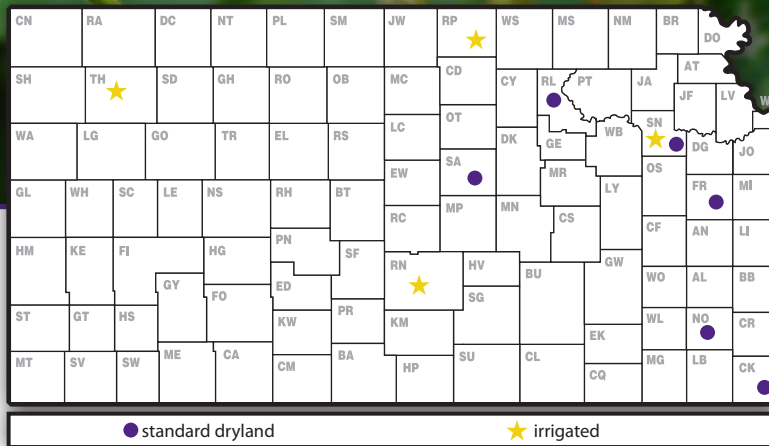
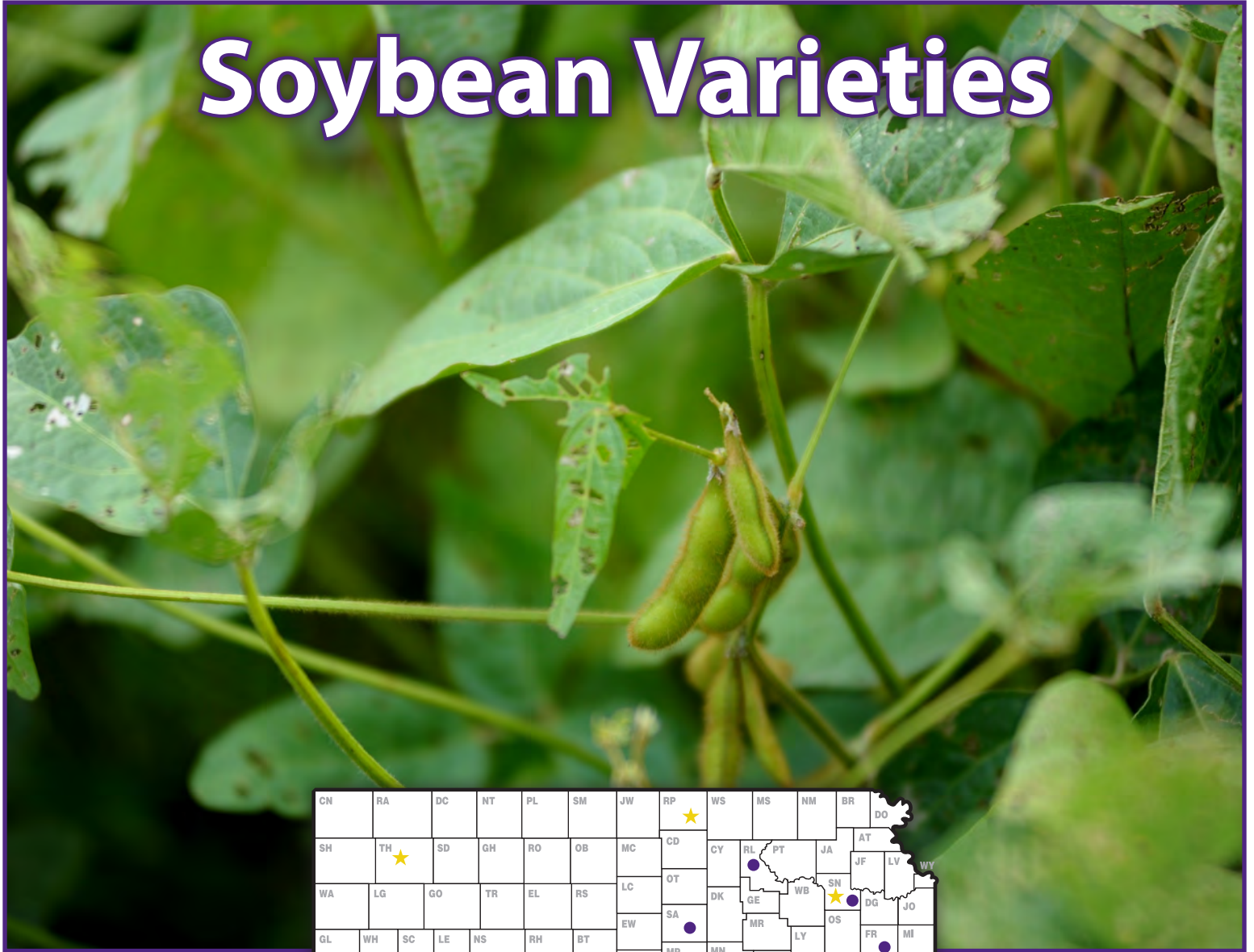


