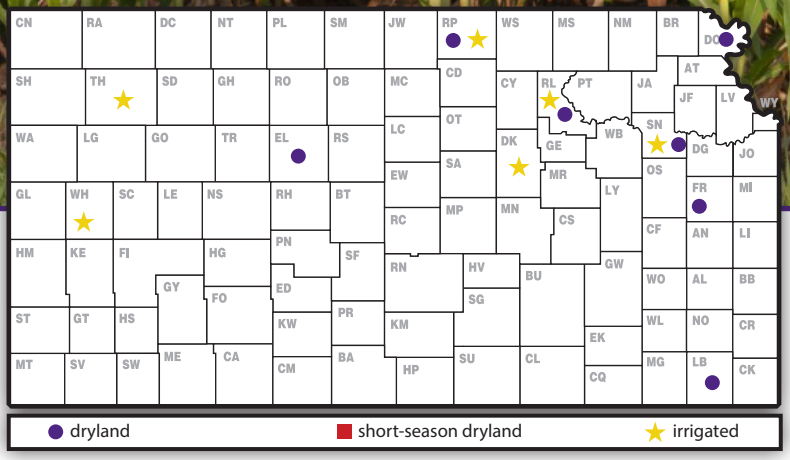
2021 Kansas Performance Tests with

Corn Hybrids



Report of Progress 1166

K-STATE
Research and Extension

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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Contribution No. 22-166-S from the Kansas Agricultural Experiment Station.

2021 CORN CROP REVIEW

Statewide Growing Conditions

The 2021 corn season was something of a roller coaster ride weather-wise: temperature and precipitation were up and down from month to month throughout most of the growing season.

The season started (or at least tried to start) in March, which was the fifth wettest March on record since 1895. Precipitation in east central Kansas was 145% higher than normal, but the clear winner for that state was northwest Kansas, which was 262% higher than normal. Due to adequate or surplus subsoil moisture, reported by 78% of the state, early planting was delayed until April or May. March was also warmer than normal, but those warm temperatures ended as we moved into April. The month of April was drier and significantly cooler than normal, to the extent that there was snow and a freeze April 20-22 for much of the state. Following the freeze there were numerous reports of chilling injury to the early planted corn.

The month of May brought another upward swing in precipitation. The drought in Kansas was essentially (temporarily) eliminated because 97% of the state was considered drought-free. The extra precipitation did cause saturated soils and standing water that had mixed results on the corn crop depending on the stage of development. There were numerous cases of uneven stands, poor root development, and many fields had to be replanted or were abandoned. The additional rain also often coincided with severe weather for the state. In May, there were 34 tornadoes, 159 hail events, 116 damaging wind events, and several flash floods.

There was some relief in June with drier and warmer than normal conditions for most parts of the state, however southeast Kansas remained at 124% of the normal precipitation. North central Kansas was the hardest hit with only 37%. The dry conditions persisted into July, again except for southeast which was still 133% of normal. Northwest Kansas dropped from 262% of normal in March to only 43%. The temperatures for July dropped as well; the average temperature was 1.4°F cooler than normal and only 1 new daily record high for the state. The weather was not quite as severe as in earlier months with no tornadoes, 11 hail events, and 51 damaging wind events.

The dry pattern remained through August and northwest Kansas dropped again to only 34% of normal precipitation and that area of Kansas was back on the drought monitor. Temperatures rebounded and the average daily temperature was 1.7°F warmer than normal with 12 new record high maximum temperatures. There was also 1 tornado, 69 hail events, and 111 damaging wind events in August.

September was also warmer than normal, but this time precipitation rebounded into a fairly wet month, which delayed grain drying and harvest.

These monthly fluctuations in precipitation and temperatures meant that growing conditions and consequently yields and quality varied widely across the state; there were pockets of excellent corn neighbored by subpar corn or corn cut for silage. There was a phenomenon that was found in many corn fields in Kansas this year of premature ear droop or ear drop. Usually the corn ear remains in an upright position until it reaches black layer, but in 2021 there were numerous reports from across the state in dryland and irrigated fields of corn ears that were drooping or had dropped to the ground. This happens when the plant runs out of resources and uses up all of the sugar and carbohydrate reserves in the plant stem and shank for grain filling. Some of the conditions that normally favor ear droop are high temperatures, drought stress, and poor root development. It can also occur when there is interrupted photosynthesis from cloudy days or smoke from wildfires. The exact cause of ear droop cannot be pinpointed this year since it occurred in rainfed and irrigated fields under a variety of weather conditions. However, our observations lead us to believe that it was some unfavorable combination of weather and lack of solar radiation that may have reduced yields and hindered harvest.

Overall, the U.S. Department of Agriculture National Agricultural Statistics Service reported the average yield for the state at 140 bushels/acre; up 6 bushels from last year, and statewide corn production at 742 million bushels, which is down 3% from last year.

Diseases

The advantage to the up-and-down growing season conditions is that it seemed to alleviate disease and insect pressures. Conditions did not stay favorable long enough for diseases to get established and affect the crop to economic thresholds. There were moderate amounts of the usual Kansas suspects: gray leaf spot, bacterial leaf streak, Southern rust, Diplodia ear rot, and stalk rots late in the season, but no disease stood out as the main concern for 2021.

Insects

Twenty-thirty years ago, we had more pest problems in corn than any other crop. However, now most corn pest problems have, or can, be mitigated with a good integrated pest management (IPM) program. But we always seem to have a few spider mite problems, mainly in the western half of Kansas. These are a difficult problem, but they can be managed.

The last 2-3 years, we have seen Japanese beetle populations increase throughout the state—mainly moving east to west. We now see the populations extend about two-thirds across the state. These beetles are relatively large and feed voraciously on silks- if the silks are emerging at about the same time as the beetles. So far, there seems to be more concern than actual damage. But these populations do need monitoring in 2022. (Jeff Whitworth, Kansas State University Department of Entomology)

2021 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 11 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 preceding data for each test. Tables 2 through 10 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 2021 Kansas Corn Performance Tests

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

Beck's Hybrids
Atlanta, IN
800-937-2325
beckshybrids.com

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

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

Lewis Hybrids
Paola, KS
816-835-5965
lewishybrids.com

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

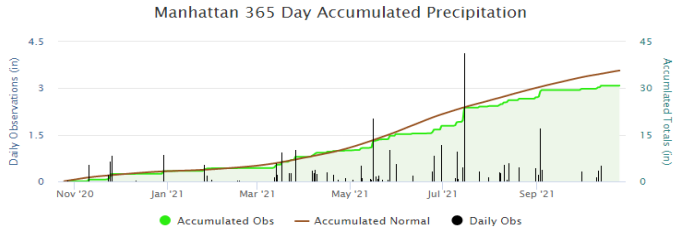
Monsanto (Dekalb)
St. Louis, MO
314-694-1000
monsanto.com
*maturity checks

