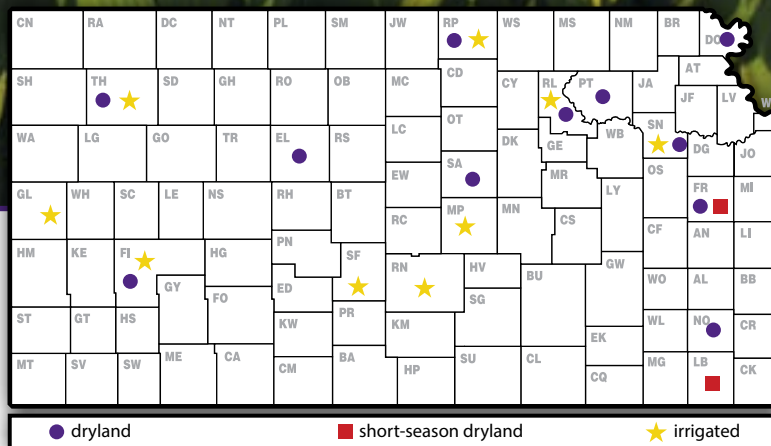
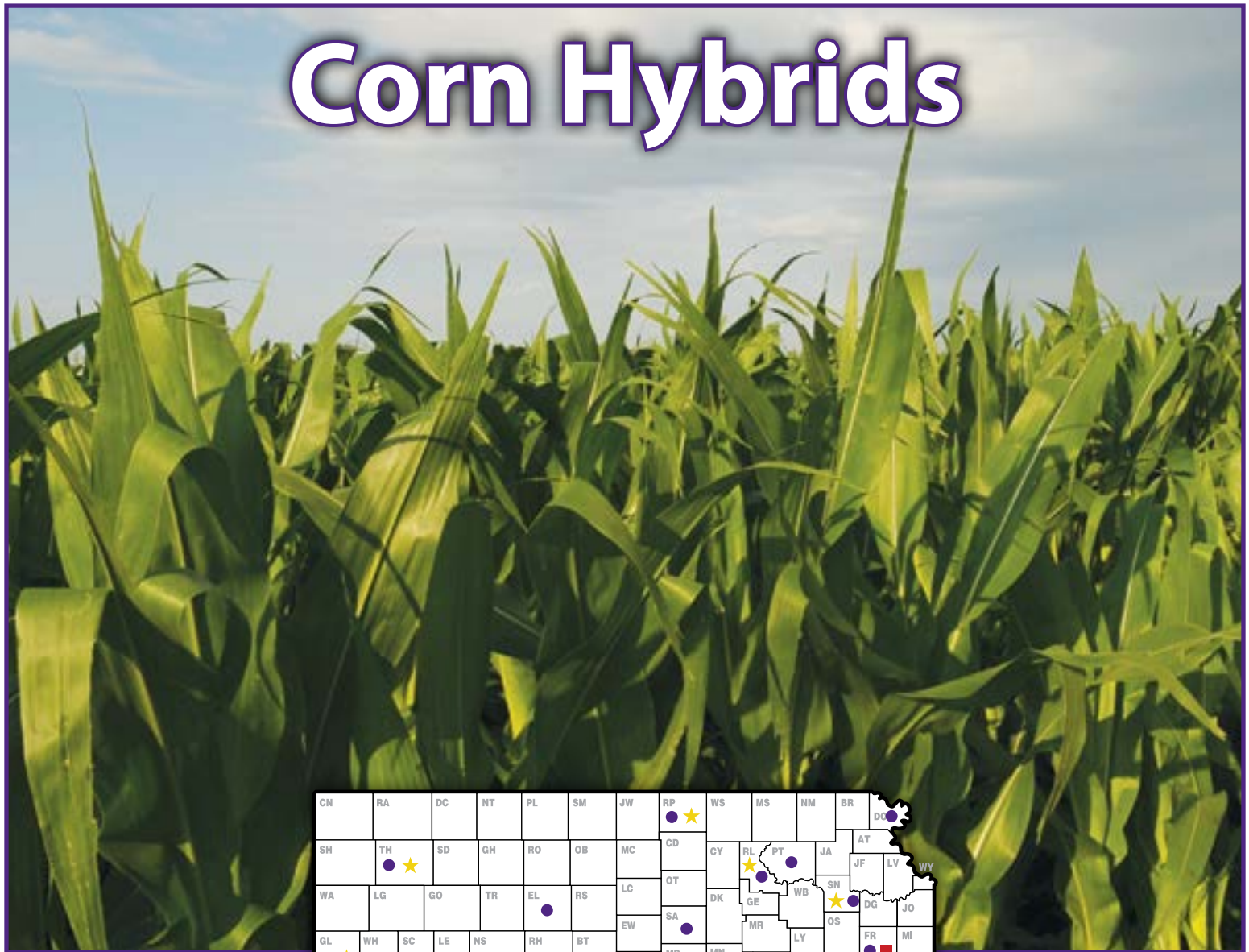


2018 Kansas Performance Tests with

Corn Hybrids



Report of Progress 1145



TABLE OF CONTENTS

2018 Corn Crop Review

Statewide Growing Conditions and Weather.....	1
2018 Temperatures by District Table 1	1

2018 Performance Tests

Diseases and Insects, Objectives and Procedures.....	2
Companies Entering 2018 Tests Table 2.....	3

Northeast Dryland: Manhattan, Riley County; Onaga, Pottawatomie County; Severance, Doniphan County

Weather Data	4
2018 Region Summary Table 3	5

Northeast Irrigated: Manhattan, Riley County; Scandia, Republic County; Topeka, Shawnee County

Weather Data	6
2018 Region Summary Table 4.....	7

Eastern Dryland: Ottawa, Franklin County; Kiro, Shawnee County; Erie, Neosho County

Weather Data	8
2018 Region Summary Table 5	9

Central Dryland: Belleville, Republic County; Assaria, Saline County

Weather Data.....	10
2018 Region Summary Table 6.....	11

Short Season: Ottawa, Franklin County; Parsons, Labette County

Weather Data	12
2018 Region Summary Table 7	13

South Central Irrigated: Moundridge, McPherson County; Hutchinson, Reno County; Macksville, Stafford County

Weather Data	14
2018 Region Summary Table 8	15

Western Dryland: Hays, Ellis County; Garden City, Finney County; Colby, Thomas County

Weather Data	16
2018 Region Summary Table 9	17

Western Irrigated: Colby, Thomas County; Tribune, Greeley County; Garden City, Finney County

Weather Data	18
2018 Region Summary Table 10	19

Entries in the 2018 Kansas Corn Performance Tests Table 11	21
Electronic Access, University Research Policy, and Duplication Policy.....	back cover

2018 CORN CROP REVIEW

Statewide Growing Conditions

The 2018 corn season had a very distinct weather pattern with different effects on the east, central, and western parts of the state. Wet conditions in the spring delayed planting in many locations. In addition, many fields presented early-season problems of lack of uniformity that impacted early growth and progress of the crop. Uneven corn stands can cause yield losses.

Overall, for the early-planted corn, pollination was not placed under ideal moisture conditions, but this varied across the state. Grain fill period was more favorable for corn yields for most areas of the state. Early-planted corn (mid- to late-April) suffered from unfavorable flowering conditions, primarily in the central and eastern parts of the state, with high temperatures promoting faster growth during early- to mid-June and exposing the crop to less favorable water environments during early reproductive periods.

Late-planted corn reached pollination in better weather environments, with drought affecting those regions earlier during the vegetative growth. 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., late-vegetative, flowering, or grain filling periods). For the western region, the planted corn faced more favorable weather conditions and expressed close to maximum yields for each environment.

Hail was a problem across the state. There were 482 reports of large hail through October 15. Of those events, 258 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, most divisions averaged above normal for the period of April 1 through October 15. The greatest departure was in the Southwest, where the divisional average was 23.87 inches or 154% of normal. The East Central division faced the greatest shortfall, with an average of 26.06 inches or 92% of normal. At the Ottawa station, rainfall dropped below normal in early April and continued below normal for the rest of the season. The Northwest division had the most favorable moisture distribution, with near normal conditions throughout the season.

Temperatures weren't as much of a factor. The warmest readings were seen in mid-July, with the highest read of 112°F reported on July 21 at Ashland, Clark County. The biggest factor was the rapid switch from much colder than normal temperatures to much warmer temperatures. State-wide average temperatures in April were the coldest since 1895, while state-wide average temperatures in June were the warmest. The first autumn freezes were near average, with Colby 1S dropping to 27°F on the 14th of October, and Concordia reaching 27°F on the 15th.

Table 1. 2018 temperatures by crop production district

Division	Extreme Tmax (°F)	Date	Avg Tmax (°F)	Avg Tmin (°F)	Avg Tmean (°F)	Extreme Tmin (°F)	Date
Northwest	104	16-Jun	79.2	51.7	65.5	4	7-Apr
North Central	105	29-Jun	78.8	53.4	65.9	4	7-Apr
Northeast	106	28-Jun	79.0	55.7	67.4	12	7-Apr
West Central	107	16-Jun	82.0	53.6	67.8	11	8-Apr
Central	107	28-Jun	82.2	57.1	69.6	8	8-Apr
East Central	104	29-Jun	81.2	59.0	70.1	15	8-Apr
Southwest	112	21-Jul	83.0	54.8	68.9	14	7-Apr
South Central	103	1-Sep	82.1	57.6	69.8	13	7-Apr
Southeast	103	20-Jul	80.7	59.1	69.9	17	16-Apr

Luckily, the below-freezing temperatures did not affect corn since it did not match with the most sensitive stages during the grain filling. Most of the crop was fully mature when those temperatures occurred. Corn can be 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.

Dry conditions impacted not only corn productivity but harvest may also have experienced some challenges when drought was a major factor. Drought-stressed corn may have high levels of aflatoxin. Aflatoxin levels may increase in storage if the corn is held at moisture levels greater than 14%. Ears may drop more easily, and a number of stalk rots may result in stalk lodging. Small kernels (small ear sizes) could also confound corn harvest when harvesting in a timely manner was critical in many fields.

In some areas of the state, wet conditions during the late reproductive stage (close to harvest time) favored diseases in corn ears such as Diplodia ear and stalk rot. Diplodia ear rot, producing white moldy growth, affected cornfields across the state and impacted the final weight and overall grain quality. In addition to the disease issue, late-season rainy conditions delayed harvest in many areas across the state, challenging the harvest progress.

Despite the abovementioned challenges, USDA-NASS reported (11/08/2018) an overall corn yield of 130 bushels per acre for the state of Kansas for the 2018 growing season (only 2 bushels down from the 2017 average), and with a final production estimate of 663 million of bushels, 23 million down from the 2017 average (Ignacio A Ciampitti, Kansas State University Cropping Systems Specialist, and Mary Knapp, Kansas State University Climatologist).

Diseases

Early- to mid-season drought followed by heavy rainfall in August and early September led to an interesting complex of problems in the 2018 Kansas corn crop. In many parts of the eastern half of the state, drought was so severe that fields failed to set ears. For those that did, Aspergillus ear rot infection was common, with incidence levels ranging from zero to over 80% in one Miami County field. Many aflatoxin tests were above the 20-ppm level considered safe for human consumption, but well below the maximum usage rate of 300 ppm. A Kansas State University

veterinarian indicated there was some aflatoxicosis reported in Kansas livestock. Late-season rains allowed for the development of Fusarium ear rot, which produces the mycotoxin, fumonisin. While levels were generally less than those considered safe for cattle, veterinarians reported some fumonisin-related deaths in horses and hogs.