2019 Kansas Performance Tests with

Soybean Varieties



Report of Progress 1153



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2019 KANSAS SOYBEAN PERFORMANCE TESTS

STATEWIDE GROWING CONDITIONS

The 2019 soybean season had a very distinct weather pattern with a very challenging end of the season. Early-season wet conditions slightly delayed planting during the early side of the crop planting window. Early growth was slow due to wet soil conditions. Delay on planting date could cause yield reductions, primarily under high-yielding environments (>70 bushels per acre), but this season's delay in planting caused a reduction in yields coming from shorter duration of the growing season.

During the growing season, late planting conditions due to saturated soils was the normal for this last growing season. Wet conditions early in the season saturated soils resulting in inhibited root growth, leaf area expansion, and increased production issues related to root compaction and produced yellow leaves. For the late planted crop (June-July), cold temperatures towards the end of the season negatively affected final seed weight.

Hail was a problem across the state. There were 712 reports of large hail through August 31. Of those events, 299 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 31. The driest area was the Southwest, where the divisional average was 15.37 inches, or 95% of normal.

The Southeast division faced the greatest excess, with an average of 47.98 inches or 158% of normal. At the Parsons station, rainfall jumped above-normal in early April and continued above normal for the rest of the season. Tribune, in the West Central Division, had the most favorable moisture distribution, with near-normal conditions throughout the season.

Temperatures weren't 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 mid-July, with the highest read of 108°F reported on July 20th at Webster Dam, Rush County and August 1 at Lakin, Kearny County.

The first autumn freezes were near average, with Colby dropping to 32°F on the 10th of October, and Columbus reaching 27°F on the 31st.

Unfortunately, the below-freezing temperatures did affect soybean growth in the northern parts of the state (primarily north central and northwest Kansas) or the late planted soybean (early July). Temperatures below 32°F, more absolute temperature than duration of the cold stress, will affect the crop. Necrosis of the leaf canopy is a visible symptom of freeze damage in soybeans. Early grain filling impact, timing of the freeze effect, will proportionally produce more yield reduction (via seed set) than if the cold stress takes place close to the end of the season.

Table 1. 2019 temperatures by crop production district

Division	Extreme Tmax (°F)	Date	Avg Tmax (°F)	Avg Tmin (°F)	Avg Tmean (°F)	Extreme Tmin (°F)	Date
Northwest	107	18-Jul	78.2	49.9	64.1	3	31-Oct
North Central	108	20-Jul	78.4	54.0	66.2	10	31-Oct
Northeast	102	18-Jul	77.5	56.1	66.8	16	31-Oct
West Central	107	21-Jul	79.4	50.3	64.8	2	31-Oct
Central	107	1-Aug	79.5	54.7	67.1	10	29-Oct
East Central	102	21-Jul	78.0	57.1	67.5	15	31-Oct
Southwest	108	1-Aug	82.0	52.9	67.5	4	31-Oct
South Central	106	1-Aug	80.2	56.27	68.245	11	31-Oct
Southeast	100	12-Aug	79.2	58.6	68.9	13	31-Oct

Reproductive temperature and precipitation conditions were favorable for the seed filling process, but the late planted timing placed the final maturity later in the year delaying harvest in many fields. Large parts of the soybean growing areas in Kansas presented poor test weight and quality soybeans that are being either severely discounted or outright refused at the elevator due to the potential for reduced feed value.

Despite the previously mentioned challenges, in November the U.S. Department of Agriculture forecasted a soybean yield of 44 bushels per acre for the state of Kansas for the 2019 season, +1 bushels per acre up compared to the final yield recorded for the 2018 growing season, but with a slight reduction in production primarily coming from a minor decline in the harvested acreage relative to the 2018 season (Ignacio A Ciampitti, Kansas State University Cropping Systems Specialist, and Mary Knapp, Kansas State University Climatologist).

TEST OBJECTIVES AND PROCEDURES

Soybean performance tests are conducted each year to provide information on the relative performance of new and established varieties and brands at several locations in Kansas.

