	570PR RIB	194.1	116.8	58.3	17.2
MIDLAND	660PR DG RIB	178.4	107.4	57.3	14.0
MIDLAND	770PR DG RIB	115.6	69.6	56.1	13.0
PIONEER	MATURITY FULL	137.9	83.0	57.1	15.6
PIONEER	MATURITY MID	158.7	95.5	54.7	16.0
PIONEER	MATURITY SHORT	167.7	101.0	56.4	18.7
	Average	166.1	166.1	56.6	16.3
	CV (%)	6.9	6.9	1.7	19.5
	LSD (0.05)	16.4	9.9	1.4	4.5

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

Cooperator: Ashland Bottoms Research Center
Soil Series: Sandy loam
Fertilizer: 220-0-0 lb/a N, P, K
Conventional till after soybean
Herbicide: 3 qt/a Lumax post
Target population: 32,000
Planted: 4/29/20
Harvested: 9/25/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.5	1.9	5.6	3.5	6.6	**20.1**
Long-term average	2.5	3.2	5.1	5.7	4.4	**20.9**
Departure						**-0.8**

Table 7. Scandia, Kansas Irrigated Corn Performance Test, Republic County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	PHT (in)	South. Rust** (observation)	Gray Leaf Spot (observation)
DEKALB	DKC50-64RIB	174.9	78.9	10.2	57.7	101.3	M	M
DEKALB	DKC60-88 RIB	251.9	113.7	11.9	59.5	99.3	T	M
DEKALB	DKC65-95 RIB	239.5	108.1	14.5	60.2	108.7	T	M
MATURITY CHECK	FULL	206.9	93.4	12.5	60.7	108.7	L	M
MATURITY CHECK	MID	194.6	87.8	11.3	59.5	106.7	T	L
MATURITY CHECK	SHORT	207.4	93.6	11.2	59.3	105.3	L	T
MIDLAND	430PR RIB	228.2	103.0	10.5	58.5	110.0	M	T
MIDLAND	570PR RIB	250.9	113.2	12.2	60.6	103.3	T	T
MIDLAND	656PR RIB	169.8	76.6	12.8	60.2	106.0	L	L
MIDLAND	770PR DG RIB	220.4	99.5	11.9	59.8	109.3	M	L
RENK	RK700SSTX	214.2	96.7	10.2	57.6	108.0	L	M
RENK	RK710DGVT2P	238.1	107.5	11.1	58.9	102.7	T	L
RENK	RK805VT2P	215.2	97.1	10.7	58.8	100.0	L	L
RENK	RK807SSTX	230.9	104.2	10.6	59.3	105.3	T	T
RENK	RK866DGVT2P	244.7	110.4	11.0	59.4	104.7	L	T
RENK	RK882SSTX	219.6	99.1	12.9	60.1	101.3	M	T
RENK	RK937VT2P	239.4	108.0	10.5	58.6	109.3	L	T
RENK	RK945DGVT2P	220.1	99.3	11.8	59.6	108.7	L	L
RENK	RK961VT2P	222.2	100.3	11.2	58.4	107.3	L	L
RENK	RK965VT2P	242.9	109.6	14.2	60.1	108.0	T	L
	Average	221.6	100.0	11.7	59.3	105.7	L	L
	CV (%)	6.9	6.9	6.0	2.0	6.0	--	--
	LSD (0.05)	25.0	10.9	2.0	1.9	4.9	--	--

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

Cooperator: North Central Experiment Field
Fertilizer: 180-0-0 lb/a N, P, K Soil Series: Crete silt loam
Herbicide: 3 qt/a Makaze, 8 oz/a Rifle, 1.5 pt/a Salvo, 3 qt/a Acuron
Target population: 32,000 plants No-till after soybean
Irrigation: 3.75 inches
Planted: 4/21/20 Harvested: 10/09/20
***Disease visual observation: T = trace; L = low incidence; M = medium; H = high

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	0.99	.38	2.8	4.0	8.3	**16.5**
Long-term average	2.12	2.96	4.2	3.8	4.2	**17.3**
Departure						**-0.8**