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

Syngenta (NK Hybrids)
Greensboro, NC
800-334-9481
nkhybrids.com

Table 2. Manhattan, Kansas Dryland Corn Performance Test, Riley County, 2021

Agronomy North Farm, Manhattan
Planted: 4/29/2021
180-0-0 lb/a N, P, K
Herbicide: Lexar applied pre-emergence

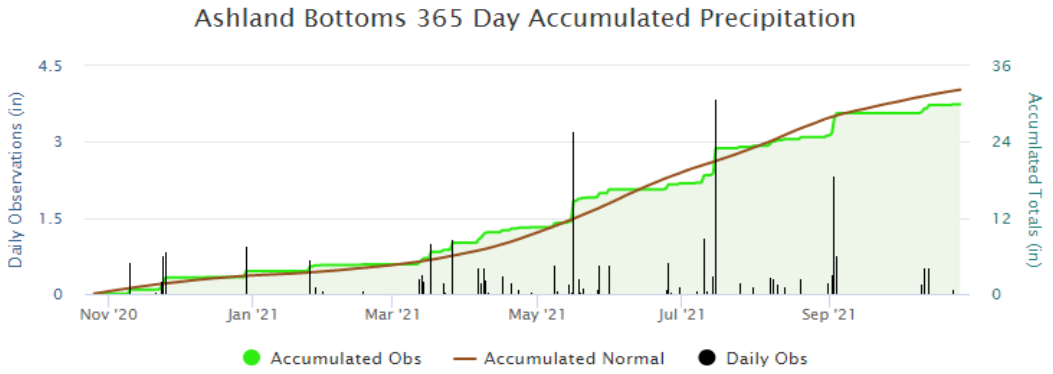


Brand	Name	Yield (bu/a)	PAVG (%)	Moist (%)	TW (lb/bu)
BECKS	5765 AM	209.9	91.1	10.4	59.1
BECKS	5909 AM	230.3	99.9	10.8	58.1
BECKS	6282 AM	**258.6**	112.2	11.9	61.0
BECKS	6414 V2P	223.6	97.1	12.9	60.6
DEKALB	DKC59-82	236.6	102.7	11.3	57.9
DEKALB	DKC65-95 RIB	242.0	105.0	13.5	60.7
DYNA-GRO	D48QV22	247.7	107.5	10.6	58.0
DYNA-GRO	D49SS70	215.0	93.3	11.4	60.3
DYNA-GRO	D50VC09	224.5	97.5	10.5	56.9
DYNA-GRO	D50VC78	218.5	94.9	10.6	58.6
DYNA-GRO	D51SS41	244.8	106.3	11.0	58.6
DYNA-GRO	D51SS61	**266.4**	115.6	10.7	58.2
DYNA-GRO	D52DC82	232.5	100.9	11.9	57.6
DYNA-GRO	D53TC19	246.3	106.9	11.4	59.4
DYNA-GRO	D57TC29	235.4	102.2	13.9	58.4
DYNA-GRO	D57VC17	193.5	84.0	13.2	60.1
DYNA-GRO	D58VC65	226.6	98.3	13.0	60.3
GOLDEN HARVEST	G13N18-3111	242.6	105.3	11.1	54.6
LEWIS	10DP719	215.8	93.7	11.2	58.7
LEWIS	14DD849	**256.2**	111.2	13.5	58.9
LEWIS	15DP899	234.2	101.6	12.8	59.1
LEWIS	16DP850	243.9	105.9	13.3	60.8
LEWIS	16DP887	248.8	108.0	16.3	60.0
MATURITY CHECK	FULL	**262.1**	113.8	13.4	60.0
MATURITY CHECK	MID	215.8	93.7	10.8	57.9
MATURITY CHECK	SHORT	209.0	90.7	10.7	58.4
MIDLAND	381VLGA EZ1	206.6	89.7	10.6	58.0
MIDLAND	570PR RIB	229.7	99.7	12.3	60.2
MIDLAND	621PR	218.1	94.7	12.9	60.0
MIDLAND	662TRE	243.6	105.8	12.5	58.8
MIDLAND	721PR RIB	219.5	95.3	12.4	61.6
MIDLAND	782PR	240.9	104.6	12.8	59.5
NK	NK1284-3220-EZ1	207.0	89.8	11.6	58.6
NK	NK1354	224.0	97.2	11.3	57.3
RENK	RK710DGVT2P	216.3	93.9	10.9	58.8
RENK	RK782VT2P	229.5	99.6	11.4	59.5
RENK	RK821SSTX	234.9	102.0	11.4	59.3
RENK	RK826VT2P	221.6	96.2	12.2	58.7
RENK	RK882TRE	217.3	94.3	12.3	58.7
RENK	RK907SSTX	236.9	102.8	12.1	60.1
RENK	RK915VT2P	233.8	101.5	13.4	59.4
RENK	RK945DGVT2P	215.6	93.6	12.6	57.1
	AVERAGE	230.4	100.0	12.0	59.0
	CV (%)	7.2	7.2	1.4	0.8
	LSD (0.05)	13.8	9.3	2.0	1.0

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

Table 3. Ashland Bottoms, Kansas Irrigated Corn Performance Test, Riley County, 2021

Ashland Bottoms Research Farm, Riley County
Planted: 5/7/2021
220-0-0 lb/ac N, P, K
Herbicide: 3 qt/a Lexar EZ pre-emergence