Gray leaf spot levels in 2018 were generally below treatable levels at tasseling, when fungicide decisions need to be made, but increased rapidly in late season when cloudy weather with frequent heavy rains occurred. Overall, losses were near the long-term average. Seven new counties were added to the list of counties confirmed to have bacterial leaf streak bringing the state's total to 44. A few cases of Goss's bacterial blight were also reported from western Kansas. On a positive note, southern rust and Diplodia ear rot incidence and severity were significantly less than in the past two years.

Stalk rots losses were above average in 2018. Fusarium stalk rot was by far the predominant disease found in grower fields, but charcoal rot and anthracnose stalk rot were all reported in many fields, especially in the eastern half of the state where weather patterns were most favorable for stalk rot development. (Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

Early-season black cutworm infestations in southeast Kansas caused areas of seedling corn, in several fields, to be replanted. Black cutworms do not usually overwinter in Kansas but are often early migrants in March and April. If their arrival coincides with corn germination they can cause serious stand losses, but usually only in lower areas of fields or along borders, which seemed to be the case in 2018.

Grasshoppers were also problematic in pockets across the state again, and were more difficult than usual to bring under control. A few corn rootworm problems were noted, mainly in southwest Kansas.

Much of the eastern two thirds of the state had extremely hot and dry conditions during the early part of the growing season, resulting in many fields being chopped early and consequently no pest problems. Also, it was just recently documented that some populations of western corn rootworms have developed resistance to all commercially available corn rootworm Bt events. (Holly Davis and Jeff Whitworth, Kansas State University Department of Entomology)

2018 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.

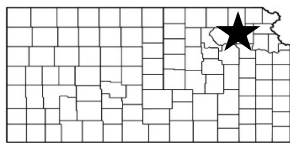
Explanatory information is given in summaries preceding data for each test. Tables 2 through 10 contain results from the individual performance tests. Hybrids are listed together by company name. A summary of growing season precipitation data is given for individual test discussions. General trends in 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 2. Companies entering hybrids in the 2018 Kansas Corn Performance Tests

Advanta Seeds Irving, TX 469-828-1882 advantaseeds.com	Golden Harvest Brand Seed Minnetonka, MN 800-455-0956 syngentaseeds.com	MFA Incorporated (MorCorn) Columbia, MO 573-874-5111 mfa-inc.com	Phillips Seed Farms, Inc. Hope, KS 785-949-2204 phillipsseed.com
AgVenture-Pinnacle Minden, NE 308-832-1050 avpinnacle.com	Hefty Seed Company Baltic, SD 800-274-3389 heftyseed.com	Midland Genetics (Sylvester) Ottawa, KS 800-819-7333 midlandgenetics.com	Renk Seed Co Sun Prairie, WI 800-289-7365 renkseed.com
B-H Genetics Ganado, TX 620-746-6262 bhgenetics.com	Heine Seeds Vermillion, SD 605-677-8263 heineseeds.com	Monsanto (Dekalb) St. Louis, MO 314-694-1000 monsanto.com	
CHS Agronomy Center Colby, KS 785-462-6880 chsinc.com	LG Seeds Waco, TX 254-761-9838 lgseeds.com	NuTech Seed LLC Ames, IA 800-942-6748 nutechseed.com	



NORTHEAST KANSAS DRYLAND CORN TESTS

Manhattan, Riley County

Agronomy North Farm

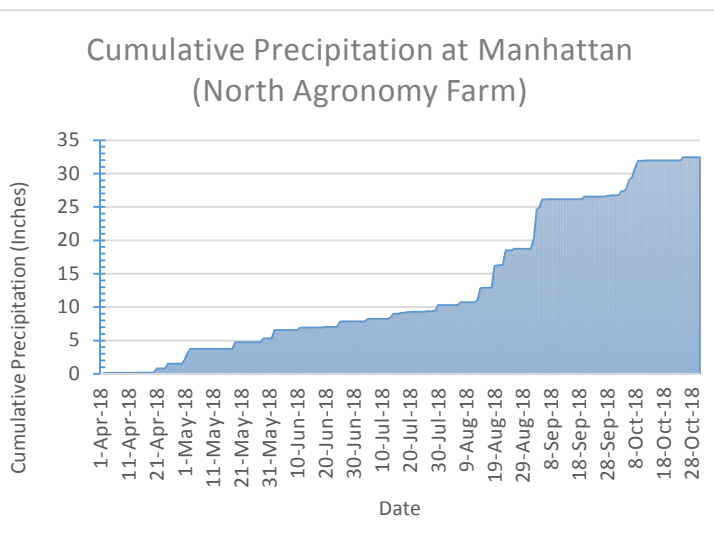
Planted: 5/3/2018

Harvested: 9/19/2018

180-0-0 N, P, K

Reading silt loam

Previous crop: wheat



Onaga, Pottawatomie County

Rezac Land and Livestock, Inc.

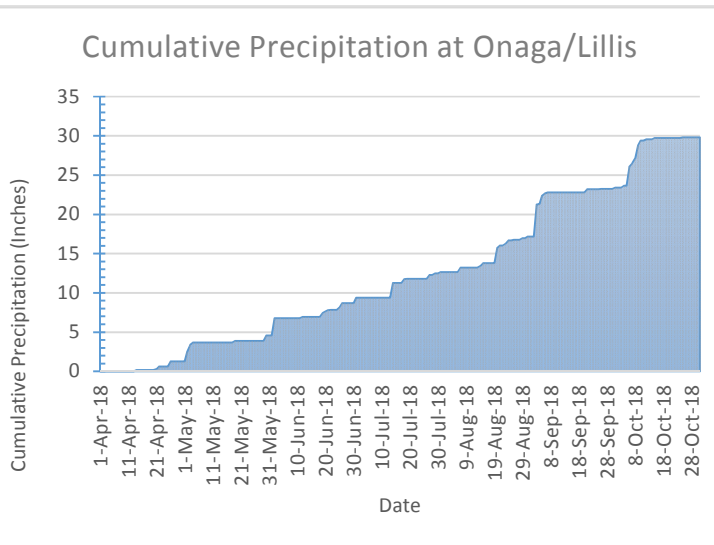
Planted: 4/28/2018

Harvested: 9/25/2018

185-0-0 lb/a N, P, K

Kipson silty clay loam

Previous crop: soybean



Severance, Doniphan County

Fuhrman Farms, Inc.

Planted: 4/27/2018

Harvested: 9/25/2018

180-0-0 lb/a N, P, K

Ulysses silt loam

Previous crop: soybean

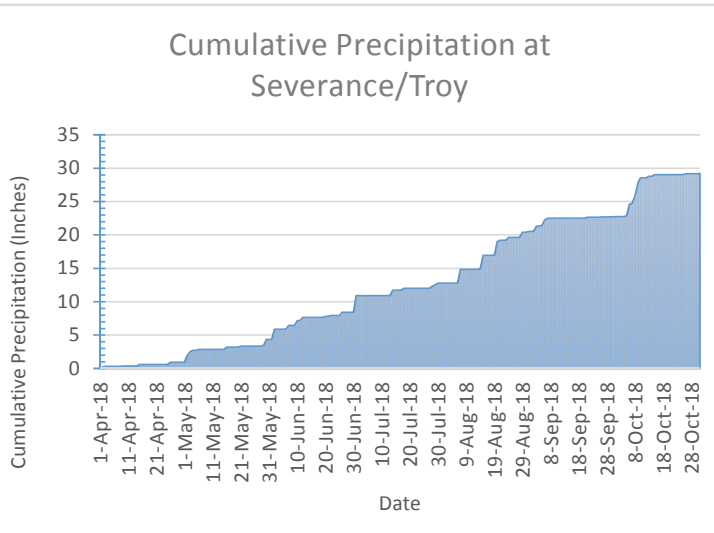
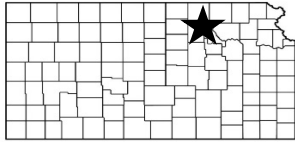


TABLE 3. NORTHEAST KANSAS DRYLAND CORN PERFORMANCE TEST, 2018

BRAND	NAME	SEVERANCE, Doniphan County				ONAGA, Pottawatomie County				MANHATTAN, Riley County			
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	260	100	61	17	102	87	59	15	139	88	57	12
DEKALB	DKC60-69RIB	255	98	60	17	104	88	58	15	145	92	58	20
DEKALB	DKC64-35RIB	257	99	60	18	101	86	59	15	160	101	59	20
GOLDEN HARVEST	G09Y24-3200A	267	103	60	17	121	103	58	15	--	--	--	--
GOLDEN HARVEST	G11B63-3010A	249	96	60	16	129	109	61	15	--	--	--	--
HEFTY	H6222	--	--	--	--	--	--	--	--	164	104	59	17
HEFTY	H6413	--	--	--	--	--	--	--	--	161	102	57	21
HEFTY	H6614	--	--	--	--	--	--	--	--	162	102	57	15
HEFTY	H6714	--	--	--	--	--	--	--	--	138	87	60	20
LG SEEDS	LG44C27VT2PRO	--	--	--	--	--	--	--	--	160	102	59	18
LG SEEDS	LG5465VT2RIB	--	--	--	--	--	--	--	--	134	85	58	15
LG SEEDS	LG5494VT2RIB	--	--	--	--	--	--	--	--	156	99	59	19
LG SEEDS	LG54C01STX	--	--	--	--	--	--	--	--	161	102	58	17
LG SEEDS	LG5525VT2PRIB	--	--	--	--	--	--	--	--	150	95	59	15
MATURITY CHECK	EARLY	257	99	61	17	131	111	60	15	167	106	59	18
MATURITY CHECK	LATE	230	89	60	16	105	89	61	16	167	106	60	21
MATURITY CHECK	MED	272	105	60	17	106	90	60	15	166	105	59	17
MIDLAND	347PR	--	--	--	--	102	86	56	13	--	--	--	--
MIDLAND	349PR	269	104	60	17	116	99	58	14	173	109	56	14
MIDLAND	429PR	255	98	60	16	107	91	59	14	162	102	58	18
MIDLAND	594PR DG	261	101	60	16	157	133	58	15	148	93	57	20
MIDLAND	656PR	248	96	61	16	164	139	61	17	157	99	59	19
MIDLAND	669PR	269	104	60	16	144	122	62	17	167	106	59	19
MIDLAND	735PR	256	99	61	17	--	--	--	--	--	--	--	--
MIDLAND	757PR	277	107	60	16	104	89	61	15	151	96	59	20
MORCORN	MC 4319 VT2P RIB	--	--	--	--	--	--	--	--	154	98	58	18
MORCORN	MC 4457 VT2P RIB	--	--	--	--	--	--	--	--	142	90	58	19
MORCORN	MC 4725 VT2P RIB	--	--	--	--	--	--	--	--	153	97	59	20
MORCORN	MC 4750 SmartStax RIB	--	--	--	--	--	--	--	--	146	93	59	19
NUTECH	5F-709	246	95	61	17	110	93	58	14	182	115	58	16
NUTECH	5FB-1010	264	102	62	17	120	102	59	15	--	--	--	--
NUTECH	5FB-1211	276	106	60	17	117	99	60	15	158	100	57	16
NUTECH	5FB-3113	270	104	60	17	135	114	58	15	164	104	57	18
NUTECH	5FB-4516	274	106	60	18	105	89	61	16	169	107	58	19
NUTECH	5FB-6313	265	102	60	17	93	79	60	16	--	--	--	--
NUTECH	5FB-9909	257	99	61	17	115	98	60	15	--	--	--	--
NUTECH	5NN-8812	262	101	60	17	75	63	59	16	--	--	--	--
NUTECH	E5FN-A213	260	100	60	17	135	115	62	16	171	108	59	21
NUTECH	E5FN-A714	262	101	63	18	128	108	60	15	169	107	58	17
PHILLIPS	PSF 082	256	99	60	17	--	--	--	--	--	--	--	--
PHILLIPS	PSF 098	273	105	59	17	--	--	--	--	--	--	--	--
PHILLIPS	PSF 109	254	98	61	17	--	--	--	--	--	--	--	--
PHILLIPS	PSF 128	248	96	61	16	--	--	--	--	--	--	--	--
PHILLIPS	PSF 133	264	102	61	17	--	--	--	--	--	--	--	--
PHILLIPS	PSF 138	225	87	60	17	--	--	--	--	--	--	--	--
RENK	RK842SSTX	--	--	--	--	147	124	60	16	--	--	--	--
RENK	RK859DGVT2P	--	--	--	--	128	108	59	15	--	--	--	--
RENK	RK877DGVT2P	--	--	--	--	95	80	58	15	--	--	--	--
RENK	RK937SSTX	--	--	--	--	125	106	60	15	--	--	--	--
	Averages	259	259	60	17	118	118	59	15	158	158	58	18
	CV (%)	9	9	2	6	11	11	2	6	12	12	2	17
	LSD (0.05)	32	12	1	1	19	16	2	1	26	16	1	4

*Seed treatment and hybrid traits located in Table 11.