Table 8. Topeka, Kansas Irrigated Corn Performance Test, Shawnee County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	PLANTS per acre
DEKALB	DKC50-64RIB	168.1	78.5	58.2	14.0	27750
DEKALB	DKC60-88 RIB	223.6	104.4	58.5	17.3	28000
DEKALB	DKC65-95 RIB	234.0	109.3	58.2	19.4	26500
GOLDEN HARVEST	G11A33-522-EZ1	210.5	98.3	56.9	16.4	28000
GOLDEN HARVEST	G13N18-3111	224.9	105.0	54.3	18.2	28000
MATURITY CHECK	FULL	232.0	108.3	58.7	14.7	29000
MATURITY CHECK	MID	213.8	99.8	55.8	15.9	28750
MATURITY CHECK	SHORT	228.1	106.5	57.5	17.7	28500
MIDLAND	381VLGA EZ1	222.7	104.0	57.0	17.4	28000
MIDLAND	429PR RIB	225.6	105.4	57.1	18.4	27500
MIDLAND	430PR RIB	221.2	103.3	55.9	16.7	28000
MIDLAND	570PR RIB	227.8	106.4	58.9	18.8	27750
MIDLAND	660PR DG RIB	238.8	111.5	58.0	19.0	29250
MIDLAND	669PR RIB	242.6	113.3	58.8	17.7	27750
MIDLAND	770PR DG RIB	225.3	105.2	56.8	19.7	28000
MIDLAND	801PR RIB	237.9	111.1	55.5	19.5	28500
NK	NK1284-3220-EZ1	213.5	99.7	57.7	16.1	26750
	Average	214.1	214.1	57.4	17.4	26863
	CV (%)	9.1	9.1	1.2	3.9	2
	LSD (0.05)	27.6	12.9	1.0	1.0	782

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

Cooperator: Kansas River Valley Experiment Field
Fertilizer: 190-0-0 lb/a N, P, K — Soil Series: Eudora silt loam
Herbicide: 2 qt/a Lumax — No-till after soybean
Target population: 29,000 plants
Planted: 4/20/20 — Harvested: 9/1/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.5	3.5	4.4	2.9	10.2	**23.6**
Long-term average	2.5	3.5	4.9	5.4	3.8	**20.2**
Departure						**+3.4**

Table 9. Ottawa, Kansas Dryland Corn Peformance Test, Franklin County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	PLANTS per acre
DEKALB	DKC50-64RIB	150.3	86.0	57.3	14.8	23250
DEKALB	DKC60-88 RIB	184.5	105.5	57.3	17.5	24000
DEKALB	DKC65-95 RIB	186.1	106.4	58.4	17.8	22875
FRONTIER	FS106	183.0	104.7	56.3	16.2	23500
FRONTIER	FS108	193.1	110.4	55.2	17.5	23375
FRONTIER	FS110	177.8	101.7	56.2	17.4	21750
GOLDEN HARVEST	G11A33-522-EZ1	178.4	102.0	54.9	17.2	23625
GOLDEN HARVEST	G13N18-3111	192.6	110.2	52.4	19.2	24750
MATURITY CHECK	FULL	161.3	92.3	56.6	15.9	24625
MATURITY CHECK	SHORT	179.5	102.7	56.8	17.7	24500
MATURITY CHECK	MID	157.4	90.0	56.1	16.1	24625
NK	NK1284-3220-EZ1	175.4	100.3	56.5	18.4	23250
	Average	174.8	174.8	56.6	17.2	23008
	CV (%)	5.7	5.7	0.7	1.8	4.5
	LSD (0.05)	14.2	8.1	0.5	0.5	1.5

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

Cooperator: East Central Experiment Field Soil Series: Woodson silt loam
Fertilizer: 140-48-31-10 lb/a N, P, K, S
Herbicide: 2.1 qt/a Cinch ATZ, 0.5 pt/a 2,4-D pre-emerge; 20 oz/a Armazon Pro; 3 oz/a Callisto post
Target population: 24,000 plants Strip-till after soybean
Planted: 4/21/20 Harvested: 9/21/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.7	1.8	4.2	2.9	4.2	**15.8**
Long-term average	2.7	3.8	5.4	5.6	4.1	**20.9**
Departure						**-5.1**