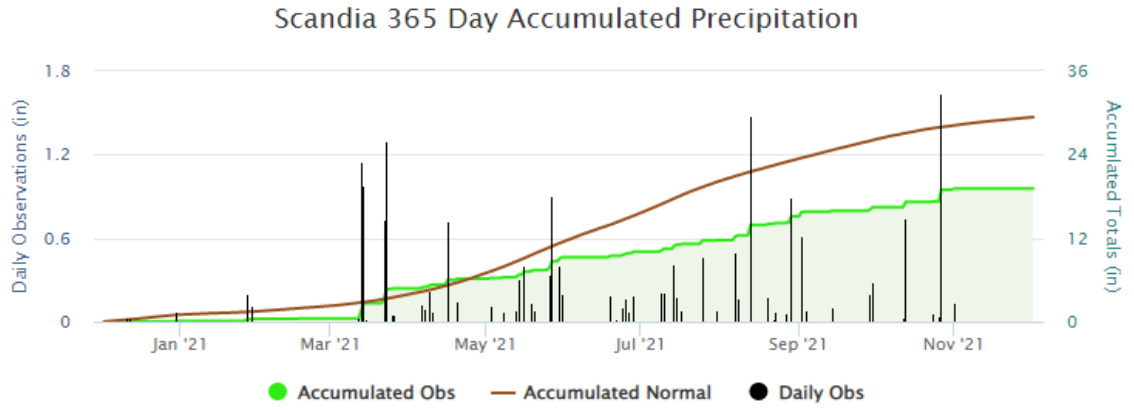


Brand	Name	Yield (bu/a)	PAVG (%)	Moist (%)	TW (lb/bu)
BECKS	5765 AM	238.3	102.2	10.9	59.4
BECKS	5909 AM	**249.6**	107.1	10.6	59.1
BECKS	6282 AM	**248.2**	106.5	11.7	61.7
BECKS	6414 V2P	**244.2**	104.8	12.2	61.0
DEKALB	DKC59-82	234.7	100.7	11.0	58.6
GOLDEN HARVEST	G13N18-3111	230.3	98.8	10.0	54.8
LEWIS	10DP719	214.0	91.8	10.8	58.9
LEWIS	14DD849	239.9	102.9	12.1	58.9
LEWIS	15DP899	236.4	101.4	12.1	58.5
LEWIS	16DP850	**246.6**	105.8	11.5	60.3
LEWIS	16DP887	**257.1**	110.3	14.6	60.3
MATURITY CHECK	FULL	**251.2**	107.8	12.6	60.6
MATURITY CHECK	MID	211.8	90.9	11.1	59.0
MATURITY CHECK	SHORT	212.6	91.2	10.6	58.8
NK	NK1284-3220-EZ1	200.5	86.0	10.9	57.7
NK	NK1354	214.3	91.9	10.6	57.3
	AVERAGE	233.1	100.0	11.4	59.0
	CV (%)	6.1	6.1	3.4	0.7
	LSD (0.05)	17.1	6.4	2.3	1.6

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

Table 4. Scandia, Kansas Irrigated Corn Performance Test, Republic County, 2021

North Central Experiment Field, Scandia
Planted: 4/30/2021
200-0-0 lb/a N, P, K
Herbicide: 1.5 qt/a Makaze, 3 qt/a Acuron, 10 oz/a Status, 1.5 qt/a Mad Dog
Irrigation: 10 inches 6/24-8/25

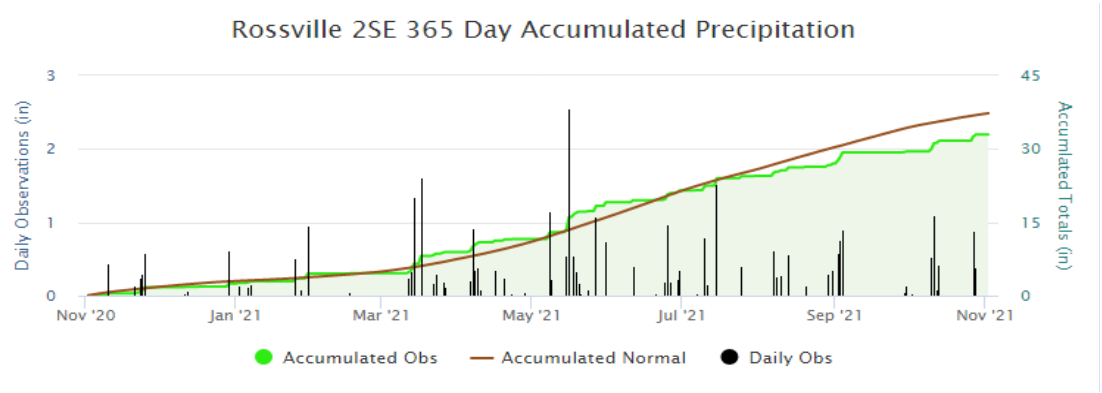


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	HT (in)
BECKS	5765 AM	203.9	94.0	14.0	58.8	108
BECKS	5909 AM	196.4	90.5	14.0	59.3	104
BECKS	6282 AM	231.7	106.8	14.3	61.2	110
BECKS	6414 V2P	231.4	106.7	14.5	60.9	108
DEKALB	DKC59-82	224.0	103.3	13.8	58.6	102
DEKALB	DKC65-95 RIB	233.9	107.8	14.7	61.1	108
GOLDEN HARVEST	G13N18-3111	**244.2**	112.5	14.2	56.7	110
LEWIS	10DP719	183.4	84.5	14.2	59.8	112
LEWIS	14DD849	**241.9**	111.5	14.3	60.4	108
LEWIS	15DP899	226.3	104.3	14.3	59.7	108
LEWIS	16DP850	**256.2**	118.1	14.5	61.7	104
LEWIS	16DP887	213.0	98.2	14.6	61.4	112
MATURITY CHECK	FULL	200.5	92.4	14.9	61.4	116
MATURITY CHECK	MID	219.8	101.3	13.9	59.2	110
MATURITY CHECK	SHORT	205.6	94.8	14.1	59.1	108
MIDLAND	721PR RIB	212.9	98.1	14.8	62.0	104
NK	NK1284-3220-	164.7	75.9	14.4	59.8	116
NK	NK1354	218.3	100.6	14.4	58.7	108
RENK	RK710DGVT2P	214.2	98.7	14.0	59.6	114
	AVERAGE	217.0	100.0	14.3	60.0	109
	CV (%)	8.5	8.5	1.5	1.1	5
	LSD (0.05)	22.0	10.1	1.1	2.3	3

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

Table 5. Rossville, Kansas Irrigated Corn Performance Test, Shawnee County, 2021

Kansas River Valley Experiment Field, Rossville
Planted: 4/27/2021
180-0-0 lb/ac N, P, K
Herbicide: pre-emergence: 6 oz/a Callisto, 3 qt/a Degree Xtra, 0.5 lb/a Aatrex 90, 1 oz/a Aim; post emergence: 1 lb/a Aatrex 90, 14 oz/a Aremezon Pro, 1 oz/a Aim, 1 qt/100 gal Enact



BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	PLANTS per acre
BECKS	5765 AM	235.9	97.3	17.8	59.6	27750
BECKS	5909 AM	247.3	102.0	19.0	58.9	28750
BECKS	6282 AM	230.6	95.1	18.1	59.7	29000
BECKS	6414 V2P	235.3	97.1	20.8	58.4	28250
DEKALB	DKC59-82	**261.8**	108.0	18.7	57.5	28000
DEKALB	DKC65-95 RIB	**262.3**	108.2	20.8	59.2	28500
DYNA-GRO	D50VC09	**254.0**	104.7	17.6	57.4	28000
DYNA-GRO	D50VC78	224.2	92.5	18.5	58.5	28250
DYNA-GRO	D51SS41	233.8	96.4	18.9	57.4	29250
DYNA-GRO	D51SS61	240.1	99.0	18.7	58.6	27000
DYNA-GRO	D52DC82	**261.8**	108.0	19.1	57.4	27750
DYNA-GRO	D53TC19	**252.4**	104.1	18.4	59.3	28333
DYNA-GRO	D57TC29	**255.8**	105.5	21.0	56.9	28750
DYNA-GRO	D57VC17	236.0	97.3	20.6	58.9	29000
DYNA-GRO	D58VC65	**248.8**	102.6	20.3	58.1	28250
GOLDEN HARVEST	G13N18-3111	248.0	102.3	19.9	56.4	27750
LEWIS	10DP719	**251.0**	103.5	18.2	58.7	27250
LEWIS	14DD849	**255.9**	105.5	21.0	57.2	29250
LEWIS	15DP899	**263.6**	108.7	19.9	57.8	28500
LEWIS	16DP850	**264.5**	109.1	19.5	59.5	32750
LEWIS	16DP887	**261.1**	107.7	20.2	56.5	26500
MATURITY CHECK	FULL	229.3	94.6	20.7	58.8	24500
MATURITY CHECK	MID	220.8	91.1	18.2	58.4	26250
MATURITY CHECK	SHORT	223.3	92.1	16.5	59.5	29250
MIDLAND	381VLGA EZ1	**250.7**	103.4	19.8	57.4	26000
MIDLAND	570PR RIB	**254.7**	105.0	19.8	59.8	27750

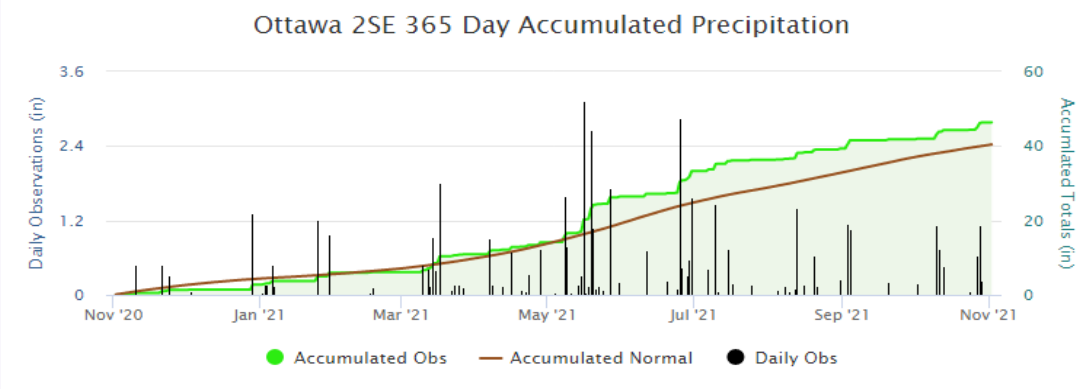
Table 5 continued. Rossville, Kansas Irrigated Corn Performance Test, Shawnee County, 2021

BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	PLANTS per acre
MIDLAND	621PR	**252.5**	104.2	19.7	58.4	28000
MIDLAND	662TRE	**255.2**	105.3	18.8	58.4	30000
MIDLAND	721PR RIB	233.1	96.1	19.1	60.5	26250
MIDLAND	782PR	238.3	98.3	20.0	57.9	25750
NK	NK1284-3220-EZ1	215.0	88.7	18.5	57.9	29000
NK	NK1354	216.4	89.2	20.4	57.0	29000
RENK	RK782VT2P	236.4	97.5	18.5	59.6	27500
RENK	RK821SSTX	243.7	100.5	17.6	59.1	28000
RENK	RK826VT2P	244.4	100.8	17.5	58.3	29000
RENK	RK882TRE	216.1	89.1	19.6	58.1	26000
RENK	RK907SSTX	226.3	93.3	19.5	59.1	29000
RENK	RK915VT2P	233.4	96.3	20.0	58.5	28250
RENK	RK945DGVT2P	241.7	99.7	20.3	57.6	27000
	AVERAGE	242.4	100.0	19.3	58.4	28034
	CV (%)	7.2	7.2	2.2	1.9	--
	LSD (0.05)	16.3	6.9	2.0	0.9	--

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

Table 6. Ottawa, Kansas Dryland Corn Performance Test, Franklin County, 2021

East Central Experiment Field, Ottawa
Planted: 6/7/2021
121-47-31-10 lb/ac N, P, K, S + 50 lb/a N on 6/16
Herbicide: 1.5 lb/a Atrazine, 1.25 pt/a S-Metolachlor, Callisto