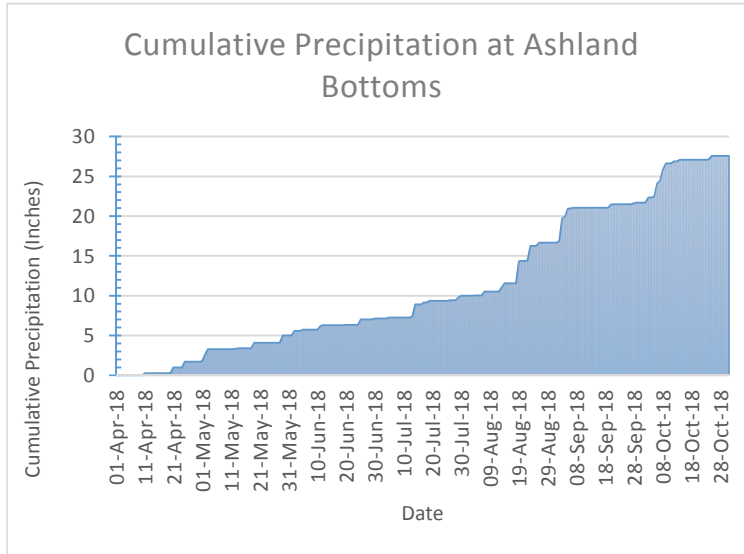
**Yields must differ by more than the LSD value to be considered statistically different.



NORTHEAST KANSAS IRRIGATED CORN TESTS

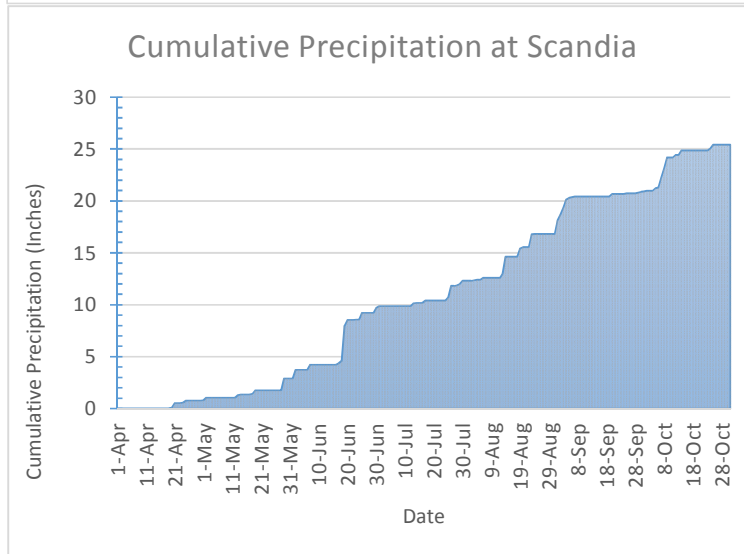
Manhattan, Riley County

Ashland Bottoms Research Center
 Planted: 5/3/2018
 Harvested: 9/20/2018
 300-0-0 N, P, K
 Sandy loam
 Previous crop: soybean



Scandia, Republic County

North Central Experiment Field
 Planted: 5/7/2018
 Harvested: 11/6/2018
 200-0-0 N, P, K
 Crete silt loam
 Previous crop: soybean



Rossville, Shawnee County

Kansas River Valley Experiment Field
 Planted: 4/23/2018
 Harvested: 9/10/2018
 194-56-42-10 N, P, K, S
 Eudora silt loam
 Previous crop: soybean

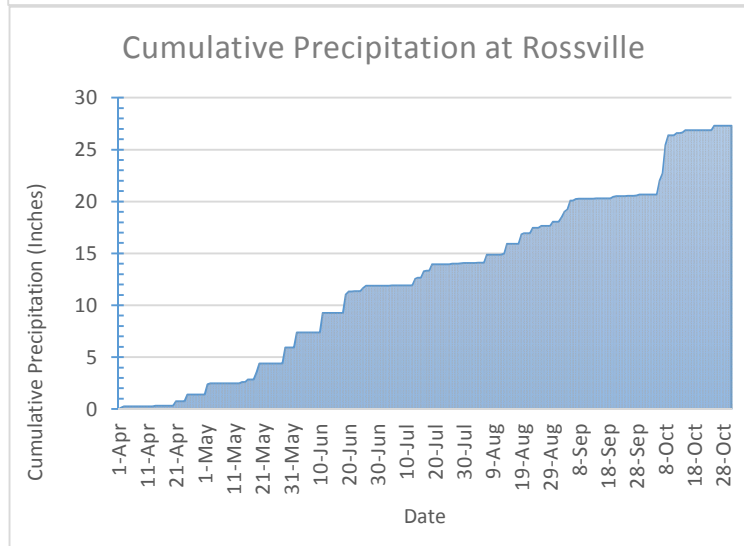
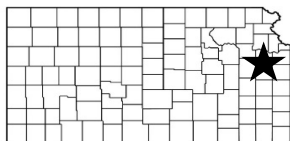


TABLE 4. NORTHEAST KANSAS IRRIGATED CORN PERFORMANCE TEST, 2018

BRAND	NAME	MANHATTAN, Riley County				SCANDIA, Republic County				ROSSVILLE, Shawnee County				
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)
DEKALB	DKC50-64RIB	150	71	57	13	192	85	59	13	184	78	61	17	58
DEKALB	DKC60-69RIB	144	69	59	17	236	105	60	13	233	98	61	18	56
DEKALB	DKC64-35RIB	190	91	60	18	216	96	61	14	252	106	62	18	58
GOLDEN HARVEST	G09Y24-3200A	--	--	--	--	--	--	--	--	238	100	60	18	60
GOLDEN HARVEST	G11B63-3010A	--	--	--	--	--	--	--	--	241	102	61	18	58
HEFTY	H6424	242	116	61	16	237	105	63	13	--	--	--	--	--
HEFTY	H6614	214	102	57	16	206	92	59	13	--	--	--	--	--
HEFTY	H6714	182	87	61	27	244	108	62	14	--	--	--	--	--
LG SEEDS	LG5643STXRIB	--	--	--	--	248	110	59	13	256	108	61	18	62
LG SEEDS	LG5700VT2PRIB	--	--	--	--	232	103	60	14	224	94	60	18	56
LG SEEDS	LG59C66VT2PRO	--	--	--	--	187	83	63	13	--	--	--	--	--
LG SEEDS	LG61C48VT2RIB	--	--	--	--	233	104	60	14	260	110	62	18	57
LG SEEDS	LG66C32STX	--	--	--	--	235	104	62	14	241	102	63	19	62
MATURITY CHECK	EARLY	209	100	59	15	200	89	60	14	218	92	62	17	56
MATURITY CHECK	LATE	213	101	60	19	209	93	61	14	227	96	63	19	60
MATURITY CHECK	MED	209	100	59	15	214	95	60	14	199	84	62	18	58
MIDLAND	349PR	--	--	--	--	230	102	59	13	--	--	--	--	--
MIDLAND	429PR	--	--	--	--	--	--	--	--	260	110	62	18	60
MIDLAND	594PR DG	221	106	58	17	210	93	59	14	227	96	60	18	58
MIDLAND	656PR	210	100	60	19	241	107	61	14	240	101	61	19	56
MIDLAND	669PR	215	103	61	23	232	103	65	13	262	110	63	18	57
MIDLAND	735PR	180	86	59	18	171	76	62	15	247	104	60	19	58
MIDLAND	757PR	224	107	60	24	--	--	--	--	239	101	62	19	58
MORCORN	MC 4319 VT2P RIB	228	109	60	21	--	--	--	--	253	107	61	19	56
MORCORN	MC 4457 VT2P RIB	172	82	60	15	--	--	--	--	233	98	62	18	58
MORCORN	MC 4725 VT2P RIB	241	115	60	20	--	--	--	--	259	109	62	19	60
MORCORN	MC 4750 SmartStax RIB	194	93	60	21	--	--	--	--	240	101	62	18	60
NUTECH	5F-308	220	105	61	19	209	93	60	14	219	92	61	18	60
NUTECH	5FB-1010	184	88	58	17	239	106	59	13	239	101	61	18	59
NUTECH	5FB-1211	--	--	--	--	208	92	60	14	--	--	--	--	--
NUTECH	5FB-3113	230	110	58	16	207	92	59	13	244	103	61	18	60
NUTECH	5FB-4516	248	119	60	22	272	121	61	14	273	115	62	20	60
NUTECH	5FB-6313	218	104	58	19	238	106	59	13	235	99	61	18	60
NUTECH	5NN-8812	217	104	60	19	233	103	61	14	215	91	60	18	60
NUTECH	ESFN-A213	244	116	60	17	230	102	61	13	209	88	63	18	58
NUTECH	ESFN-A714	214	102	59	17	240	106	60	14	250	105	61	19	58
PHILLIPS	PSF 082	179	85	58	14	223	99	59	13	--	--	--	--	--
PHILLIPS	PSF 098	243	116	58	15	235	104	59	13	--	--	--	--	--
PHILLIPS	PSF 109	220	105	59	15	231	102	60	13	--	--	--	--	--
PHILLIPS	PSF 133	227	108	58	17	231	103	59	13	--	--	--	--	--
PHILLIPS	PSF 148	211	101	60	15	221	98	61	13	--	--	--	--	--
PHILLIPS	PSF 169	--	--	--	--	247	110	59	14	--	--	--	--	--
RENK	RK842SSTX	--	--	--	--	232	103	60	13	--	--	--	--	--
RENK	RK859DGV2P	--	--	--	--	225	100	60	13	--	--	--	--	--
RENK	RK877DGV2P	--	--	--	--	223	99	60	13	--	--	--	--	--
RENK	RK945DGV2P	--	--	--	--	251	112	60	13	--	--	--	--	--
RENK	RK961VT2P	--	--	--	--	224	99	60	13	--	--	--	--	--
RENK	RK965SSTX	--	--	--	--	215	95	60	13	--	--	--	--	--
	Averages	210	210	59	18	225	225	60	14	237	237	61	18	59
	CV (%)	9	9	1	24	8	8	2	2	10	10	1	2	1
	LSD (0.05)	27	13	1	6	30	13	2	0	34	14	1	1	1

*Seed treatment and hybrid traits located in Table 11.