Table 10. Kiro, Kansas Dryland Corn Performance Test, Shawnee County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	PLANTS per acre
DEKALB	DKC50-64RIB	174.3	83.0	59.4	12.4	23500
DEKALB	DKC60-88 RIB	228.4	108.7	61.0	13.5	24000
DEKALB	DKC65-95 RIB	220.2	104.8	61.1	15.3	22500
GOLDEN HARVEST	G11A33-522-EZ1	201.6	96.0	58.9	13.7	23000
GOLDEN HARVEST	G13N18-3111	216.2	102.9	58.0	15.0	23750
MATURITY CHECK	SHORT	225.3	107.2	60.5	13.6	24750
MATURITY CHECK	FULL	205.8	98.0	60.6	12.7	22250
MATURITY CHECK	MID	215.4	102.5	59.7	12.6	23250
MIDLAND	381VLGA EZ1	231.0	109.9	59.8	13.5	21500
MIDLAND	429PR RIB	216.9	103.2	60.9	14.1	23500
MIDLAND	430PR RIB	221.2	105.3	59.8	12.8	22000
MIDLAND	570PR RIB	243.2	115.7	61.8	14.8	22500
MIDLAND	656PR RIB	180.4	85.9	60.9	14.8	21500
MIDLAND	660PR DG RIB	230.9	109.9	60.9	14.1	22750
MIDLAND	669PR RIB	233.8	111.3	61.3	14.7	22500
NK	NK1284-3220-EZ1	219.4	104.4	61.0	13.2	23750
	Average	210.1	210.1	60.5	13.8	22053
	CV (%)	7.6	7.6	0.8	3.1	3
	LSD (0.05)	22.7	10.8	0.6	0.6	898

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

Cooperator: Private farmer field
Fertilizer: 180-0-0lb/a N, P, K
Herbicide: 2 qt/a Lumax
Target population: 24,000 plants
Planted: 4/21/20

Soil Series: Eudora silt loam
No-till after soybean
Harvested: 10/14/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	2.5	2.9	4.2	4.4	8.6	**22.6**
Long-term average	2.5	3.5	5.0	5.4	4.5	**20.9**
Departure						**+1.7**

Table 11. Belleville, Kansas Dryland Corn Performance Test, Republic County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	HT (in)	South. Rust** (observation)	Gray Leaf Spot (observation)
DEKALB	DKC50-64RIB	133.6	69.0	11.6	58.7	95.3	M	M
DEKALB	DKC60-88 RIB	223.1	115.3	14.5	59.3	100.0	H	M
DEKALB	DKC65-95 RIB	214.2	110.7	15.7	60.2	108.0	H	M
MIDLAND	381VLGA EZ1	208.9	108.0	13.3	58.0	102.7	M	M
MIDLAND	430PR RIB	212.5	109.8	12.8	57.6	110.0	M	L
MIDLAND	570PR RIB	222.8	115.2	16.3	60.1	108.0	H	L
MIDLAND	669PR RIB	217.5	112.4	16.4	60.0	106.0	L	M
MIDLAND	721PR RIB	205.0	105.9	14.8	61.1	104.7	L	M
MATURITY CHECK	FULL	183.9	95.0	14.2	60.5	114.0	H	M
MATURITY CHECK	MID	149.0	77.0	13.3	60.0	108.7	H	M
MATURITY CHECK	SHORT	178.4	92.2	14.4	60.2	108.7	M	L
RENK	RK700SSTX	203.3	105.1	12.2	57.1	104.7	L	H
RENK	RK710DGVT2P	194.3	100.4	14.9	59.0	101.3	M	M
RENK	RK805VT2P	183.2	94.7	12.4	58.0	97.3	M	L
RENK	RK807SSTX	211.4	109.3	12.7	58.3	110.7	M	M
RENK	RK866DGVT2P	184.4	95.3	12.9	57.8	104.7	L	M
RENK	RK882SSTX	197.0	101.8	14.7	59.2	98.7	M	H
RENK	RK937VT2P	202.2	104.5	12.6	57.9	106.0	M	H
RENK	RK945DGVT2P	180.0	93.1	14.4	59.0	105.3	H	M
RENK	RK961VT2P	177.5	91.7	14.9	57.1	103.3	H	M
RENK	RK965VT2P	219.5	113.4	16.5	58.9	109.3	H	L
	Average	193.5	193.5	14.0	58.5	104.6	M	M
	CV (%)	9.8	9.8	7.1	1.9	6.8	--	--
	LSD (0.05)	28.4	14.5	2.0	1.6	9.7	--	--