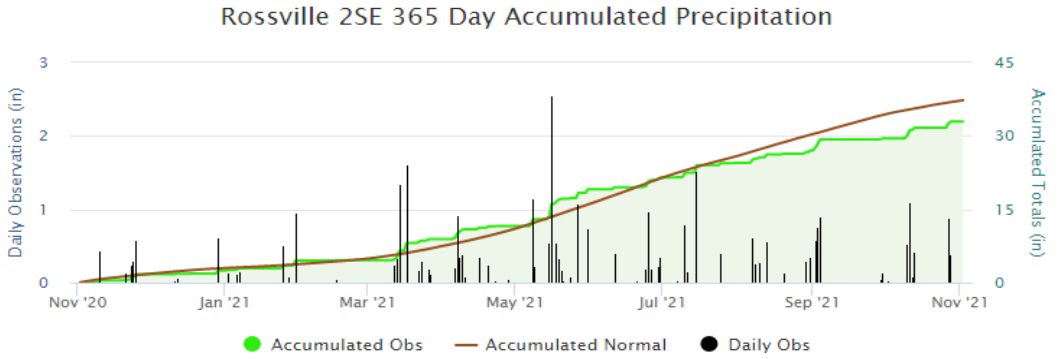


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	DATE (1/2 silk)	PLANTS per acre
BECKS	5765 AM	139.2	87.5	17.6	54.8	28-Jul	23500
BECKS	5909 AM	**161.2**	101.4	18.6	54.9	28-Jul	24250
BECKS	6282 AM	150.0	94.4	20.0	55.9	29-Jul	24625
BECKS	6414 V2P	**176.1**	110.8	20.8	55.0	28-Jul	23500
DEKALB	DKC59-82	153.2	96.4	19.1	54.1	29-Jul	23625
DEKALB	DKC65-95 RIB	**172.5**	108.5	20.6	56.0	3-Aug	24750
GOLDEN HARVEST	G13N18-3111	**170.5**	107.2	21.8	51.0	29-Jul	23375
LEWIS	10DP719	157.0	98.7	18.3	55.4	29-Jul	22500
LEWIS	14DD849	**160.4**	100.9	22.8	52.9	3-Aug	24625
LEWIS	15DP899	**169.6**	106.7	21.8	54.5	30-Jul	23625
LEWIS	16DP850	**169.2**	106.5	21.5	55.3	30-Jul	23500
MATURITY CHECK	FULL	**164.1**	103.2	21.1	54.8	30-Jul	22750
MATURITY CHECK	MID	141.7	89.1	19.5	54.7	1-Aug	22125
MATURITY CHECK	SHORT	150.5	94.7	16.3	57.2	26-Jul	23750
NK	NK1284-3220-EZ1	138.3	87.0	20.3	54.1	3-Aug	24000
NK	NK1354	**170.2**	107.1	22.4	51.1	29-Jul	24250
	AVERAGE	159.0	100.0	20.2	54.5	30-Jul	23672
	CV (%)	7.9	7.9	3.4	1.1	--	6
	LSD (0.05)	17.9	10.3	1.0	0.9	--	1883

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

Table 7. Kiro, Kansas Dryland Corn Performance Test, Shawnee County, 2021

Private farm, Kiro, Kansas
Planted: 4/27/2021
180-0-0 lb/ac N, P, K
Herbicide: pre-emergence: 6 oz/a Callisto, 3 qt/a Degree Xtra, 0.5 lb/a Aatrex 90, 1 oz/a Aim; post emergence: 1 lb/a Aatrex 90, 14 oz/a Aremezon Pro, 1 oz/a Aim, 1 qt/100 gal Enact

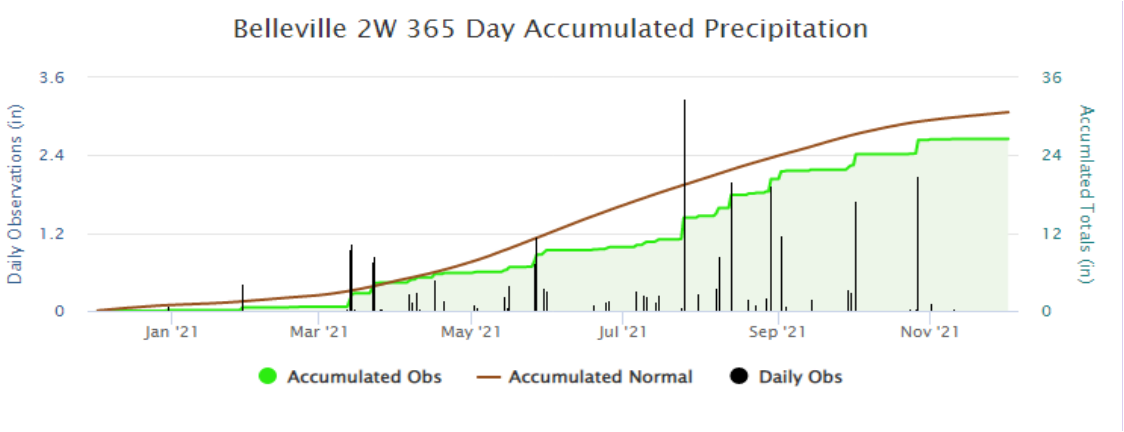


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	PLANTS per acre
BECKS	5765 AM	**229.5**	102.4	13.7	60.3	21750
BECKS	5909 AM	227.0	101.3	14.3	60.0	24250
BECKS	6282 AM	225.8	100.8	15.3	61.5	23500
BECKS	6414 V2P	**227.8**	101.7	16.4	60.7	23000
DEKALB	DKC59-82	**228.0**	101.7	15.2	59.3	23000
DEKALB	DKC65-95 RIB	**238.0**	106.2	17.8	60.5	24500
GOLDEN HARVEST	G13N18-3111	216.6	96.6	16.1	56.6	24250
LEWIS	10DP719	219.7	98.0	14.4	59.9	22250
LEWIS	14DD849	**227.4**	101.5	17.2	58.9	23250
LEWIS	15DP899	**240.3**	107.2	17.0	60.0	22500
LEWIS	16DP850	**242.9**	108.4	18.5	60.5	25250
MATURITY CHECK	FULL	225.8	100.8	17.9	60.6	22500
MATURITY CHECK	MID	203.5	90.8	14.2	60.1	21250
MATURITY CHECK	SHORT	198.0	88.3	13.2	59.8	22500
NK	NK1284-3220-EZ1	**235.2**	104.9	14.4	60.4	23750
NK	NK1354	200.2	89.3	17.2	58.2	23750
	AVERAGE	224.1	100.0	15.8	59.8	23203
	CV (%)	5.9	5.9	2.1	0.9	--
	LSD (0.05)	15.9	6.7	1.8	1.5	--

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

Table 8. Belleville, Kansas Dryland Corn Performance Test, Republic County, 2021

North Central Experiment Field, Belleville
Planted: 5/7/2021
160-0-0 lb/a N, P, K
Herbicide: 3.0 qt/a Makaze, 8 oz/a Rifle, 1 pt/a Salvo, 3 qt/a Acuron, 10 oz/a Status, 1.5 qt/a Mad Dog