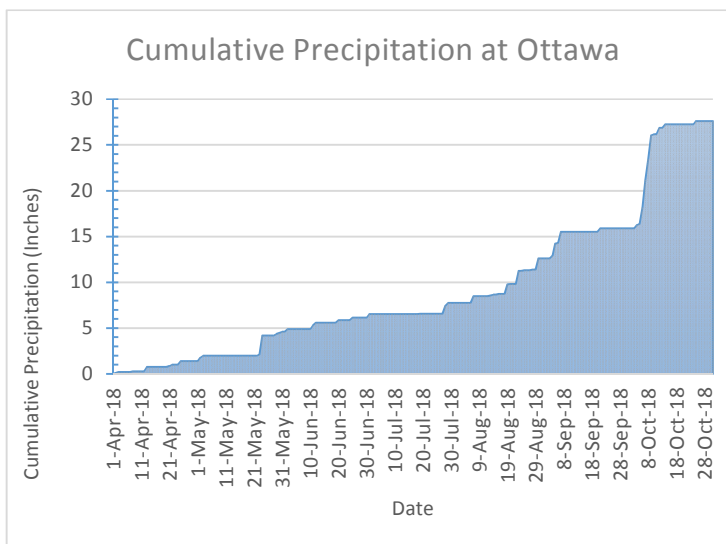
**Yields must differ by more than the LSD value to be considered statistically different.



EASTERN KANSAS DRYLAND CORN TESTS

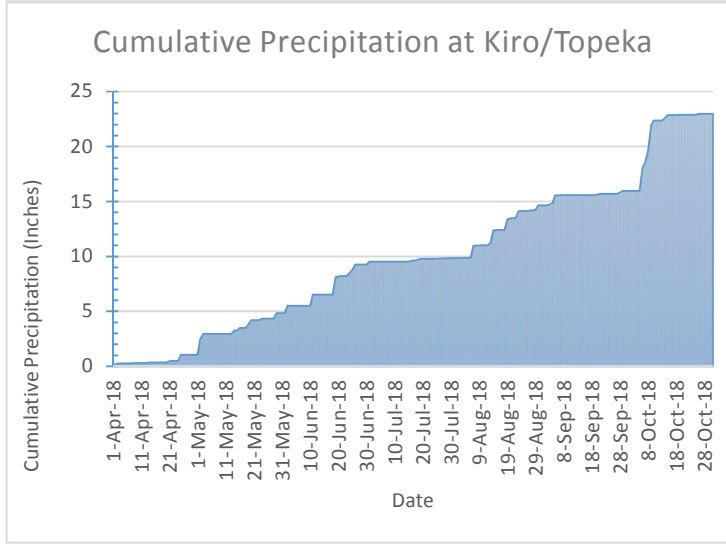
Ottawa, Franklin County

East Central Experiment Field
 Planted: 4/24/2018
 Harvested: 9/17/2018
 140-40-15 lb/a N, P, K
 Woodson silt loam
 Previous crop: soybean



Kiro, Shawnee County

Private farmer's field
 Planted: 4/23/2018
 Harvested: 8/29/2018
 194-56-42-0 lb/a N, P, K, S
 Silty clay loam
 Previous crop: soybean



Erie, Neosho County

Private farmer's field
 Planted: 4/11/2018
 Harvested: 9/17/2018
 225-50-0 N, P, K
 Lanton silt loam
 Previous crop: soybean

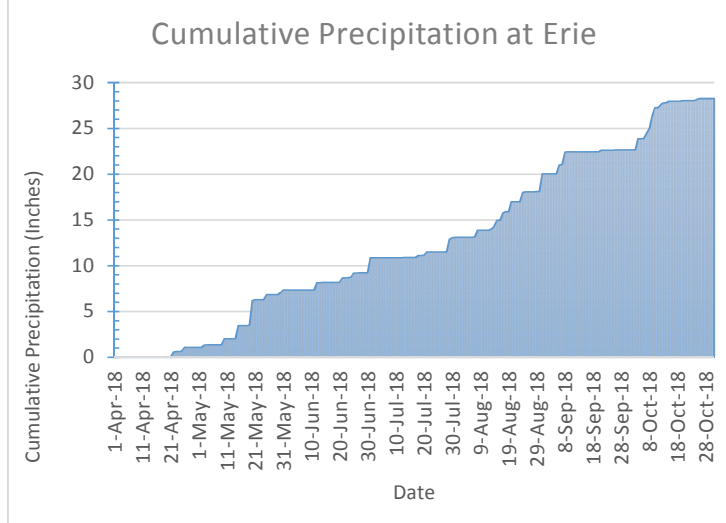
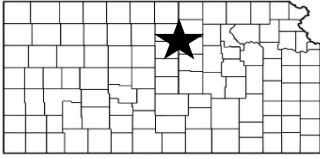


TABLE 5. EASTERN KANSAS DRYLAND CORN PERFORMANCE TEST, 2018

BRAND	NAME	OTTAWA, Franklin County					ERIE, Neosho County					KIRO, Shawnee County				
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)
DEKALB	DKC50-64RIB	116	104	59	14	62	114	68	58	14	68	121	106	56	14	59
DEKALB	DKC60-69RIB	115	104	59	15	63	145	86	58	15	68	156	136	56	16	59
DEKALB	DKC64-35RIB	107	96	60	15	63	171	102	60	16	68	123	108	56	15	63
GOLDEN HARVEST	G09Y24-3200A	--	--	--	--	--	--	--	--	--	--	138	121	55	16	64
GOLDEN HARVEST	G11B63-3010A	--	--	--	--	--	--	--	--	--	--	156	136	56	17	63
GOLDEN HARVEST	G14V04-3120	--	--	--	--	--	--	--	--	--	--	71	62	50	18	63
MATURITY CHECK	EARLY	113	102	60	15	62	138	82	58	14	68	114	100	57	15	60
MATURITY CHECK	LATE	101	91	62	17	64	186	111	60	16	70	106	93	56	18	63
MATURITY CHECK	MED	108	97	61	15	63	169	101	59	16	68	98	86	57	17	62
MIDLAND	347PR	110	100	57	15	63	--	--	--	--	--	--	--	--	--	--
MIDLAND	349PR	99	89	57	14	63	--	--	--	--	--	--	--	--	--	--
MIDLAND	429PR	112	101	59	15	65	--	--	--	--	--	138	121	54	17	63
MIDLAND	594PR DG	112	101	59	16	63	149	89	57	16	68	100	88	54	17	61
MIDLAND	656PR	118	107	60	15	63	172	103	58	16	68	119	104	55	18	61
MIDLAND	669PR	106	96	60	16	64	181	108	59	16	67	129	113	56	17	60
MIDLAND	757PR	--	--	--	--	--	175	104	59	16	68	89	78	56	19	65
MORCORN	MC 3055 DGVT2P RIB	--	--	--	--	--	156	93	57	14	67	--	--	--	--	--
MORCORN	MC 3544 VT2P RIB	--	--	--	--	--	172	102	59	15	68	--	--	--	--	--
MORCORN	MC 3617 VT2P RIB	--	--	--	--	--	195	116	57	15	68	--	--	--	--	--
MORCORN	MC 4319 VT2P RIB	123	111	60	16	63	--	--	--	--	--	112	98	55	19	62
MORCORN	MC 4457 VT2P RIB	114	103	60	15	62	--	--	--	--	--	120	105	56	17	62
MORCORN	MC 4725 VT2P RIB	118	106	61	17	64	--	--	--	--	--	109	96	56	18	63
MORCORN	MC 4750 SmartStax RIB	95	86	58	14	63	--	--	--	--	--	101	88	53	16	63
NUTECH	5F-709	108	97	59	15	63	--	--	--	--	--	--	--	--	--	--
NUTECH	5FB-1211	114	103	60	17	65	176	105	58	16	67	108	95	56	16	61
NUTECH	5FB-3113	107	97	58	15	64	199	119	58	16	70	102	90	54	18	65
NUTECH	5FB-4516	118	106	60	17	64	187	112	59	17	71	108	95	56	20	66
NUTECH	5FB-6313	--	--	--	--	--	--	--	--	--	--	109	95	56	18	65
NUTECH	E5FN-A714	113	102	59	17	64	166	99	59	16	71	100	87	54	20	65
	Averages	111	111	59	15	63	168	168	58	15	68	114	114	55	17	62
	CV (%)	8	8	1	6	2	11	11	1	3	2	13	13	2	5	1
	LSD (0.05)	12	11	1	1	2	26	16	1	1	1	21	19	2	1	1

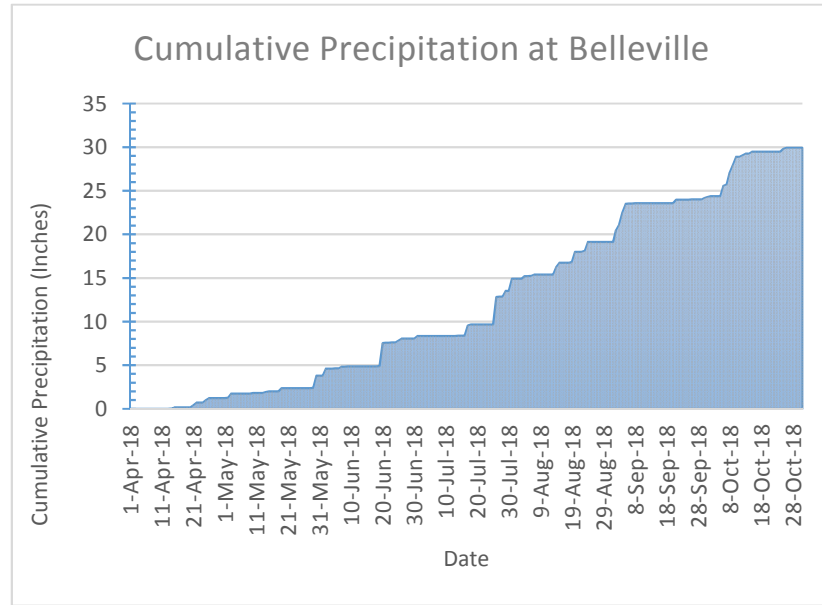
*Seed treatment and hybrid traits located in Table 11.