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

Cooperator: Agronomy North Farm
Fertilizer: 140-0-0 lb/a N, P, K Soil Series: Reading silt loam
Herbicide: 3 qt/a Makaze, 3 qt/a Acuron, 5 oz/a Status
Target population: 25,000 plants No-till after soybean
Planted: 4/29/20 Harvested: 10/1/20
***Disease visual observation: L = low incidence; M = medium; H = high

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	1.1	0.5	2.5	2.5	6.3	**12.8**
Long-term average	2.1	2.9	4.4	4.4	4.0	**17.7**
Departure						**-4.9**

Table 12. Abilene, Kansas Irrigated Corn Performance Test, Dickinson County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)
DEKALB	DKC50-64RIB	141.2	69.9	15.5	56.3
DEKALB	DKC60-88 RIB	214.7	106.2	17.7	56.9
DEKALB	DKC65-95 RIB	218.5	108.1	19.7	57.6
DYNA-GRO	D43VC81	179.1	88.6	15.3	57.5
DYNA-GRO	D48VC76	199.6	98.8	17.7	57.0
MIDLAND	381VLGA EZ1	218.7	108.2	18.7	56.9
MIDLAND	570PR RIB	211.8	104.8	19.5	57.6
MIDLAND	656PR RIB	177.5	87.8	20.1	56.3
MIDLAND	669PR RIB	208.7	103.3	19.2	58.0
MIDLAND	721PR RIB	220.7	109.2	18.9	58.8
MATURITY CHECK	FULL	231.6	114.6	20.1	56.4
MATURITY CHECK	MID	179.4	88.8	17.6	57.0
MATURITY CHECK	SHORT	174.2	86.2	16.4	57.6
RENK	RK710DGVT2P	189.0	93.5	16.9	57.6
RENK	RK866DGVT2P	209.0	103.4	17.6	57.2
RENK	RK882SSTX	200.1	99.0	18.7	57.8
RENK	RK937VT2P	206.1	102.0	17.6	57.5
RENK	RK945DGVT2P	211.6	104.7	19.2	57.0
RENK	RK961VT2P	213.9	105.8	19.6	55.3
RENK	RK965VT2P	236.6	117.1	19.4	56.8
	Average	202.1	100.0	18.2	57.1
	CV (%)	8.3	8.3	10.9	1.9
	LSD (0.05)	22.6	11.6	4.5	1.0

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

Cooperator: Private farm
Soil Series: Ulysses silt loam
Fertilizer: 180-0-0 lb/a N, P, K
Strip-till after soybean
Herbicide: 2 qt/a Acuron, 17 lb/100 gal AMS, 1 qt/100 gal crop oil
Target population: 28,000 plants
Planted: 4/28/20
Harvested: 9/23/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	1.9	2.1	4.5	1.9	7.6	**17.9**
Long-term average	2.5	3.3	5.0	5.0	4.1	**20.0**
Departure						**-2.1**