Seeds for tests are from private seed companies, certified growers, and agricultural experiment stations (Table 1). Seed quality, including factors such as purity and germination, can be important in determining the performance of a variety. Soybean seed used for private and public entries in the Kansas Crop Performance Tests is prepared professionally and usually meets or exceeds Kansas Crop Improvement Certification standards. Relative performance of a given variety comparable to that obtained in these tests is best assured under similar environmental conditions and cultural practices and with the use of certified or professionally prepared seed. All companies known to be developing and marketing soybean varieties or brands are invited to submit test seed; interested companies enter on a voluntary, fee-entry basis.

Entries were planted in four-row plots with rows 30 inches apart and were replicated three or four times each. Seeding rate ranged from 7 to 12 seeds per foot of row. The center two rows of each plot were harvested for yield. Harvested row lengths ranged from 11 to 33 feet, depending on location. Cultural practices and rainfall for each test location are presented with each table. Results from this year's tests are presented in Tables 2 through 15. Relative yields of each entry from all locations are shown in Table 16.

DATA INTERPRETATION

Yields are recorded as bushels per acre (60 lb/bushel) adjusted to 13% moisture content, when moisture data are available. Seed yield also is expressed as a percentage of the test average to assist in identifying entries that consistently produce better than the average yield.

Maturity is the date on which 95% of the pods have ripened (browned). Delayed leaf drop and green stems are not considered when assigning maturity. About 1 week of good drying weather after maturing is needed before soybeans are ready to harvest.

Lodging is rated at maturity by the following scores:

1. Almost all plants erect
2. All plants slightly leaning or a few plants down
3. All plants leaning moderately (45%) or 25 to 50% of plants down
4. All plants leaning considerably or 50 to 80% plants down
5. Almost all plants down

Height is the average length from the soil surface to the top of the main stem of mature plants.

VARIETY OR BRAND SELECTION

Performance of soybean varieties or brands varies from year to year and from location to location, depending on factors such as weather, management practices, and variety adaptation. When selecting varieties or brands, producers should carefully analyze variety performance for two or more years across locations. Performance averaged over several environments will provide a better estimate of genetic potential and stability than performance based on a few environments.

Small differences in yield between any two varieties or brands usually are not important. Within maturity groups at each location, a LSD (least significant difference) was calculated. The significance level used to calculate the LSD was 10%. Unless two varieties differ in yield by more than the LSD, genetic yield potential of one entry cannot be considered superior to that of another.

The coefficient of variability (CV) represents an estimate of the precision in the replicated yield trials. A CV of less than 10% indicates a good test with a high level of reliability. CVs ranging from 10 to 15% are usually acceptable for performance comparisons. CVs greater than 15% generally lack sufficient precision to provide any more than a rough guide to cultivar performance. For tests in which the precision was insufficient to statistically compare performance among the entries, the LSD value has been replaced with the designation NS, indicating that seed yields were not significantly different.

Test results also can be found online at: www.agronomy.k-state.edu/services/crop-performance-tests/soybean

Table 2. Entrants in the 2019 Kansas Soybean Performance Tests

Kansas Ag. Exp. Stn. (AES) Manhattan, KS 785-532-7243	Golden Harvest Minnetonka, MN 785-207-2648 syngenta.com	Monsanto St. Louis, MO 800-768-6387 aganytime.com/asgrow *maturity checks
Missouri Ag. Exp. Stn (AES) Portageville, MO 573-379-5431	LG Seeds Waco, TX 254-761-9838 lgseeds.com	Phillips Seed Farms Hope, KS 785-949-2204 phillipsseed.com
Corteva AgriSciences Johnston, IA 800-233-7333 pioneer.com *maturity checks	MFA Incorporated Columbia, MO 573-874-5111 mfa-inc.com	Stratton Seed Stuttgart, AR 800-264-4433 strattonseed.com
GDM Seeds, Inc Gibson City, IL 217-784-8475	Midland Sylvester Seed Farm Ottawa, KS 800-819-7333 midlandgenetics.com	Willcross NeCo Seed Farms, Inc. Garden City, MO 816-773-8207 necoseed.com

Dave Regher Farm, Riley, Riley County: Bill Schapaugh, agronomist

Rainfall: April May June July Aug. Sept. Total
 1.7 14.1 7.1 4.3 10.2 4.6 45.1

Planted into damp soils with standing rye residue. Germination was sub optimal, plant development was slowed due to soil-applied herbicides. Plants returned to normal development over the following 2 weeks. Over the growing season, the field received 25 inches of rainfall. Early rains kept conditions fairly wet until July. Near R1-R3, Dicamba drifted onto the field and caused noticeable cupping throughout field. Plants near the southern edge were heavily affected and the earliest maturities remained stunted for the rest of the season.