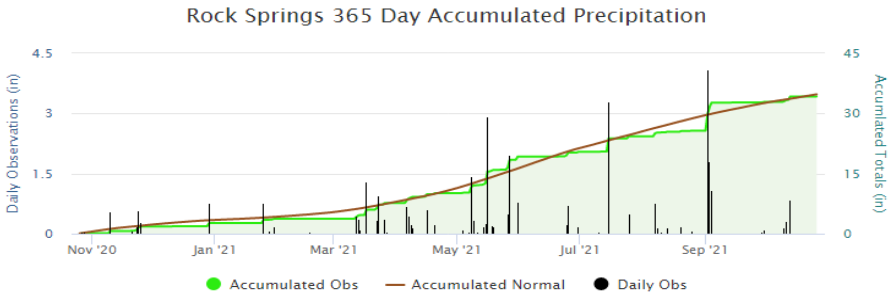


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	HT (in)
BECKS	5765 AM	**231.7**	106.5	17.0	59.8	92.7
BECKS	5909 AM	222.0	102.1	15.8	59.1	82.0
BECKS	6282 AM	213.5	98.2	18.7	60.2	89.0
BECKS	6414 V2P	221.8	102.0	19.5	60.5	90.7
DEKALB	DKC59-82	**239.6**	110.2	16.8	59.0	90.0
DEKALB	DKC65-95 RIB	**240.4**	110.5	20.1	59.8	96.7
DYNA-GRO	D51SS41	211.5	97.2	17.3	59.0	80.7
GOLDEN HARVEST	G13N18-3111	207.0	95.2	25.0	56.9	101.3
LEWIS	14DD849	212.6	97.8	23.3	58.5	92.7
MATURITY CHECK	FULL	212.8	97.8	23.7	60.1	98.7
MATURITY CHECK	MID	220.1	101.2	17.1	59.0	94.0
MATURITY CHECK	SHORT	197.6	90.8	16.0	58.5	84.0
MIDLAND	570PR RIB	**225.0**	103.4	18.4	59.9	91.3
NK	NK1284-3220-EZ1	197.9	91.0	19.6	60.1	98.7
NK	NK1354	215.1	98.9	17.6	58.8	94.0
RENK	RK945DGVT2P	211.2	97.1	20.6	59.3	94.0
	AVERAGE	217.5	100.0	19.2	59.3	91.9
	CV (%)	5.2	5.2	3.2	0.9	5.2
	LSD (0.05)	16.0	7.4	1.7	1.4	2.6

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

Table 9. Abilene, Kansas Irrigated Corn Performance Test, Dickinson County, 2021

Private Farm, Dickinson County, 38.91433439, -97.16233227
Planted: 4/29/2021
Previous Crop: Soybean
Conventional tillage; flood irrigation

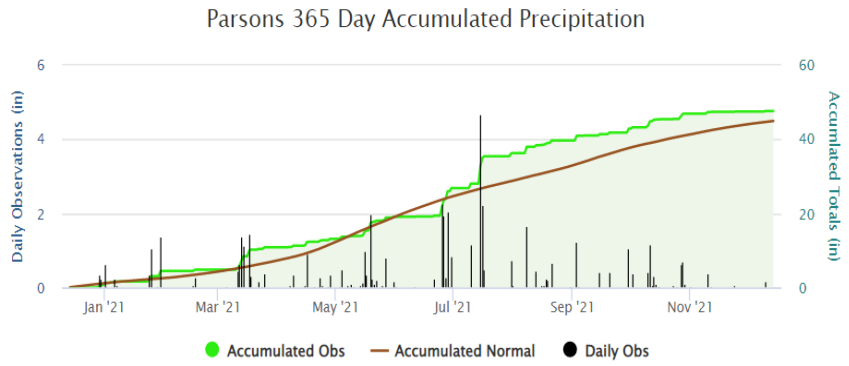


Brand	Name	Yield (bu/a)	PAVG (%)	Moist (%)	TW (lb/bu)
BECKS	5765 AM	270.4	100.7	12.9	62.8
BECKS	5909 AM	236.8	88.2	13.3	61.6
BECKS	6282 AM	**293.9**	109.5	12.7	63.3
BECKS	6414 V2P	273.3	101.8	13.1	63.0
DYNA-GRO	D50VC09	267.8	99.7	12.6	62.9
DYNA-GRO	D50VC78	257.2	95.8	12.9	61.8
DYNA-GRO	D51SS41	264.3	98.4	12.4	62.9
DYNA-GRO	D51SS61	273.0	101.7	13.0	62.6
DYNA-GRO	D52DC82	270.1	100.6	13.3	62.3
DYNA-GRO	D53TC19	**286.3**	106.6	13.9	61.7
DYNA-GRO	D57TC29	**280.3**	104.4	13.4	62.2
DYNA-GRO	D57VC17	271.6	101.1	13.5	63.1
DYNA-GRO	D58VC65	**288.8**	107.6	13.5	63.7
GOLDEN HARVEST	G13N18-3111	273.5	101.9	14.0	61.4
LEWIS	10DP719	249.0	92.7	12.6	63.0
LEWIS	14DD849	**282.9**	105.4	13.8	62.4
LEWIS	15DP899	**295.2**	110.0	13.1	63.5
LEWIS	16DP850	**291.9**	108.7	13.4	63.6
LEWIS	16DP887	**289.9**	108.0	13.8	64.1
MATURITY CHECK	FULL	**280.1**	104.3	14.1	62.0
MATURITY CHECK	MID	257.8	96.0	13.1	62.3
MATURITY CHECK	SHORT	240.6	89.6	12.0	63.2
MIDLAND	381VLGA EZ1	258.2	96.2	12.6	62.6
MIDLAND	570PR RIB	264.1	98.4	12.1	64.5
MIDLAND	621PR	266.3	99.2	12.4	64.4
MIDLAND	662TRE	273.5	101.8	13.1	63.2
MIDLAND	721PR RIB	252.9	94.2	12.8	63.4
MIDLAND	782PR	259.9	96.8	12.9	63.7
NK	NK1354	**289.7**	107.9	13.7	62.2
RENK	RK710DGVT2P	213.0	79.3	12.4	63.2
RENK	RK782VT2P	251.6	93.7	12.9	63.4
	AVERAGE	268.5	100.0	13.1	62.9
	CV (%)	4.9	4.9	4.3	1.4
	LSD (0.05)	18.3	6.8	1.7	1.1

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

Table 10. Parsons, Kansas Corn Performance Test, Labette County, 2021

Southeast Agricultural Research Center, Parsons
Planted: 4/9/2021
180-46-60 lb/a N, P, K
Herbicide: 2 qt/a glyphosate + 2.0 qt/a Atrazine 4L + 2qt/a 2,4-D