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



CENTRAL KANSAS DRYLAND CORN TESTS

Belleville, Republic County
 North Central Experiment Field
 Planted: 5/1/2018
 Harvested: 10/19/2018
 180-0-0 N, P, K
 Crete silt loam
 Previous crop: grain sorghum



Assaria, Saline County
 Clayton Short Farm
 Planted: 5/10/2018
 Harvested: *abandoned*
 180-0-0 lb/a N, P, K
 Ulysses silt loam
 Previous crop: grain sorghum

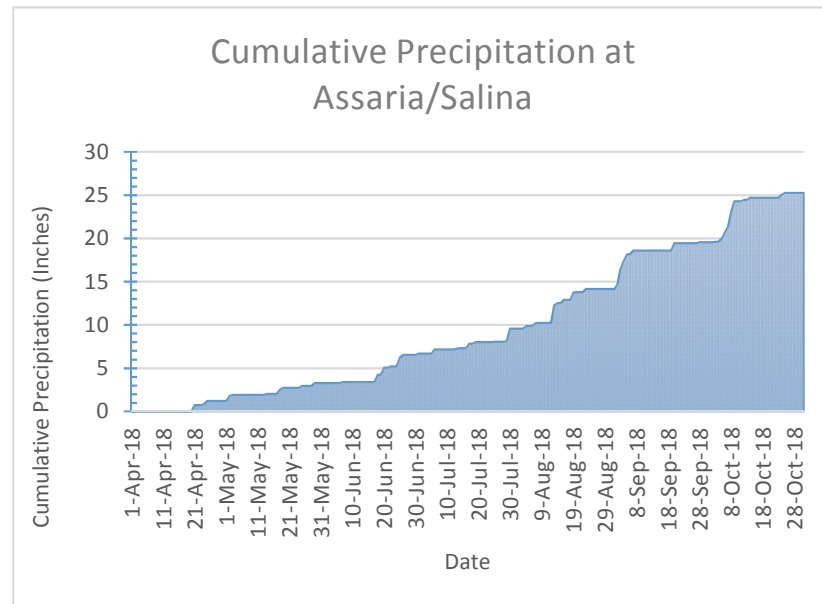


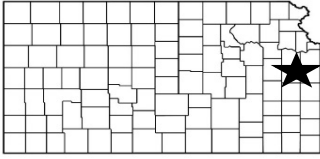
TABLE 6. CENTRAL KANSAS DRYLAND CORN PERFORMANCE TEST, 2018

		BELLEVILLE, Republic County			
BRAND	NAME	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	100	108	58	19
DEKALB	DKC60-69RIB	78	85	58	23
DEKALB	DKC64-35RIB	115	125	58	26
LG SEEDS	LG5494VT2RIB	103	112	58	20
LG SEEDS	LG5525VT2PRIB	110	119	60	21
LG SEEDS	LG5643STXRIB	52	57	58	24
LG SEEDS	LG61C48VT2RIB	68	74	59	24
LG SEEDS	LG64C18VT2RIB	129	140	59	23
MATURITY CHECK	EARLY	137	149	57	20
MATURITY CHECK	LATE	69	75	58	22
MATURITY CHECK	MED	48	52	56	24
MIDLAND	347PR	97	106	57	19
MIDLAND	349PR	72	78	57	21
MIDLAND	429PR	109	119	57	25
MIDLAND	594PR DG	114	124	55	29
MIDLAND	656PR	100	109	58	27
MIDLAND	669PR	73	80	58	24
MIDLAND	757PR	66	72	58	26
NUTECH	5F-709	64	70	56	22
NUTECH	5FB-1211	78	85	56	24
NUTECH	5FB-4516	74	80	57	17
NUTECH	E5FN-A714	45	49	56	23
PHILLIPS	PSF 082	63	68	55	21
PHILLIPS	PSF 098	105	114	57	19
PHILLIPS	PSF 109	82	90	59	19
PHILLIPS	PSF 133	136	148	56	16
PHILLIPS	PSF 148	105	114	60	19
PHILLIPS	PSF 169	74	81	55	30
RENK	RK842SSTX	109	119	58	25
RENK	RK859DGVT2P	127	138	58	21
RENK	RK877DGVT2P	127	138	57	25
RENK	RK945DGVT2P	76	83	58	23
RENK	RK961VT2P	134	145	57	23
RENK	RK965SSTX	89	96	57	28
	Averages	92	92	56	23
	CV (%)	9	9		17
	LSD (0.05)	14	15	14	6

Assaria, Saline County abandoned: severe drought caused incomplete ear set and high variability.

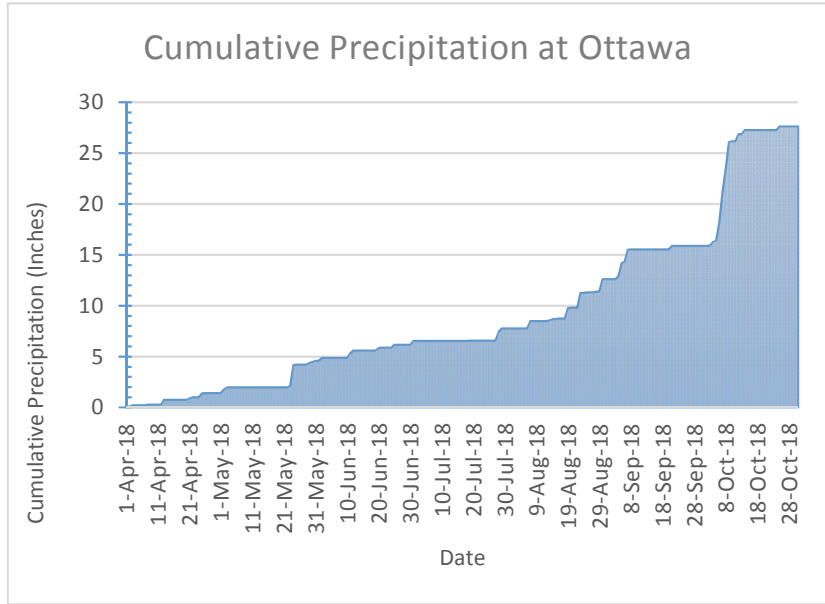
*Seed treatment and hybrid traits located in Table 11.

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



SHORT SEASON DRYLAND CORN TESTS

Ottawa, Franklin County
 East Central Experiment Field
 Planted: 4/24/2018
 Harvested: 9/13/2018
 140-40-15 lb/a N, P, K
 Woodson silt loam
 Previous crop: soybean



Parsons, Labette County
 K-State Southeast Research Center
 Planted: 4/10/2018
 Harvested: 8/28/2018
 180-50-50 N, P, K
 Parsons silt loam
 Previous crop: soybean

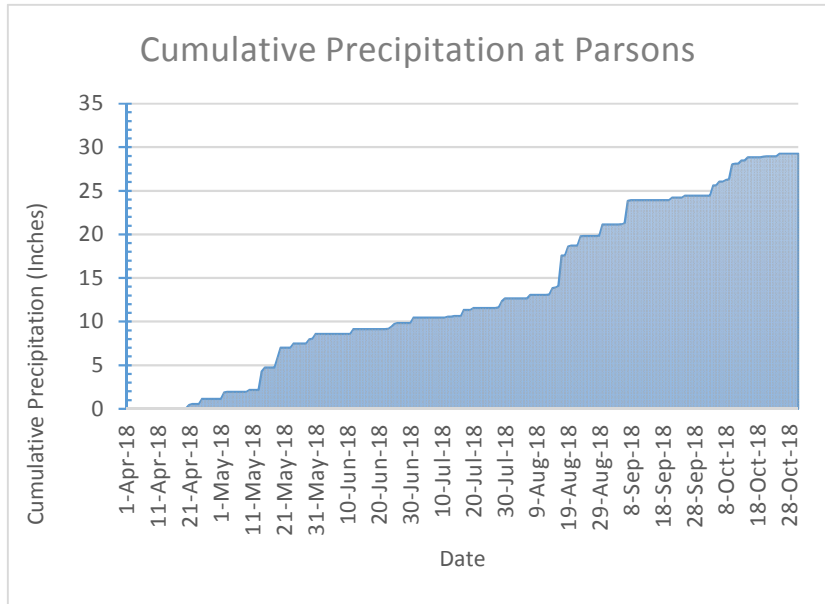
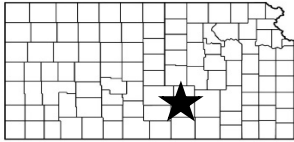


TABLE 7. KANSAS SHORT-SEASON DRYLAND CORN PERFORMANCE TEST, 2018

BRAND	NAME	OTTAWA, Franklin County						PARSONS, Labette County					
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa
DEKALB	DKC50-64RIB	100	90	58	15	61	24	75	104	57	15	69	33
DEKALB	DKC60-69RIB	118	106	58	16	63	23	83	114	56	15	69	40
MATURITY CHECK	EARLY	106	95	58	16	63	24	61	83	57	14	69	36
MATURITY CHECK	MED	106	96	61	16	63	22	68	93	58	16	73	36
MORCORN	MC 3055 DGV2P RIB	--	--	--	--	--	--	68	94	55	14	69	29
MORCORN	MC 3544 VT2P RIB	--	--	--	--	--	--	82	113	57	16	70	35
MORCORN	MC 3617 VT2P RIB	--	--	--	--	--	--	74	102	56	16	71	41
MORCORN	MC 4319 VT2P RIB	117	105	58	17	64	24	--	--	--	--	--	--
MORCORN	MC 4457 VT2P RIB	110	99	59	16	62	22	--	--	--	--	--	--
MORCORN	MC 4725 VT2P RIB	115	104	58	18	63	24	--	--	--	--	--	--
MORCORN	MC 4750 SmartStax RIB	100	90	59	16	64	25	--	--	--	--	--	--
NUTECH	5F-601	104	93	59	15	63	22	70	96	56	15	71	36
NUTECH	5H-905	114	103	57	15	61	23	80	110	54	15	69	35
NUTECH	E5FN-A604	133	120	60	16	63	23	67	92	58	16	72	34
	Averages	111	111	59	16	63	23	73	73	56	15	70	35
	CV (%)	9	9	4	2	2	5	13	13	1	4	1	7
	LSD (0.05)	15	13	3	0	2	2	14	19	1	1	1	4

*Seed treatment and hybrid traits located in Table 11.

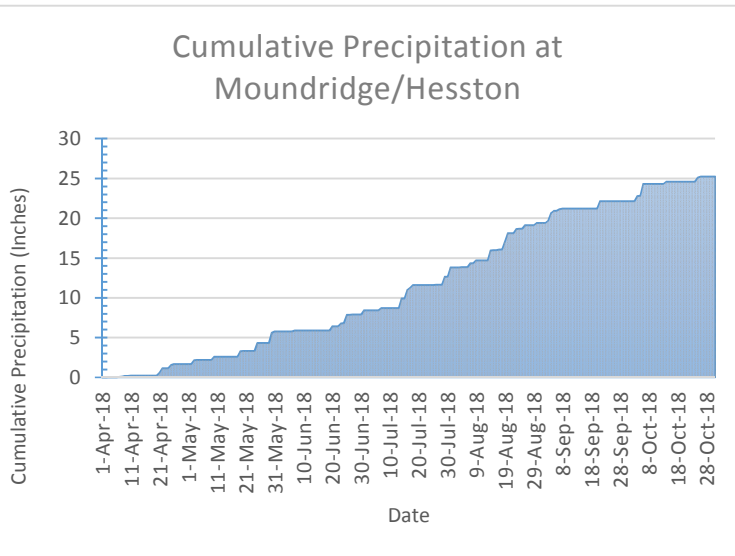
**Yields must differ by more than the LSD value to be considered statistically different.