Planted 6/4/2019 at 155,000 seeds/ft; Harvested 10/24/2019; 12 ft. by 4-row plot; Pesticides: 6 oz/ac Zidua Pro + 0.5 lb/ac paraquat; 1.5 oz/ac Zidua SC + 12 oz/ac Outlook.

Table 3. Riley, Riley County Dryland Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	66.4	--	--	--	--	108	--	--	9/30	1.0	33
ASGROW	AG41x8	RR2X	64.4	--	--	--	--	105	--	--	10/11	1.0	38
CHECK	19MG3.9	RR	55.5	--	--	--	--	91	--	--	9/27	1.0	33
GOLDEN HARVEST	3728	RR2X	58.2	--	--	--	--	95	--	--	9/29	1.0	32
GOLDEN HARVEST	S37-A4X	RRX	61.8	--	--	--	--	101	--	--	10/1	1.0	33
GOLDEN HARVEST	S39-G2X	RRX	63.0	--	--	--	--	103	--	--	10/7	1.0	35
GOLDEN HARVEST	S42-B9XS	RRX	65.2	--	--	--	--	106	--	--	10/15	1.0	34
GOLDEN HARVEST	S46-W2X	RRX	64.6	--	--	--	--	105	--	--	10/13	1.0	34
KANSAS AES	K15-1283	C, STS	58.4	--	--	--	--	95	--	--	10/14	1.0	30
KANSAS AES	K4117Nsgr	RR1, STS	57.4	--	--	--	--	94	--	--	10/5	1.0	27
KANSAS AES	KS4117Ns	C, STS	62.0	35.4	65.1	48.7	54.2	101	104	95	10/4	1.0	25
MIDLAND	3537NX	RR2X	56.9	36.5	74.8	46.7	56.1	93	107	109	9/27	1.0	30
MIDLAND	3779NXS	RR2X/STS	59.8	36.7	--	48.3	--	98	108	--	10/6	1.0	34
MIDLAND	3930NXS	RR2X	67.4	--	--	--	--	110	--	--	10/8	1.0	33
PHILLIPS	379 NR2XSE	RR2X	54.4	--	--	--	--	89	--	--	10/7	1.0	32
PHILLIPS	387 NR2X	RR2X	63.2	39.0	--	51.1	--	103	114	--	10/7	1.0	35
PHILLIPS	408 NR2XS	RR2X	63.8	30.7	--	47.2	--	104	90	--	10/13	1.0	32
PHILLIPS	427 NR2XS	RR2X	61.0	--	--	--	--	99	--	--	10/14	1.0	38
	AVERAGES		61.3	34.1	68.5								
	CV (%)		5.7	8.2	3.7								
	LSD (0.10)		3.9	3.3	3.0								

Values in bold are in the upper LSD group.

J.D. Hanna, Erma Harden Farm, Kiro, Shawnee County; Eric Adee, agronomist

Season started cool, then wet, with a very dry period in the middle of July; and very wet for most of the remainder of the growing season. SDS symptoms were not seen until August 15, but severity increased rapidly.

April May June July Aug. Sept. Total
 Rainfall: 3.9 11.1 4.5 4.8 9.1 2.5 37.8

Planted 10/6/2019 at 100,000 seeds/ft; Harvested 10/17/2019; 10 ft. by 4-row plot; Pesticides: 6 oz/a Authority Maxx + 1.5 pt/ac Dual II Mag + 24 oz/ac RR Wmax + Speedway (H₂O conditioner for RR); 0.3 oz/ac First Rate + 4 oz/ac Pursuit + 8 oz/ac Select Max + 2.75 oz/ac Zidua + Array (drift control).