Table 13. Parsons, Kansas Short Season Corn Performance Test, Labette County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	HT (in)	PLANTS per acre	DAYS (silk)	LODGE (%)
DEKALB	DKC50-64RIB	90.3	75.3	14.3	57.5	81.3	19886	88	0
DEKALB	DKC60-88 RIB	123.3	102.8	14.3	57.9	85.3	20754	87	0
DEKALB	DKC65-95 RIB	148.5	123.9	14.5	58.5	84.3	20044	88	7
DYNA-GRO	D54SS74	126.2	105.3	14.2	58.3	85.3	21780	87	0
DYNA-GRO	DG50VC30	131.9	110.0	14.1	58.5	88.0	21780	89	0
DYNA-GRO	DG52VC63	116.1	96.8	14.4	57.9	85.0	19176	88	15
FRONTIER	FS106	119.4	99.6	14.2	57.1	83.8	18939	85	0
FRONTIER	FS108	105.7	88.1	14.1	56.7	83.5	21228	87	0
FRONTIER	FS110	108.1	90.1	14.4	57.8	83.8	19492	88	0
MATURITY CHECK	FULL	121.4	101.2	14.5	59.7	92.3	18781	88	0
MATURITY CHECK	MID	110.4	92.1	14.4	58.2	86.8	17282	87	0
MATURITY CHECK	SHORT	137.4	114.6	14.1	58.5	86.5	18623	85	0
	Average	119.9	100.0	14.3	58.0	85.5	19813	87	2
	CV (%)	10.0	10.0	0.9	0.9	3.0	5	1	--
	LSD (0.05)	16.8	14.1	1.2	0.6	4.0	1802	2	--

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

Cooperator: Kansas State University Southeast Research-Extension Center
Fertilizer: 180-46-60 lb/a N, P, K Soil Series: Parsons silt loam
Herbicide: 2 qt/a glyphosate + 1.5 pt/a Dual II Magnum + 2.0 qt/a Atrazine 4L + 2 qt/a 2,4-D
Target population: 20,000 plants No-till after soybean
Planted: 4/7/20 Harvested: 9/3/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	6.0	3.7	13.7	1.0	4.9	**29.3**
Long term average	3.2	4.4	5.9	5.5	3.9	**23.0**
Departure						**+6.3**

Table 14. Hays, Kansas Dryland Corn Performance Test, Ellis County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	103.4	86.8	53.8	11.9
DEKALB	DKC60-88 RIB	126.1	105.9	54.1	13.0
DEKALB	DKC65-95 RIB	120.8	101.4	55.4	14.9
DYNA-GRO	D43VC81	96.2	80.7	53.3	12.1
DYNA-GRO	D48VC76	124.7	104.6	54.0	12.4
MATURITY CHECK	FULL	137.3	115.2	55.3	16.2
MATURITY CHECK	MID	94.4	79.2	54.4	13.5
MATURITY CHECK	SHORT	82.5	69.3	53.9	12.2
MIDLAND	381VLGA EZ1	125.3	105.2	53.6	13.0
MIDLAND	570PR RIB	142.7	119.8	55.0	14.9
MIDLAND	656PR RIB	105.5	88.5	54.5	14.9
MIDLAND	669PR RIB	138.6	116.4	55.2	15.3
MIDLAND	721PR RIB	122.7	103.0	56.5	14.6
RENK	RK710DGVT2P	112.3	94.3	52.9	12.1
RENK	RK866DGVT2P	129.6	108.8	53.7	12.6
RENK	RK882SSTX	124.7	104.6	55.2	15.1
RENK	RK937VT2P	115.2	96.7	53.4	12.4
RENK	RK945DGVT2P	122.6	102.9	53.9	15.5
RENK	RK961VT2P	117.4	98.5	53.1	15.9
RENK	RK965VT2P	110.2	92.5	55.0	15.7
	Average	119.1	100.0	54.2	13.9
	CV (%)	8.8	8.8	1.1	4.6
	LSD (0.05)	14.8	12.5	0.9	0.9

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

Cooperator: Agricultural Research Center-Hays
Fertilizer: 120-0-0 lb/a N, P, K — Soil Series: Harney clay loam
Herbicide: 2 qt/a Dual II Magnum — No-till after soybean
Target population: 20,000 plants
Planted: 4/23/20 — Harvested: 9/24/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	0.5	0.5	3.2	2.4	7.0	**13.5**
Long-term average	1.8	2.1	3.3	2.8	3.9	**14.0**
Departure						**-0.5**