SOUTH CENTRAL KANSAS IRRIGATED CORN TESTS

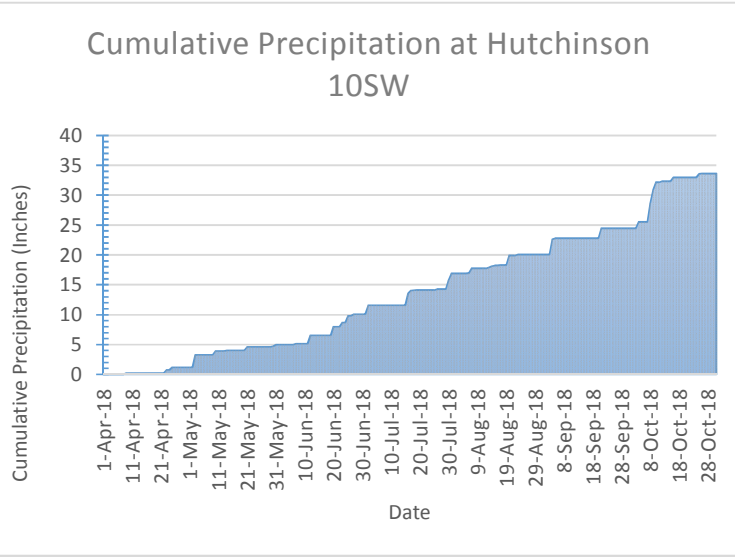
Moundridge, McPherson County

Private farmer's field
 Planted: 5/1/2018
 Harvested: 9/28/2018
 200-0-0 lb/a N, P, K
 Crete silt loam
 Previous crop: soybean



Hutchinson, Reno County

South Central Experiment Field, Redd Qtr
 Planted: 5/10/2018
 Harvested: 11/7/2018
 200-0-0 lb/a N, P, K
 Punkin silt loam
 Previous crop: cotton



Macksville, Stafford County

Private farmer's field
 Planted: 5/10/2018
 Harvested: 9/28/2018
 Carwile fine sandy loam
 200-0-0 lb/a N, P, K
 Previous crop: soybean

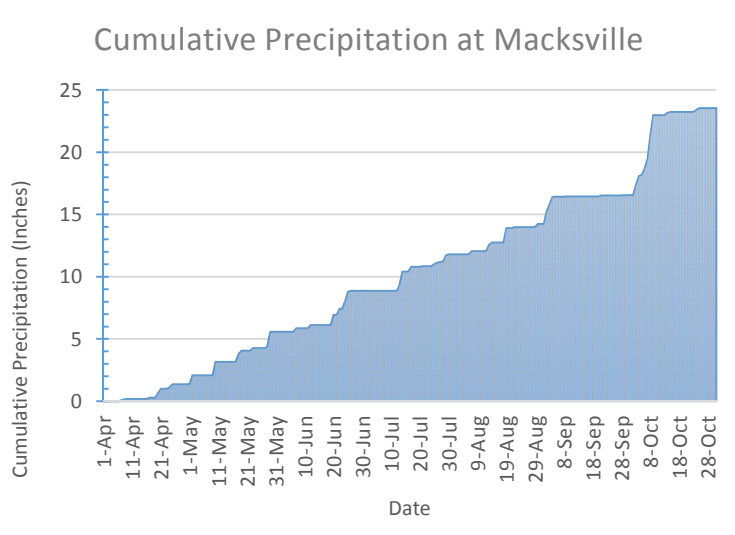
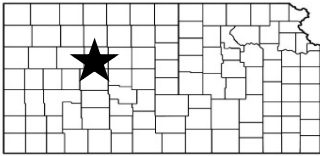


TABLE 8. SOUTH CENTRAL KANSAS IRRIGATED CORN PERFORMANCE TEST, 2018

BRAND	NAME	MOUNDRIDGE, McPherson County				HUTCHINSON, Reno County				MACKSVILLE, Stafford County			
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
DEKALB	DKC50-64RIB	270	105	62	16	218	139	59	16	245	97	62	16
DEKALB	DKC60-69RIB	262	102	62	16	154	98	60	16	240	95	62	15
DEKALB	DKC64-35RIB	273	106	61	16	117	75	57	16	260	103	62	16
HEFTY	H6424	257	100	62	16	163	104	59	16	--	--	--	--
HEFTY	H6614	242	94	62	16	141	90	60	16	--	--	--	--
HEFTY	H6714	243	95	62	16	151	96	59	16	--	--	--	--
LG SEEDS	LG5643STXRIB	241	94	61	15	117	75	58	16	240	95	61	15
LG SEEDS	LG5650VT2PRO	251	98	62	16	--	--	--	--	--	--	--	--
LG SEEDS	LG5700VT2PRIB	258	101	61	15	179	115	58	16	273	108	61	15
LG SEEDS	LG61C48VT2RIB	--	--	--	--	155	99	59	16	242	95	62	15
LG SEEDS	LG66C32STX	239	93	62	16	201	129	59	16	262	103	62	15
LG SEEDS	LG68C88VT2PRO	252	98	62	16	181	116	59	16	242	95	62	16
MATURITY CHECK	EARLY	256	100	62	16	156	100	57	16	264	104	61	15
MATURITY CHECK	LATE	274	107	63	16	155	99	58	16	247	97	62	15
MATURITY CHECK	MED	240	93	61	16	183	117	60	15	267	105	62	16
NUTECH	5F-713	262	102	61	16	175	112	59	16	229	90	62	15
NUTECH	5FB-1010	254	99	61	16	171	109	60	16	243	96	61	15
NUTECH	5FB-3113	259	101	61	16	103	66	57	15	258	102	61	15
NUTECH	5FB-4516	251	98	62	16	119	76	57	16	268	106	61	15
NUTECH	E5FN-A714	279	109	62	17	193	123	58	16	260	103	62	16
PHILLIPS	PSF 068	266	104	61	16	122	78	57	16	260	103	62	15
PHILLIPS	PSF 082	280	109	63	17	131	84	60	16	275	108	62	16
PHILLIPS	PSF 098	258	101	63	16	168	107	58	16	274	108	62	15
PHILLIPS	PSF 109	240	93	62	16	146	93	59	16	249	98	62	15
PHILLIPS	PSF 128	251	98	63	16	191	122	59	16	227	89	61	15
PHILLIPS	PSF 133	--	--	--	--	161	103	59	16	--	--	--	--
PHILLIPS	PSF 138	252	98	62	16	120	77	58	16	277	109	61	15
PHILLIPS	PSF 148	259	101	63	17	153	97	60	16	226	89	62	15
	Averages	257	257	62	16	157	157	59	16	253	253	62	15
	CV (%)	11	11	2	4	8	8	3	5	10	10	2	4
	LSD (0.05)	40	16	2	1	18	11	3	1	35	14	2	1

*Seed treatment and hybrid traits located in Table 11.

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



WESTERN KANSAS DRYLAND CORN TESTS

Hays, Ellis County

Western Kansas Research Center

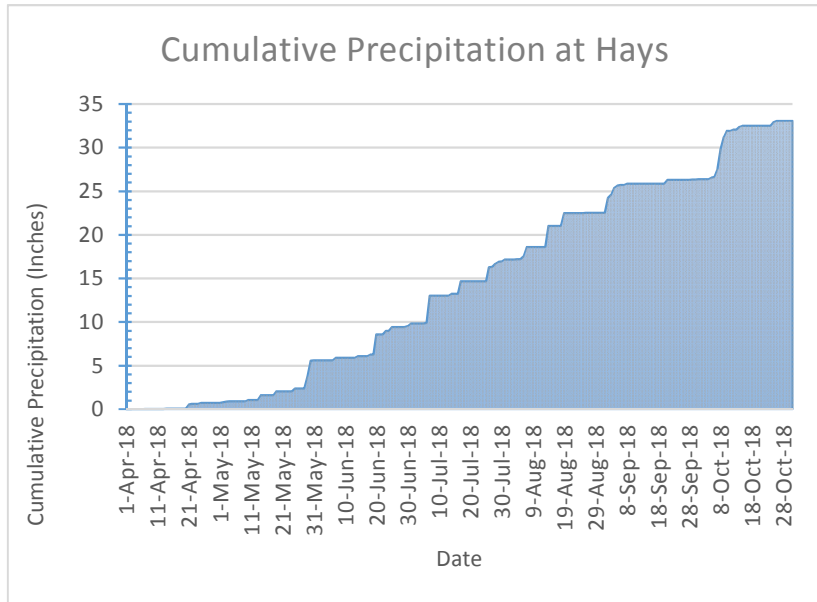
Planted: 5/1/2018

Harvested: 11/19/2018

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

Harney clay loam

Previous crop: wheat



Colby, Thomas County

K-State Northwest Research Center

Planted: 5/3/2018

Harvested: 10/29/2018

100-30-0 lb/a N, P, K

Keith silt loam

Previous crop: fallow

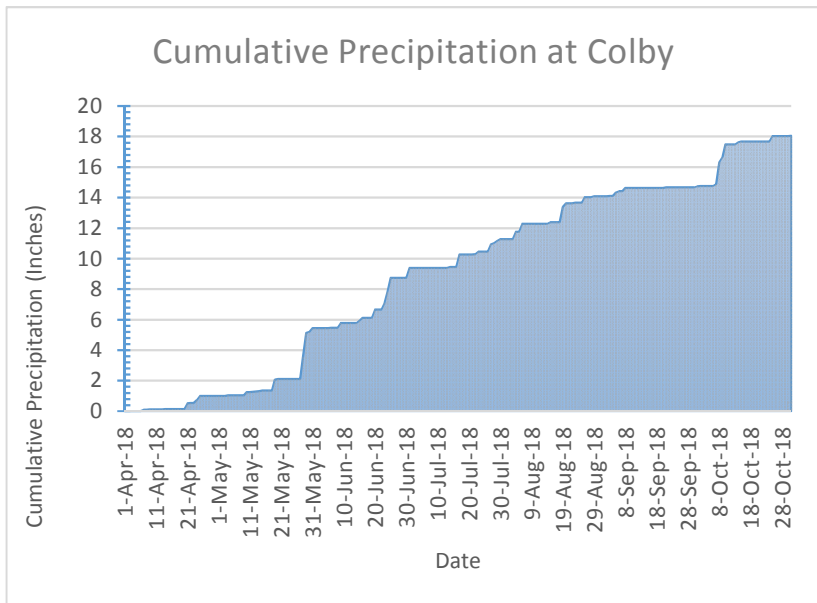
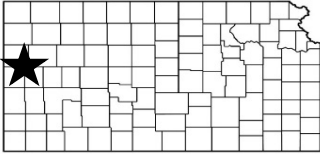


TABLE 9. WESTERN KANSAS DRYLAND CORN PERFORMANCE TEST, 2018

BRAND	NAME	HAYS, Ellis County					COLBY, Thomas County					
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa
CHS ALLEGIANT	10039 VT2P	--	--	--	--	--	140	99	57	15	69	15
CHS ALLEGIANT	10357 VT2P	--	--	--	--	--	124	88	58	16	71	15
DEKALB	DKC50-64RIB	85	87	53	15	19	111	79	55	14	70	14
DEKALB	DKC60-69RIB	105	107	54	15	17	147	104	56	17	71	14
DEKALB	DKC64-35RIB	102	104	55	15	18	126	89	57	16	73	16
HEFTY	H5003	88	90	51	15	18	113	80	55	14	69	15
HEFTY	H5212	95	97	53	15	18	163	116	57	15	70	15
HEFTY	H5804	65	67	53	15	18	153	109	58	16	70	15
HEFTY	H6222	100	103	54	15	18	--	--	--	--	--	--
HEFTY	H6422	86	88	52	15	19	138	98	56	17	74	13
HEFTY	H6423	98	100	54	15	17	138	98	56	17	73	15
LG SEEDS	LG5494VT2RIB	--	--	--	--	--	130	93	56	15	70	17
LG SEEDS	LG5525VT2PRIB	--	--	--	--	--	144	103	57	15	70	16
LG SEEDS	LG55C95VT2RIB	--	--	--	--	--	126	89	55	15	74	14
MATURITY CHECK	EARLY	109	112	54	15	17	144	102	56	16	70	15
MATURITY CHECK	LATE	98	100	55	15	17	153	109	58	18	74	12
MATURITY CHECK	MED	95	97	55	15	17	148	105	57	17	75	13
PHILLIPS	PSF 082	95	97	52	15	19	--	--	--	--	--	--
PHILLIPS	PSF 109	114	117	53	15	19	--	--	--	--	--	--
PHILLIPS	PSF 133	98	101	53	15	18	--	--	--	--	--	--
PHOENIX	6342A4	121	124	52	15	18	134	95	54	17	74	15
PHOENIX	6542A4	119	122	53	15	18	129	92	54	17	75	16
RENK	RK842SSTX	101	104	54	15	18	171	121	57	17	73	13
RENK	RK859DGV2P	91	93	54	15	18	148	105	56	16	74	14
RENK	RK877DGV2P	90	92	52	15	18	147	105	56	17	74	13
RENK	RK937SSTX	96	99	54	15	18	169	120	58	16	74	13
	Averages	98	98	53	15	18	141	141	56	16	72	14
	CV (%)	10	10	2	1	7	9	9	1	2	2	15
	LSD (0.05)	14	14	2	0	2	17	12	1	0	2	3

*Seed treatment and hybrid traits located in Table 11.