Table 4. Kiro, Shawnee County Dryland Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	82.9	--	--	--	--	100	--	--	10/6	3.0	43
ASGROW	AG41x8	RR2X	83.7	--	--	--	--	101	--	--	10/12	2.5	51
CHECK	19MG3.1	RR	73.9	--	--	--	--	89	--	--	9/29	3.0	39
CHECK	19MG3.9	RR	66.1	--	--	--	--	80	--	110	10/4	1.8	42
GOLDEN HARVEST	3728	RR2X	74.3	--	--	--	--	90	--	--	10/6	1.3	41
GOLDEN HARVEST	S37-A4X	RRX	75.8	--	--	--	--	91	--	--	10/5	1.5	41
GOLDEN HARVEST	S39-G2X	RRX	79.3	--	--	--	--	96	--	--	10/9	1.8	47
GOLDEN HARVEST	S42-B9XS	RRX	88.8	--	--	--	--	107	--	--	10/11	2.5	44
GOLDEN HARVEST	S46-W2X	RRX	89.8	--	--	--	--	108	--	--	10/12	2.3	43
KANSAS AES	K15-1283	C, STS	93.2	--	--	--	--	112	--	--	10/11	4.0	41
KANSAS AES	K4117Nsgr	RR1, STS	87.6	--	--	--	--	106	--	--	10/9	1.3	38
KANSAS AES	KS4117Ns	C, STS	86.7	58.2	87.1	72.5	77.3	104	103	105	10/7	1.0	38
MIDLAND	3779NXS	RR2X/STS	82.9	62.5	--	72.7	--	100	108	--	10/9	2.5	46
MIDLAND	3930NXS	RR2X	89.5	--	--	--	--	108	--	--	10/11	3.0	45
MIDLAND	4140NXS	RR2X	91.8	--	--	--	--	111	--	--	10/11	3.8	44
MIDLAND	4328NX	RR2X	81.8	--	82.3	--	--	98	--	99	10/10	3.0	46
	AVERAGES		83.0	57.7	82.8								
	CV (%)		6.0	11.3	5.5								
	LSD (0.10)		5.8	7.7	5.4								

Values in bold are in the upper LSD group.

Kansas River Valley Experiment Field, Topeka, Shawnee County; Eric Adee, agronomist

Season started cool, then wet, with a very dry period in the middle of July; and very wet for most of the remainder of the growing season. SDS symptoms were not seen until August 15, but severity increased rapidly.

	April	May	June	July	Aug.	Sept.	Total
Rainfall:	2.9	11.1	6.7	3.0	9.0	1.9	37.2
Irrigation:				1.2			1.24

Planted 5/15/2019 at 140,000 seeds/ft; Harvested 10/16/2019; 10 ft. by 4-row plot; Pesticides: 6 oz/ac Authority Maxx + 1.5 pt/ac Dual II Mag + 24 oz/ac RR Wmax + Speedway (h2o conditioner for RR); 0.3 oz/ac First Rate + 4 oz/ac Pursuit +8 oz/ac Select Max + 2.75 oz/ ac Zidua + Array (drift control).

Table 5. Topeka, Shawnee County Irrigated Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	67.7	--	--	--	--	108	--	--	10/2	2.0	36
ASGROW	AG41x8	RR2X	66.2	--	--	--	--	106	--	--	9/29	1.5	35
CHECK	19MG3.1	RR	63.4	--	--	--	--	102	--	--	9/29	1.5	32
CHECK	19MG3.9	RR	59.4	--	--	--	--	95	--	--	9/29	1.8	36
GOLDEN HARVEST	3934	RR2X	59.2	--	--	--	--	95	--	--	10/4	2.0	41
GOLDEN HARVEST	4628	RR2X	64.4	--	--	--	--	103	--	--	10/7	1.8	38
KANSAS AES	K15-1283	C, STS	66.9	--	--	--	--	107	--	--	10/7	2.5	35
KANSAS AES	K4117Nsg	RR1, STS	62.2	--	--	--	--	100	--	--	9/29	1.8	33
KANSAS AES	KS4117Ns	C, STS	65.1	--	68.9	--	--	104	--	98	10/1	1.3	31
MIDLAND	3930NXS	RR2X	74.6	--	--	--	--	119	--	--	10/3	1.5	42
MIDLAND	4140NXS	RR2X	62.3	--	--	--	--	100	--	--	10/9	2.3	39
MIDLAND	4328NX	RR2X	63.9	57.9	65.8	60.9	62.5	102	103	93	10/8	1.5	40
MIDLAND	4488NXS	RR2X/STS	68.6	58.1	--	63.3	--	110	103	--	10/11	3.0	40
MISSOURI	S13-2743C	C	47.5	--	--	--	--	76	--	--	10/2	2.5	37
MISSOURI	S13-3851C	C	65.7	50.7	--	58.2	--	105	90	--	10/7	2.3	39
MISSOURI	S14-15138R	RR/STS	65.7	47.6	--	56.7	--	105	85	--	10/12	2.5	36
MISSOURI	S14-15146R	RR/STS	55.5	--	--	--	--	89	--	--	10/4	2.8	36
MORSOY	MS 3907 RXT	RR2X	64.4	--	77.7	--	--	103	--	110	10/4	1.8	36
MORSOY	MS 4117 RXT	RR2X	55.9	--	71.7	--	--	90	--	102	10/5	2.0	37
MORSOY	MS 4426 RXT	RR2X	73.8	--	72.7	--	--	118	--	103	10/12	3.8	39
MORSOY	MS 4706 RXT	RR2X	69.2	--	--	--	--	111	--	--	10/12	4.0	46
MORSOY	MS 4846 RXT	RR2X	65.0	--	--	--	--	104	--	--	10/12	2.8	40
PHILLIPS	379 NR2XSE	RR2X	62.1	--	--	--	--	100	--	--	10/2	1.3	38
PHILLIPS	387 NR2X	RR2X	68.4	--	--	--	--	110	--	--	10/9	2.0	41
PHILLIPS	387 NR2X	RR2X	59.8	--	--	--	--	96	--	--	10/1	2.3	41
PHILLIPS	408 NR2XS	RR2X	59.8	--	--	--	--	96	--	--	10/5	1.8	35
PHILLIPS	427 NR2XS	RR2X	50.1	--	--	--	--	80	--	--	10/4	1.8	40
WILLCROSS	WX1038NGT/LL	RR	69.0	--	--	--	--	110	--	--	10/9	3.0	41
WILLCROSS	WX1046NSGT/LLRR		39.8	--	--	--	--	64	--	--	10/1	2.8	40
WILLCROSS	WX1441NLL	LL	52.9	--	--	--	--	85	--	--	10/1	1.0	38
WILLCROSS	WXE8038NS	RR/LL	61.0	--	--	--	--	98	--	--	9/28	1.0	33
WILLCROSS	WXE8043NS	RR/LL	76.3	--	--	--	--	122	--	--	10/7	2.0	38
WILLCROSS	WXX3386N	RR2X	67.4	--	73.7	--	--	108	--	105	9/30	1.5	40
	AVERAGES		62.5	56.3	70.4								
	CV (%)		8.2	8.7	8.9								
	LSD (0.10)		6.0	5.7	7.4								