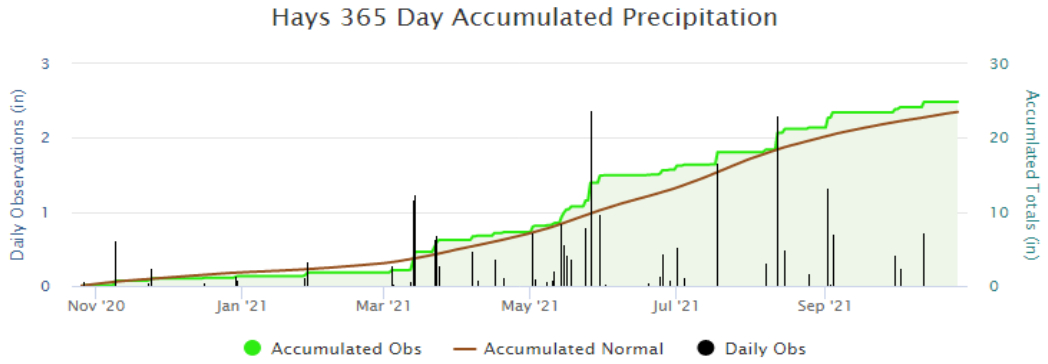


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)
BECKS	5765 AM	118	90	14	56
BECKS	5909 AM	119	91	16	56
BECKS	6282 AM	135	103	16	57
BECKS	6414 V2P	**140**	106	17	58
DEKALB	DKC59-82	121	92	16	54
DEKALB	DKC65-95 RIB	**147**	112	17	58
DYNA-GRO	D43VC81	114	87	14	56
DYNA-GRO	D45TC55	130	99	14	56
DYNA-GRO	D48QV22	**138**	105	15	55
GOLDEN HARVEST	G13N18-3111	**148**	113	18	53
LEWIS	10DP719	115	88	16	55
LEWIS	14DD849	**154**	117	16	56
LEWIS	15DP899	**146**	111	17	57
LEWIS	16DP850	**144**	110	17	58
LEWIS	16DP887	133	101	19	55
MATURITY CHECK	FULL	**150**	114	17	57
MATURITY CHECK	MID	115	88	16	56
MATURITY CHECK	SHORT	130	99	15	57
MIDLAND	381VLGA EZ1	127	97	15	54
MIDLAND	570PR RIB	109	83	16	57
MIDLAND	621PR	135	103	18	57
MIDLAND	662TRE	**139**	106	16	55
MIDLAND	721PR RIB	119	91	17	59
MIDLAND	782PR	123	94	17	56
NK	NK1284-3220-EZ1	134	102	15	57
NK	NK1354	128	97	15	55
	AVERAGE	131	100	16	56
	CV (%)	9	9	2	1
	LSD (0.05)	17	15	1	1

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

Table 11. Hays, Kansas Dryland Corn Performance Test, Ellis County, 2021

Kansas Agricultural Research Center, Hays
Planted: 4/30/2021
Harvested: 9/27/2021

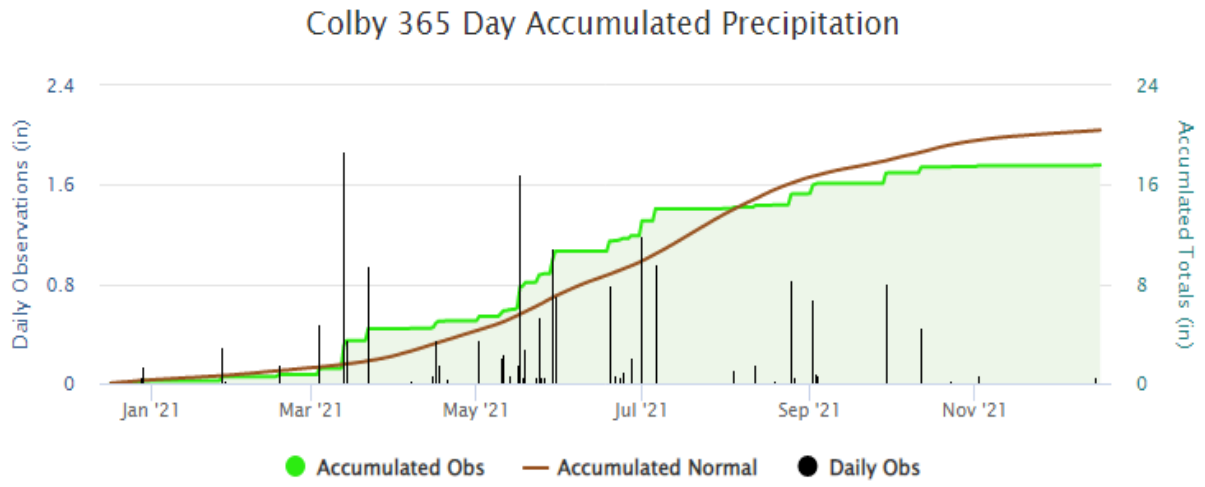


Brand	Name	Yield (bu/a)	PAVG (%)	Moist (%)	TW (lb/bu)
BECKS	5765 AM	**135.2**	108.3	12.7	53.1
BECKS	5909 AM	**138.4**	110.8	12.8	53.7
BECKS	6282 AM	**129.4**	103.7	13.0	54.3
BECKS	6414 V2P	128.5	102.9	15.4	53.8
DYNA-GRO	D43VC81	115.7	92.7	12.0	51.4
DYNA-GRO	D45TC55	**132.0**	105.7	11.7	53.0
DYNA-GRO	D48QV22	114.8	92.0	11.9	51.6
DYNA-GRO	D49SS70	118.0	94.6	12.8	55.2
GOLDEN HARVEST	G13N18-3111	**136.0**	109.0	15.7	50.1
LEWIS	10DP719	101.3	81.2	12.7	54.4
LEWIS	14DD849	**131.6**	105.4	15.9	53.4
LEWIS	15DP899	118.7	95.1	15.1	54.4
MATURITY CHECK	FULL	**138.0**	110.6	16.4	54.3
MATURITY CHECK	MID	107.3	86.0	11.6	53.2
MATURITY CHECK	SHORT	**131.1**	105.0	10.1	53.7
RENK	RK882TRE	113.0	90.5	14.8	52.4
RENK	RK907SSTX	129.1	103.4	14.9	53.9
RENK	RK915VT2P	129.1	103.4	15.7	52.0
RENK	RK945DGVT2P	124.5	99.7	16.2	51.6
	AVERAGE	124.8	100.0	13.8	55.1
	CV (%)	9.0	9.0	4.1	3.2
	LSD (0.05)	9.2	6.2	3.0	2.5

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

Table 12. Colby, Kansas Irrigated Corn Performance Test, Thomas County, 2021

Northwest Research-Extension Center, Colby
Planted: 5/6/2021
235-60-0 lb/a N, P, K
Atrazine 4L 16 oz/a, Detonate 16 oz/a, Buccaneer 5Extra 32 oz/a, Mesotrioze 3 oz/a, Basis Blend 1 oz/a on 4/2/21;
Atrazine 4L 24 oz/a, Brawl II 32 oz/a, Buccaneer 5Extra 32 oz/a, Mesotrione 4SC 4 oz/a, Status 10 oz/a on 5/8/21
Irrigation: 12.3 inches