Table 15. Colby, Kansas Dryland Corn Performance Test, Thomas County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	PHT (in)	STAND (%)	PLANTS per acre
DEKALB	DKC50-64RIB	120.4	91.9	11.9	55.4	86.5	91.0	28199
DEKALB	DKC60-88 RIB	141.9	108.2	13.5	55.7	87.5	91.0	28199
DEKALB	DKC65-95 RIB	141.8	108.2	15.3	56.0	90.5	91.3	28314
DYNA-GRO	D43VC81	129.3	98.6	12.0	55.9	89.8	95.0	29460
DYNA-GRO	D48VC76	141.6	108.0	13.5	53.9	90.8	93.9	29116
DYNA-GRO	D51VC41	127.6	97.4	12.9	54.0	86.8	97.3	30148
DYNA-GRO	D52DC82	129.1	98.5	14.3	54.0	91.8	80.6	24990
DYNA-GRO	D54SS74	135.2	103.1	17.2	54.2	87.5	91.3	28314
DYNA-GRO	D54VC14	131.4	100.3	18.3	53.3	86.5	90.6	28085
DYNA-GRO	D55VC80	137.9	105.2	19.7	52.9	92.8	99.5	30836
DYNA-GRO	D57VC17	135.7	103.5	16.4	55.7	91.0	105.4	32670
DYNA-GRO	D58VC65	118.1	90.1	21.8	51.5	89.0	80.6	24990
MATURTY CHECK	FULL	117.8	89.9	15.5	56.3	93.8	79.5	24646
MATURTY CHECK	MID	128.4	97.9	17.1	54.9	91.5	90.2	27970
MATURTY CHECK	SHORT	134.0	102.2	14.5	56.3	89.5	91.0	28199
RENK	RK710DGVT2P	126.8	96.7	12.6	55.2	90.3	91.7	28429
RENK	RK866DGVT2P	129.1	98.5	13.1	54.0	91.0	95.0	29460
RENK	RK882SSTX	138.7	105.8	14.4	56.5	91.3	102.1	31638
RENK	RK937VT2P	129.2	98.5	13.5	53.2	92.8	98.4	30492
RENK	RK945DGVT2P	129.0	98.4	18.4	53.8	89.8	90.2	27970
RENK	RK961VT2P	125.2	95.5	15.9	53.4	91.5	90.2	27970
RENK	RK965VT2P	129.9	99.1	19.2	53.8	89.3	81.4	25219
ROB-SEE-CO	6038-332	131.4	100.3	14.1	54.1	92.8	102.8	31868
ROB-SEE-CO	6698-3111	142.3	108.5	17.8	52.4	91.0	89.1	27626
	Average	131.1	131.1	15.6	54.4	90.2	92.4	28654
	CV (%)	8.9	8.9	--	--	--	--	12
	LSD (0.05)	12.1	9.1	4.6	3.1	--	--	2854

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

Cooperator: Kanas State University Northwest Research-Extension Center
Fertilizer: 140-30-0 lb/a N, P, K Soil Series: Keith silt loam
Herbicide: 80 oz/a Lumax, 5.5 oz/a Corvus; 6 oz/a Balance Flex; 16 oz/a Detonate
Target population: 31,000 plants No-till after wheat
Planted: 5/5/20 Harvested: 9/24/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	1.7	0.3	2.0	1.5	4.1	**9.4**
Long-term average	1.1	2.0	1.3	2.5	3.8	**12.8**
Departure						**-3.4**

Table 16. Garden City, Kansas Irrigated Corn Performance Test, Finney County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	187.4	75.1	57.6	12.1
DEKALB	DKC60-88 RIB	253.9	101.7	58.6	13.0
DEKALB	DKC65-95 RIB	257.1	103.0	63.1	13.6
DYNA-GRO	D51VC41	269.6	108.0	58.8	12.5
DYNA-GRO	D52DC82	244.8	98.1	56.6	11.4
DYNA-GRO	D54SS74	231.1	92.6	58.8	14.3
DYNA-GRO	D54VC14	268.2	107.5	60.3	13.0
DYNA-GRO	D55VC80	281.2	112.7	58.2	15.4
DYNA-GRO	D57VC17	281.9	113.0	59.8	14.4
DYNA-GRO	D58VC65	231.3	92.7	57.8	16.0
MATURITY CHECK	SHORT	249.5	100.0	58.1	11.3
MATURITY CHECK	FULL	273.9	109.8	57.5	17.9
MATURITY CHECK	MID	233.8	93.7	57.8	10.8
	Average	249.6	249.6	58.8	13.5
	CV (%)	9.7	9.7	3.7	12.4
	LSD (0.05)	34.3	13.7	3.1	2.4