Values in bold are in the upper LSD group.

East Central Kansas Experiment Field, Ottawa, Franklin County; Eric Adee, agronomist; Jim Kimball, research tech

Extremely wet growing season with considerable runoff.

April May June July Aug. Sept. Total

Rainfall: 6.6 13.5 10.5 3.5 9.0 5.3 56.1

Planted 6/3/2019 at 140,000 seeds/ft; Harvested 11/2/2019; 26 ft. by 4-row plot; Pesticides: 7 oz/ac Authority Maxx + 1.5 pt/ac Dual II Mag.

Table 6. Ottawa, Franklin County Dryland Soybean Performance Test, Maturity Groups III-IV, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	76.0	--	--	--	--	104	--	--	9/30	1.0	35
ASGROW	AG41x8	RR2X	67.0	--	--	--	--	92	--	--	10/6	1.5	39
CHECK	19MG3.1	RR	72.5	--	--	--	--	99	--	--	9/22	1.3	31
CHECK	19MG3.9	RR	72.4	--	--	--	--	99	--	--	9/28	1.3	35
DONMARIO	DM EXP (19E419)		73.7	--	--	--	--	101	--	--	10/2	1.0	35
GOLDEN HARVEST	3934	RR2X	71.0	--	--	--	--	97	--	--	10/1	2.0	41
GOLDEN HARVEST	S42-B9XS	RRX	78.3	--	--	--	--	107	--	--	10/6	1.0	37
GOLDEN HARVEST	S43-V3X	RRX	73.4	--	--	--	--	101	--	--	10/4	1.5	40
GOLDEN HARVEST	S46-W2X	RRX	70.0	--	--	--	--	96	--	--	9/29	1.3	32
INTEGRA	4149NS		74.5	--	--	--	--	102	--	--	10/14	1.0	42
INTEGRA	S3809N		73.4	--	--	--	--	100	--	--	10/2	1.3	38
KANSAS AES	K15-1283	C, STS	71.3	--	--	--	--	98	--	--	10/5	1.3	33
KANSAS AES	K4117Nsgr	RR1, STS	75.1	--	--	--	--	103	--	--	10/2	1.0	31
KANSAS AES	KS4117Ns	C, STS	74.9	52.2	74.1	63.6	67.1	103	116	103	10/2	1.0	31
MIDLAND	4140NXS	RR2X	70.7	--	--	--	--	97	--	--	10/10	1.5	37
MIDLAND	4328NX	RR2X	73.9	42.6	66.3	58.3	60.9	101	95	92	10/6	1.3	38
MIDLAND	4488NXS	RR2X/STS	76.3	54.0	--	65.1	--	105	120	--	10/14	2.0	41
MIDLAND	4677NXS	RR2X/STS	66.1	52.4	73.8	59.3	64.1	91	116	103	10/14	1.8	45
MISSOURI	S13-2743C	C	78.0	--	69.1	--	--	107	--	96	10/6	1.0	37
MISSOURI	S13-3851C	C	71.5	51.4	71.5	61.5	64.8	98	114	100	10/7	1.3	36
MISSOURI	S14-15146R	RR/STS	69.4	--	--	--	--	95	--	--	10/7	1.0	34
MORSOY	MS 3907 RXT	RR2X	74.9	--	75.5	--	--	103	--	105	10/1	1.5	37
MORSOY	MS 4117 RXT	RR2X	74.1	--	79.5	--	76.8	102	--	111	10/5	1.0	36
MORSOY	MS 4426 RXT	RR2X	77.6	--	72.8	--	75.2	106	--	101	10/12	1.8	39
PHILLIPS	387 NR2X	RR2X	70.5	--	--	--	--	97	--	--	10/10	1.8	38
PHILLIPS	408 NR2XS	RR2X	76.3	--	--	--	--	105	--	--	10/6	1.3	34
PHILLIPS	427 NR2XS	RR2X	69.6	--	--	--	--	95	--	--	10/8	1.0	39
PHILLIPS	430NR2XSE	RR2X	75.7	--	--	--	--	104	--	--	10/9	1.3	40
WILLCROSS	WX1046NSGT/LLRR		68.8	--	--	--	--	94	--	--	10/12	1.5	41
	AVERAGES		73.0	45.0	71.8								
	CV (%)		5.5	11.9	8.2								
	LSD (0.10)		4.6	6.2	6.9								