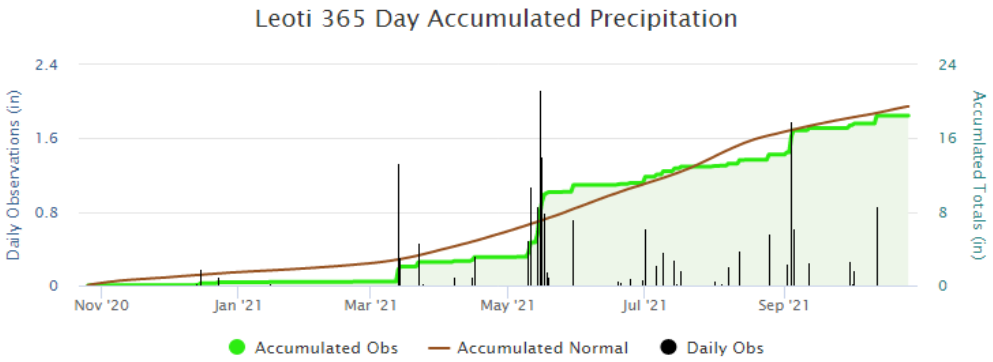


BRAND	NAME	YIELD (bu/a)	PAVG (%)	MOIST (%)	TW (lb/bu)	DAYS (silk)	HT (in)
BECKS	5765 AM	259	94	12	50	73	95
BECKS	5909 AM	269	98	11	55	75	93
BECKS	6282 AM	**308**	112	13	60	74	92
BECKS	6414 V2P	288	105	13	56	76	90
DYNA-GRO	D48QV22	278	101	12	52	76	93
DYNA-GRO	D49SS70	262	96	11	51	73	93
DYNA-GRO	D50VC09	268	98	12	51	74	93
DYNA-GRO	D50VC78	293	107	11	54	71	91
DYNA-GRO	D51SS41	263	96	12	50	71	87
GOLDEN HARVEST	G13N18-3111	286	104	17	51	77	96
MATURITY CHECK	FULL	267	97	15	54	77	97
MATURITY CHECK	MID	238	87	12	55	74	94
MATURITY CHECK	SHORT	231	84	11	50	71	90
RENK	RK882TRE	288	105	13	54	73	93
RENK	RK907SSTX	**319**	116	13	60	74	92
RENK	RK915VT2P	**303**	111	14	56	73	91
RENK	RK945DGVT2P	240	88	14	52	73	94
	AVERAGE	274	100	13	54	73	92
	CV (%)	7	7	4	3	1	3
	LSD (0.05)	22	10	2	2	1	3

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

Table 13. Leoti, Kansas Irrigated Corn Performance Test, Wichita County, 2021

Private Farm, Wichita County, 38.54192413, -101.2303249
Planted: 5/4/2021
Previous crop: corn
Strip-tillage; pivot irrigation



Brand	Name	Yield (bu/a)	PAVG (%)	Moist (%)	TW (lb/bu)
BECKS	5765 AM	**207.7**	105.5	16.8	61.5
BECKS	5909 AM	**213.9**	108.6	15.5	62.3
BECKS	6282 AM	188.6	95.7	17.4	62.1
BECKS	6414 V2P	201.6	102.3	17.1	62.2
DYNA-GRO	D48QV22	**210.3**	106.7	16.8	59.8
DYNA-GRO	D49SS70	193.6	98.3	15.6	63.3
DYNA-GRO	D50VC09	177.7	90.2	15.7	60.6
DYNA-GRO	D50VC78	203.0	103.1	17.7	60.9
DYNA-GRO	D51SS41	191.3	97.1	16.3	62.0
GOLDEN HARVEST	G13N18-3111	196.5	99.8	22.9	56.1
LEWIS	14DD849	205.8	104.5	18.4	60.5
MATURITY CHECK	FULL	193.8	98.4	17.2	62.2
MATURITY CHECK	MID	198.9	100.9	15.7	62.5
MATURITY CHECK	SHORT	185.6	94.2	15.3	62.8
RENK	RK882TRE	197.0	100.0	16.9	61.3
RENK	RK907SSTX	191.4	97.2	14.8	63.7
RENK	RK915VT2P	205.4	104.3	18.0	61.9
RENK	RK945DGVT2P	183.6	93.2	20.9	58.9
	AVERAGE	197.0	100.0	17.1	61.4
	CV (%)	8.3	8.3	3.3	0.7
	LSD (0.05)	7.9	4.0	0.6	0.6

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

Table 14. Entries in the 2021 Kansas Corn Performance Tests*

	SD TRT*	DBL	RES
BECKS			
5765 AM	P/V500	107	AcreMax
5909 AM	P/V500	109	AcreMax
6282 AM	P/V500	112	AcreMax
6414 V2P	P/V500	114	AcreMax
DEKALB			
DKC59-82	ACC/VOT	109	VT2PRIB
DKC65-95 RIB	ACC/VOT	115	VT2PRIB
DYNA-GRO			
D43VC81	ACC/P500	103	VT2P
D45TC55	ACC/P500	105	Trecepta
D48QV22	ACC/P500	108	VT2PRIB
D49SS70	ACC/P500	109	Smart Stax
D50VC09	ACC/P500	110	VT2PRIB
D50VC78	ACC/P500	110	VT2PRIB
D51SS41	ACC/P500	111	Smart Stax
D51SS61	ACC/P500	111	Smart Stax
D52DC82	ACC/P500	112	DGVT2PRIB
D53TC19	ACC/P500	113	Trecepta
D57TC29	ACC/P500	117	Trecepta
D57VC17	ACC/P500	117	VT2P
D58VC65	ACC/P500	118	VT2P
GOLDEN HARVEST			
G13N18-3111	P/VOT	113	AgriSure Vip
LEWIS			
10DP719	P/VOT	110	VT2PRIB
14DD849	P/VOT	114	DGVT2PRIB
15DP899	P/VOT	115	VT2PRIB
16DP850	P/VOT	116	VT2PRIB
16DP887	P/VOT	116	VT2PRIB
MATURITY CHECK			
SHORT	--	106	AQUAmax
MID	--	112	AQUAmax
FULL	--	118	AQUAmax
MIDLAND			
381VLGA EZ1	CM/VIB	108	3330
570PR RIB	ACC250	112	VT2P
662TRE	P/VOT	113	Trecepta
621PR	P/VOT	114	VT2PRIB
721PR RIB	ACC	115	VT2P
782PR	P/VOT	115	VT2PRIB
NK			
NK1354	AV500	112	HX/LL
NK1284-3220-EZ1	AV500	113	HX/LL
RENK			
RK710DGVT2P	AC250	106	VT2P
RENK			
RK782VT2P	ACC250	109	VT2P
RK821SSTX	ACC250	111	Smart Stax
RK826VT2P	ACC250	111	VT2P
RK882TRE	ACC250	111	Trecepta
RK907SSTX	ACC250	115	Smart Stax
RK915VT2P	ACC250	115	VT2P
RK945DGVT2P	AC250	115	VT2P

*SD TRT = Seed treatment (C = Cruiser, ACC = Acceleron, P = Poncho, VOT = Votivo. Numbers indicate rates (if available)); DBL = days to black layer; RES = herbicide, disease, and insect resistance traits. 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:

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.

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SRP 1166 January 2022