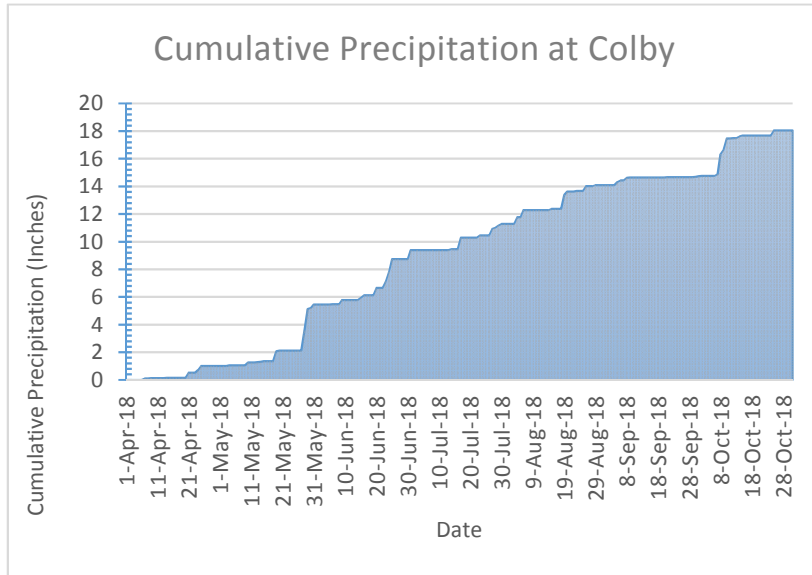
**Yields must differ by more than the LSD value to be considered statistically different.



WESTERN KANSAS IRRIGATED CORN TESTS

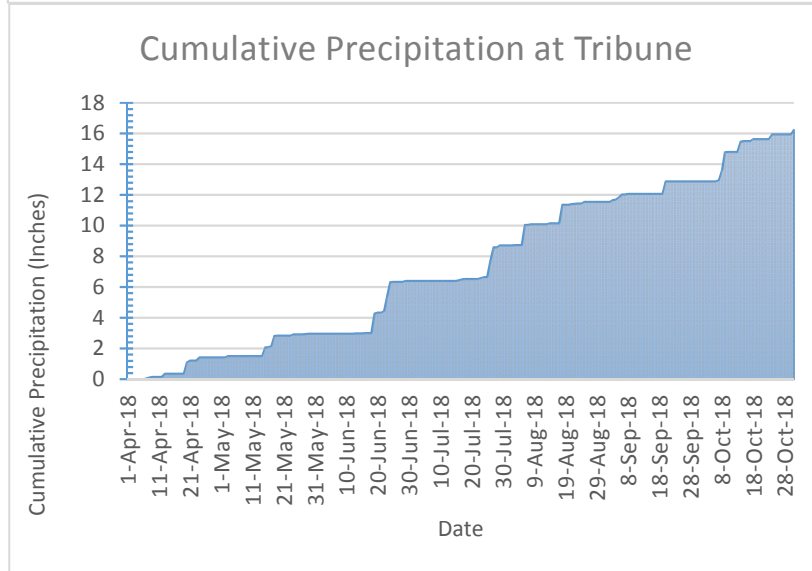
Colby, Thomas County

K-State Northwest Research Center
 Planted: 5/4/2018
 Harvested: 10/30/2018
 250-30-0 lb/a N, P, K
 Keith silt loam
 Previous crop: fallow



Tribune, Greeley County

K-State Northwest Research Center
 Planted: 5/1/2018
 Harvested: 10/2/2018
 250-40-0 lb/a N, P, K
 Ulysess silt loam
 Previous crop: fallow



Garden City, Finney County

K-State Southwest Research Center
 Planted: 5/7/2018
 Harvested: 10/4/2018
 220-0-0 lb/a N, P, K
 Keith silt loam
 Previous crop: wheat

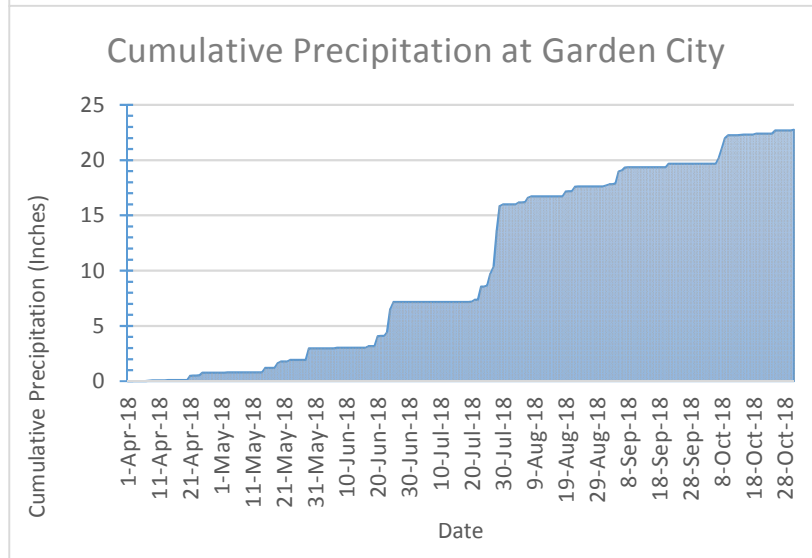


TABLE 10. WESTERN KANSAS IRRIGATED CORN PERFORMANCE TEST, 2018

BRAND	NAME	COLBY, Thomas County						TRIBUNE, Greeley County						GARDEN CITY, Finney County			
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
AGVENTURE	EXP116488AM	170	104	57	21	76	28	--	--	--	--	--	--	--	--	--	--
AGVENTURE	EXP164048AM	192	118	57	19	74	28	--	--	--	--	--	--	--	--	--	--
AGVENTURE	EXP178088AM	191	117	57	17	74	28	--	--	--	--	--	--	201	100	58	17
AGVENTURE	EXP182128YHB	--	--	--	--	--	--	--	--	--	--	--	--	196	97	60	14
AGVENTURE	EXP186148YHB	--	--	--	--	--	--	--	--	--	--	--	--	201	100	58	16
AGVENTURE	EXP198178YHB	--	--	--	--	--	--	--	--	--	--	--	--	208	104	59	15
B-H GENETICS	BH 7646VT2P	155	95	55	16	73	26	--	--	--	--	--	--	--	--	--	--
B-H GENETICS	BH 8121SS	181	111	57	16	73	29	234	100	55	26	76	31	--	--	--	--
B-H GENETICS	BH 8130VT2P	140	86	56	18	73	29	--	--	--	--	--	--	--	--	--	--
B-H GENETICS	BH 8399VT2P	--	--	--	--	--	--	239	102	52	32	77	29	--	--	--	--
B-H GENETICS	BH 8737VT2P	185	113	57	21	74	26	250	107	55	26	76	29	--	--	--	--
B-H GENETICS	BH 8848SS	--	--	--	--	--	--	243	103	52	35	78	29	--	--	--	--
CHS ALLEGIANT	10890 VT2P	159	97	56	16	72	27	--	--	--	--	--	--	--	--	--	--
CHS ALLEGIANT	11594 VT2P	148	90	56	22	74	26	--	--	--	--	--	--	--	--	--	--
DEKALB	DKC50-64RIB	151	93	55	15	71	30	182	77	56	20	74	30	196	98	60	16
DEKALB	DKC60-69RIB	135	83	56	18	72	28	234	99	53	30	76	30	200	100	58	15
DEKALB	DKC64-35RIB	167	102	57	17	75	26	232	99	54	33	78	31	205	102	60	16
HEFTY	H6104	114	70	57	17	73	28	221	94	55	26	76	30	203	101	59	16
HEFTY	H6212	161	99	55	19	76	27	239	101	51	35	79	31	193	96	60	15
HEFTY	H6413	166	102	55	21	75	29	242	103	51	34	78	30	196	97	59	17
HEFTY	H6422	144	88	55	17	73	26	218	93	54	28	77	30	--	--	--	--
HEFTY	H6423	149	91	56	17	73	28	230	98	53	30	75	31	--	--	--	--
HEINE SEEDS	823VT2ProRIB	--	--	--	--	--	--	241	102	53	34	78	32	--	--	--	--
HEINE SEEDS	8400 STX	--	--	--	--	--	--	231	98	53	38	80	32	--	--	--	--
HEINE SEEDS	8500DGV2Pro	--	--	--	--	--	--	266	113	52	33	77	31	--	--	--	--
HEINE SEEDS	851DGV2Pro	--	--	--	--	--	--	245	104	52	32	77	31	--	--	--	--
HEINE SEEDS	852VT2ProRIB	--	--	--	--	--	--	252	107	52	33	76	31	--	--	--	--
HEINE SEEDS	8600STX	--	--	--	--	--	--	232	99	50	35	77	29	--	--	--	--
LG SEEDS	LG5606STXRIB	180	110	58	19	75	29	--	--	--	--	--	--	--	--	--	--
LG SEEDS	LG5643VT2RIB	177	109	55	21	76	29	243	103	52	30	77	30	211	105	59	15
LG SEEDS	LG5700STXRIB	--	--	--	--	--	--	--	--	--	--	--	--	182	91	58	17
LG SEEDS	LG59C41STX	138	84	57	17	72	28	229	97	55	27	75	30	193	96	58	16
LG SEEDS	LG61C48STXRIB	170	104	57	18	74	29	--	--	--	--	--	--	209	104	59	15
LG SEEDS	LG61C48VT2RIB	--	--	--	--	--	--	235	100	52	36	79	31	--	--	--	--
LG SEEDS	LG64C18VT2RIB	--	--	--	--	--	--	251	107	52	31	77	31	--	--	--	--
LG SEEDS	LG66C32STX	186	114	58	21	77	29	237	101	53	36	80	30	202	100	59	16
LG SEEDS	LG68C88VT2PRO	--	--	--	--	--	--	--	--	--	--	--	--	207	103	59	15
MATURITY CHECK	EARLY	164	100	57	16	73	27	203	87	54	29	76	30	212	106	59	18
MATURITY CHECK	LATE	183	112	57	21	76	28	226	96	55	28	77	31	201	100	59	16
MATURITY CHECK	MED	163	100	57	18	75	26	240	102	55	27	76	31	192	96	60	15
NUTECH	5FB-3113	198	122	54	18	76	28	246	105	51	30	79	31	186	92	59	17
NUTECH	5FB-4516	198	121	55	21	77	28	246	105	51	36	81	31	209	104	61	15
NUTECH	E5FN-A714	164	100	56	19	76	29	234	99	52	31	80	30	203	101	60	15
PHILLIPS	PSF 098	140	86	55	16	75	27	242	103	51	29	77	30	--	--	--	--
PHILLIPS	PSF 128	136	83	55	18	73	26	228	97	54	29	76	28	--	--	--	--
PHILLIPS	PSF 138	183	112	56	18	75	29	216	92	53	35	78	31	--	--	--	--
PHILLIPS	PSF 143	155	95	56	22	74	28	246	105	52	32	76	28	--	--	--	--
PHILLIPS	PSF 148	136	84	57	18	73	27	243	103	54	28	76	30	--	--	--	--
PHILLIPS	PSF 169	164	100	54	21	75	26	245	104	52	32	77	28	--	--	--	--
PHOENIX	1121EZ	188	115	57	18	77	29	238	101	54	28	80	31	--	--	--	--
PHOENIX	6342A4	171	105	53	21	75	29	241	102	48	34	79	30	--	--	--	--
PHOENIX	6542A4	184	113	53	21	75	29	241	102	50	31	79	30	--	--	--	--
RENK	RK842SSTX	167	103	57	19	76	26	227	97	53	34	79	30	204	102	60	16
RENK	RK859DGV2P	112	69	56	17	72	26	232	99	54	29	75	29	198	99	58	17
RENK	RK877DGV2P	169	103	55	19	74	25	239	101	52	31	76	28	214	107	58	17