Values in bold are in the upper LSD group.

East Central Kansas Experiment Field, Ottawa, Franklin County; Eric Adee, agronomist; Jim Kimball, research tech

Extremely wet growing season with considerable runoff.

April May June July Aug. Sept. Total

Rainfall: 6.6 13.5 10.5 3.5 9.0 5.3 56.1

Planted 6/3/2019 at 140,000 seeds/ft; Harvested 10/22/2019; 26 ft. by 4-row plot; Pesticides: 7 oz/ac Authority Maxx + 1.5 pt/ac Dual II Mag.

Table 7. Ottawa, Franklin County Dryland Soybean Performance Test, Maturity Groups IV-V, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG48x9	RR2X	71.9	--	--	--	--	104	--	--	10/14	1.0	41
CHECK	19MG4.8	RR	72.0	--	--	--	--	104	--	--	10/13	1.3	39
INTEGRA	S4920N		70.3	--	--	--	--	102	--	--	10/8	1.0	35
KANSAS AES	K13-1830	C	69.4	59.7	--	64.5	--	100	107	--	10/15	1.5	34
KANSAS AES	K15-1809	C, STS	75.4	61.2	--	68.3	--	109	110	--	10/21	1.0	32
KANSAS AES	K15-1855	C, STS	70.0	67.4	--	68.7	--	101	121	--	10/20	1.0	35
KANSAS AES	K15-1874	C, STS	67.0	54.3	--	60.6	--	97	98	--	10/12	1.0	33
KANSAS AES	KS4919N	C	64.6	57.9	--	61.3	--	94	104	--	10/18	2.3	37
KANSAS AES	KS5004N	C	60.8	51.0	--	55.9	--	88	92	--	10/12	1.5	38
KANSAS AES	KS5518	C	64.5	57.3	--	60.9	--	93	103	--	10/19	3.0	38
MISSOURI	S14-15138R	RR/STS	69.2	46.7	--	58.0	--	100	84	--	10/13	1.0	37
MORSOY	MS 4706 RXT	RR2X	63.7	--	72.0	--	63.6	92	--	102	10/15	1.5	48
MORSOY	MS 4846 RXT	RR2X	72.0	--	--	--	--	104	--	--	10/12	1.0	38
WILLCROSS	WX1748NLL	LL	70.7	--	--	--	--	102	--	--	10/10	1.0	38
WILLCROSS	WX9447NC		69.0	--	--	--	--	100	--	--	10/9	1.5	37
WILLCROSS	WXE8048NS	RR/LL	68.2	--	--	--	--	99	--	--	10/10	1.0	38
WILLCROSS	WXR7878NS	RR	71.6	--	--	--	--	104	--	--	10/15	1.3	43
WILLCROSS	WXX3487NS	RR2X	73.6	58.8	--	66.2	--	107	106	--	10/15	1.3	45
	AVERAGES		69.1	55.6	70.4								
	CV (%)		4.4	9.3	8.8								
	LSD (0.10)		3.6	6.1	7.4								

Values in bold are in the upper LSD group.