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

Cooperator: Kansas State University Southwest Research-Extension Center
Fertilizer: 180-0-0 lb/a N, P, K — Soil Series: Keith silt loam
Herbicide: 2 qt/a Acuron, 17 lb/100 gal AMS, 1 qt/100 gal crop oil
Target population: 28,000 plants — Conventional-till after sorghum
Planted: 4/29/20 — Harvested: 10/6/20

Monthly rainfall (in)	March	April	May	June	July	**Total**
2020	0.5	0.1	0.7	1.9	5.2	**8.4**
Long-term average	1.2	1.7	3.0	3.1	2.8	**11.9**
Departure						**-3.5**

Table 17. Leoti, Kansas Irrigated Corn Performance Test, Wichita County, 2020

BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	166.6	77.7	57.6	14.0
DEKALB	DKC60-88 RIB	215.0	100.2	58.2	19.1
DEKALB	DKC65-95 RIB	221.7	103.3	57.3	20.4
DYNA-GRO	D43VC81	165.6	77.2	58.0	15.5
DYNA-GRO	D48VC76	206.1	96.0	57.1	17.9
DYNA-GRO	D51VC41	228.8	106.6	56.3	18.2
DYNA-GRO	D52DC82	226.9	105.7	55.4	19.9
DYNA-GRO	D54SS74	251.0	116.9	56.0	21.5
DYNA-GRO	D54VC14	226.2	105.4	57.5	19.5
DYNA-GRO	D55VC80	245.7	114.5	56.1	22.2
DYNA-GRO	D57VC17	207.1	96.5	56.4	22.5
DYNA-GRO	D58VC65	216.6	100.9	56.2	22.4
HEINE SEEDS	8220 VT2Pro	212.9	99.2	56.2	19.5
HEINE SEEDS	823VT2ProRIB	240.0	111.8	56.0	20.7
HEINE SEEDS	831VT2ProRIB	214.0	99.7	57.9	17.5
HEINE SEEDS	8500DGVT2Pro	189.8	88.5	54.8	22.0
HEINE SEEDS	852VT2ProRIB	216.8	101.0	56.1	21.6
MATURITY CHECK	FULL	216.4	100.8	56.4	21.6
MATURITY CHECK	MID	203.5	94.9	58.4	18.9
MATURITY CHECK	SHORT	198.9	92.7	58.0	17.2
RENK	RK710DGVT2P	212.9	99.2	58.7	16.8
RENK	RK866DGVT2P	223.6	104.2	56.9	18.8
RENK	RK882SSTX	225.7	105.2	57.3	19.4
RENK	RK937VT2P	212.6	99.1	57.1	19.1
RENK	RK945DGVT2P	229.4	106.9	55.7	21.1
RENK	RK961VT2P	201.7	94.0	55.1	20.4
RENK	RK965VT2P	220.6	102.8	55.3	23.5
	Average	214.6	100.0	56.8	19.7
	CV (%)	8.3	8.3	1.5	7.7
	LSD (0.05)	25.1	11.7	1.2	2.1

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

Cooperator: Private farm Soil Series: Ulysses silt loam
Fertilizer: 180-0-0 lb/a N, P, K
Herbicide: 2 qt/a Acuron, 17 lb/100 gal AMS, 1 qt/100 gal crop oil
Target population: 30,000 plants Strip-till after corn
Planted: 5/4/20 Harvested: 10/9/20

Monthly rainfall (in)	March	Apri	May	June	July	**Total**
2020	0.6	0.1	0.6	2.7	3.5	**7.5**
Long-term average	1.4	2.0	2.6	2.6	2.9	**11.4**
Departure						**-3.9**