TABLE 10 continued. WESTERN KANSAS IRRIGATED CORN PERFORMANCE TEST, 2018

BRAND	NAME	COLBY, Thomas County						TRIBUNE, Greeley County						GARDEN CITY, Finney County			
		YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)	DAYS (silk)	1000 ppa	YIELD (bu/a)	PAVG (%)	TW (lb/bu)	MOIST (%)
RENK	RK937SSTX	159	98	57	16	73	26	215	92	54	26	77	31	200	100	59	18
	Averages	163	163	56	18	74	28	235	235	53	31	77	30	201	201	59	16
	CV (%)	10	10	2	4	2	0	6	6	2	9	1	0	7	7	3	11
	LSD (0.05)	23	14	1	1	2	2	19	8	1	4	1	2	18	9	2	3

*Seed treatment and hybrid traits located in Table 11.

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

Table 11. Entries in the 2018 Kansas Corn Performance Tests*

	SD TRT*	DBL	RES	P	F		SD TRT	DBL	RES	P	F
AGVENTURE						LG SEEDS					
EXP164048AM	LUM250/C2	104	AM	Y	Y	LG44C27VT2PRO	P/VOV500	94	VT2PRO	N	Y
EXP178088AM	LUM250/C2	108	AM	Y	Y	LG5465VT2RIB	P/VOV500	97	VT2PRO	N	Y
EXP182128YHB	LUM/C250	112	YHB	Y	Y	LG5494VT2RIB	P/VOV500	99	VT2PRO	N	Y
EXP116488AM	LUM250/C2	114	AM	Y	Y	LG54C01STX	P/VOV500	104	STX	N	Y
EXP186148YHB	LUM/C250	114	YHB	Y	Y	LG5525VT2PRIB	P/VOV500	105	VT2PRO	N	Y
EXP198178YHB	LUM250/C2	117	YHB	Y	Y	LG55C95VT2RIB	P/VOV500	105	VT2PRO	N	Y
B-H GENETICS						LG59C41STX	P/VOV500	109	STX	N	Y
BH 8121SS	P/V500	--	GENUITY SS	--	--	LG59C66VT2PRO	P/VOV500	109	VT2PRO	N	Y
BH 8130VT2P	P/V500	--	GENUITY VT2F	--	--	LG61C48STXRIB	P/VOV500	111	STX	N	Y
BH 8399VT2P	P/V500	--	VT2P	--	--	LG61C48VT2RIB	P/VOV500	111	VT2PRO	N	Y
BH 8737VT2P	A250	--	GENUITY VT2F	--	--	LG5606STXRIB	P500/VOT	111	STX RR, LL	Y	Y
BH 8848SS	P/V500	--	GENUITY SS	--	--	LG64C18VT2RIB	P/VOV500	114	VT2PRO	N	Y
BH 7646VT2P	P/V500	106	GENVT2P	--	--	LG5643STXRIB	P/VOV500	114	VT2PRO	N	Y
CHS ALLEGIANT						LG5643VT2RIB	P500/VOT	114	VT2P	Y	Y
10039 VT2P	--	100	VT2P	N	Y	LG5650VT2PRO	P/VOV500	115	VT2PRO	N	Y
10357 VT2P	--	103	VT2P	--	--	LG66C32STX	P/VOV500	116	STX	N	Y
10890 VT2P	--	108	VT2P	--	--	LG5700STXRIB	P/VOV500	116	STX	N	Y
11594 VT2P	--	115	VT2P	--	--	LG5700VT2PRIB	P500/VOT	116	VT2P	Y	Y
DEKALB						LG68C88VT2PRO	P/VOV500	118	VT2PRO	N	Y
DKC50-64RIB	ACC/VOT	100	VT2PRIB	--	--	MATURITY CHECK					
DKC60-69RIB	ACC/VOT	110	VT2PRIB	--	--	EARLY2	--	--	--	--	--
DKC64-35RIB	ACC/VOT	114	VT2PRIB	--	--	LATE2	--	--	--	--	--
GOLDEN HARVEST						MED2	--	--	--	--	--
G09Y24-3200A	AVICTA 50	109	CB,VP,LL,RR	N	N	MIDLAND					
G11B63-3010A	AVICTA 50	111	CB,RR,LL	N	Y	347PR	C250	108	RR, 2Pro	Y	Y
G14V04-3120	AVICTA 50	114	CB,RR,LL	N	Y	349PR	C250	108	VT2Pro	Y	Y
HEFTY						429PR	C250	110	VT2Pro	Y	Y
H5003	HC	100	DGVT2P	--	Y	656PR	C250	113	RR, VT2P	Y	Y
H5212	HC	102	VT2P	--	Y	669PR	C250	113	VT2Pro	Y	Y
H5804	HC	108	SS	--	N	594PR DG	C250	113	RR, VT2P	Y	Y
H6104	HC	111	SS	--	Y	757PR	C250	115	RR,2Pro	Y	Y
H6222	HC	112	VT2P	--	Y	735PR	C250	115	RR	Y	Y
H6212	HC	112	VT2P	--	Y	MORCORN					
H6422	HC	114	VT2P	--	Y	MC 3055 DGVT2P RI	ACC250	--	RR	N	Y
H6423	HC	114	DGVT2P	--	N	MC 3617 VT2P RIB	ACC250	--	RR/VT2P	N	Y
H6424	HC	114	SS	--	N	MC 4319 VT2P RIB	ACC250	--	RR/VT2P	N	Y
H6413	HC	114	DGVT2P	--	N	MC 4457 VT2P RIB	ACC250	--	RR/VT2P	N	Y
H6614	HC	116	SS	--	Y	MC 4750 SmartStax R	P/VOV500	--	RR/LL/STX	N	Y
H6714	HC	117	SS	--	N	MC 4725 VT2P RIB	ACC250	--	RR	N	N
HEINE SEEDS						MC 3544 VT2P RIB	ACC250	105	RR	--	--
851DGVT2Pro	ACC250	--	DGVT2Pro	Y	Y	NUTECH					
8500DGVT2Pro	P/VOT500	--	DGVT2Pro	Y	N	5F-601	P500	101	Acremax	N	Y
823VT2ProRIB	ACC250	--	VT2Pro	Y	N	E5FN-A604	C250/L250	104	Acremax	N	N
8600STX	P/VOT500	--	STX	Y	Y	5H-905	P500	105	Acremax	N	N
8400 STX	P/VOT500	--	STX	Y	N	5F-308	P500	108	Acremax	N	Y
852VT2ProRIB	ACC250	--	VT2ProRIB	Y	Y	5F-709	P500	109	Acremax	N	N

Table 11 continued. Entries in the 2018 Kansas Corn Performance Tests

	SD TRT*	DBL	RES	P	F
NUTECH					
5FB-9909	C250/L250	109	Acremax	N	Y
5FB-1010	P500	110	Acremax	N	Y
5FB-1211	C250/L250	111	Acremax	N	N
5NN-8812	C250/L250	112	3000GT	N	Y
5FB-3113	C250/L250	113	Acremax	N	Y
5FB-6313	C250/L250	113	Acremax	N	Y
E5FN-A213	C250/L250	113	Acremax	N	Y
5F-713	P500	113	Acremax	N	Y
E5FN-A714	C250/L250	114	Acremax	N	Y
5FB-4516	C250/L250	116	Acremax	N	Y
PHILLIPS					
PSF 068	ACC250	106	VT2P	--	Y
PSF 082	ACC250	108	VT2P	--	Y
PSF 098	ACC250	109	VT2P	--	Y
PSF 109	ACC250	110	RR/LL	N	Y
PSF 128	ACC250	112	VT2P	N	Y
PSF 138	ACC250	113	VT2P	N	Y
PSF 133	ACC250	113	VT2P	N	N
PSF 143	ACC250	114	VT2P	N	Y
PSF 148	ACC250	114	VT2P	N	Y
PSF 169	ACC250	116	VT2P	N	Y
PHOENIX					
1121EZ	AVICTA 50	112	RR/3122	--	--
6342A4	AVICTA	113	3111	N	Y
6542A4	AVICTA	116	3111	N	Y
RENK					
RK937SSTX	AC250	110	VT2P	N	N
RK877DGV2P	ACC250	111	VT2P+DG	N	N
RK842SSTX	AC250	112	STX	N	N
RK859DGV2P	ACC250	112	VT2P+DG	N	N
RK945DGV2P	AC250	115	VT2P	N	N
RK961VT2P	ACC250	116	GEN. VT2P	N	N
RK965SSTX	A500/VOT	116	STX	N	N

*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 1145, '2018 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."

Contributors

Main Station, Manhattan

Jane Lingenfelter, Associate Agronomist (Senior Author)
Ignacio Ciampitti, Extension Agronomist
Doug Jardine, Extension Plant Pathologist
Mary Knapp, K-State Weather Data Librarian
Holly Davis, Extension Entomologist
R. Jeff Whitworth, Extension Entomologist

Experiment Fields

Eric Adee, Topeka
Andrew Esser, Scandia
Jim Kimball, Ottawa

Research Centers

Robert Aiken, Colby
A.J. Foster, Garden City
Raenette Martin, Colby
Lonnie Mengarelli, Parsons
Troy Ostmeier, Hays
Gretchen Sassenrath, Parsons
Nickolas Sower, Garden City
Alan Schlegel, Tribune

Cooperators

Fuhrman Farms, Severance
Rezac Farms, Onaga
Clayton Short, Assaria
Southwest Seed Research, Hutchinson
Justin Vosburgh, Macksville

Copyright 2018 Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, give credit to the author(s), 2018 Kansas Performance Tests with Corn Hybrids, Kansas State University, December 2018. Contribution no. 19-119-S from the Kansas Agricultural Experiment Station.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available at:
www.ksre.ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer.

SRP 1145 December 2018