Table 18. Entries in the 2020 Kansas Corn Performance Tests

	SD TRT	DBL	RES	P	F
DEKALB					
DKC60-88 RIB	--	--	--	--	--
DKC65-95 RIB	--	--	--	--	--
DKC50-64RIB	ACC/VOT	100	VT2PRIB	--	--
DYNA-GRO					
DG50VC30	--	--	--	--	--
DG52VC63	--	--	--	--	--
D43VC81	ACC/P500	103	VT2P	Y	Y
D48VC76	ACC/P500	108	VT2P	Y	Y
D51VC41	ACC/P500	111	VT2P	Y	Y
D52DC82	ACC/P500	112	DG/VT	Y	Y
D54VC14	ACC/P500	114	VT2P	Y	Y
D54SS74	ACC/P500	114	SSTX	Y	N
D55VC80	ACC/P500	115	VT2P	Y	N
D57VC17	ACC/P500	117	VT2P	Y	Y
D58VC65	ACC/P500	118	VT2P	Y	Y
FRONTIER					
FS106	CM250	106	3010	N	Y
FS108	CM250	108	3220	N	Y
FS110	CM250	110	3220	N	Y
GOLDEN HARVEST					
G11A33-522-EZ1	--	--	--	--	--
G13N18-3111	--	--	--	--	--
HEINE SEEDS					
831VT2ProRIB	ACC250	111	DGVT2Pro	Y	Y
8220 VT2Pro	ACC250	111	VT2P	--	--
8500DGVT2Pro	P/VOT500	111	DGVT2Pro	Y	N
823VT2ProRIB	ACC250	111	VT2Pro	Y	N
852VT2ProRIB	ACC250	112	VT2ProRIB	Y	Y
MATURITY CHECK					
FULL	--	--	AQUAmax	--	--
MID	--	--	AQUAmax	--	--
SHORT	--	--	AQUAmax	--	--
MIDLAND					
381VLGA EZ1	CM/VIB	108	3330	--	--
429PR RIB	C250	110	VT2Pro	Y	Y
430PR RIB	ACC250	111	VT2P	--	Y
570PR RIB	ACC250	112	VT2P	--	Y
660PR DG RIB	ACC	113	VT2P DG	--	--
656PR RIB	C250	113	RR, VT2P	Y	Y
669PR RIB	C250	113	VT2Pro	Y	Y
721PR RIB	ACC	115	VT2P	--	Y
770PR DG RIB	ACC250	115	VT2P	--	Y
790SS RIB	ACC	116	SS	--	--
801PR RIB	ACC	117	VT2P	--	--
NK					
NK1284-3220-EZ1	--	--	--	--	--
RENK					
RK710DGVT2P	AC250	106	VT2P	N	N
RK700SSTX	ACC	107	SSTX	N	N
RK805VT2P	ACC	110	VT2P	N	N
RK807SSTX	AC500/VOT	111	SSTX	N	N
RK882SSTX	ACC	111	SSTX	N	N
RK866DGVT2P	ACC	112	VT2PDG	N	N
RK937VT2P	AC250	113	VT2P	N	N
RK945DGVT2P	AC250	115	VT2P	N	N
RK961VT2P	ACC250	116	GEN. VT2P	N	N
RK965VT2P	AC250	116	VT2P	N	N
ROB-SEE-CO					
6038-332	CM500	110	Viptera	Y	N
6698-3111	CM500	116	Viptera	Y	Y

SD TRT = Seed treatment (C = Cruiser, ACC = Acceleron, HC = Hefty Complete, P = Poncho, VOT = Votivo. Numbers indicate rates if available); DBL = days to black layer; RES = herbicide, disease, and insect resistance traits [(Bt, BtCB, CB, YG, YG1, YG+, YGCB), Hx = transgenic corn borer protection; BtRW, RW, YGRW, HxRW = transgenic rootworm protection; CL, I, IT, IMI = imidazolinone resistant/tolerant; LL = Liberty Link; RR = Roundup Ready; TS, T = Triple Stack (RRCBRW)]; P = prolific; F = flex ear. Values provided by entrants.

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 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 1159, '2020 Kansas Performance Tests with Corn 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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