South Central Kansas Experiment Field, Hutchinson, Reno County; Jane Lingenfelter, agronomist; Keith Thompson, tech

Planted into wet conditions that turned dry during July.

	April	May	June	July	Aug.	Sept.	Total
Rainfall:	1.2	12.2	4.5	0.4	6.0	0.3	26.4
Irrigation:			4.5	6.0			10.5

Planted 6/7/2019 at 140,000 seeds/ft; Harvested 10/29/2019; 11 ft. by 2-row plot; Pesticides: Zidua Pro.

Table 8. Hutchinson, Reno County Irrigated Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	63.2	--	--	--	--	107	--	--	--	1.0	36
ASGROW	AG41x8	RR2X	60.6	--	--	--	--	102	--	--	--	1.0	40
CHECK	19MG3.1	RR	53.2	--	--	--	--	90	--	--	--	1.0	33
CHECK	19MG3.9	RR	59.4	--	--	--	--	100	--	--	--	1.0	35
DONMARIO	DM EXP (19E419)		57.1	--	--	--	--	96	--	--	--	1.0	34
KANSAS AES	K4117Nsgr	RR1, STS	59.3	--	--	--	--	100	--	--	--	1.0	30
KANSAS AES	KS4117Ns	C, STS	60.8	--	--	--	--	102	--	--	--	2.0	29
LG SEEDS	LGS3600RX 387	RR2X	58.4	--	--	--	--	98	--	--	--	1.0	34
PHILLIPS	NR2X	RR2X	62.9	--	--	--	--	106	--	--	--	1.0	34
PHILLIPS	408 NR2XS	RR2X	64.8	--	--	--	--	109	--	--	--	1.0	34
PHILLIPS	427 NR2XS	RR2X	57.0	--	--	--	--	96	--	--	--	1.0	39
PHILLIPS	430NR2XSE	RR2X	65.1	--	--	--	--	110	--	--	--	1.0	39
PHILLIPS	450NR2XSE	RR2X	58.9	--	--	--	--	99	--	--	--	1.0	39
PHILLIPS	456NR2XS	RR2X	58.2	--	--	--	--	98	--	--	--	1.0	41
PHILLIPS	478 NR2XSE	RR2X	54.0	--	--	--	--	91	--	--	--	1.0	42
	AVERAGES		59.3	--	--								
	CV (%)		5.5	--	--								
	LSD (0.10)		3.9	--	--								

Values in bold are in the upper LSD group.

Columbus, Cherokee County: Gretchen Sassenrath, agronomist; Lonnie Mengarelli, technician

Parsons Silt Loam

Planting went very well and emergence was good even though we had an extremely wet spring and early summer. Rain most of the summer. Plots did very well other than where water was standing in areas of poor drainage. Harvest was spotty, trying to harvest between rains.

April May June July Aug. Sept. Total
 Rainfall: 6.0 16.0 7.2 3.2 14.6 8.0 59.5

Planted 6/27/2019 at 100,000 seeds/ft; Harvested 11/18/2019; 14 ft. by 4-row plot; Pesticides: 2 pt/ac gramoxone; 2 pt/ac Dual II Mag; 1.5 lb/ac metribuzin; 6 oz/ac Authority XL.

Table 9. Columbus, Cherokee County Dryland Soybean Performance Test, Maturity Groups III-IV, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	55.5	--	--	--	--	108	--	--	10/14	--	31
ASGROW	AG41x8	RR2X	52.6	--	--	--	--	102	--	--	10/18	--	34
CHECK	19MG3.1	RR	48.4	--	--	--	--	94	--	--	10/14	--	27
CHECK	19MG3.9	RR	48.1	--	--	--	--	93	--	--	10/14	--	31
DONMARIO	DM EXP (19E419)		46.7	--	--	--	--	91	--	--	10/18	--	27
GOLDEN HARVEST	S45-Z5XS	RRX	59.0	--	--	--	--	114	--	--	10/19	--	30
GOLDEN HARVEST	S46-W2X	RRX	55.1	--	--	--	--	107	--	--	10/18	--	34
KANSAS AES	K4117Nsgr	RR1, STS	51.2	--	--	--	--	99	--	--	10/16	--	26
KANSAS AES	KS4117Ns	C, STS	49.9	--	--	--	--	97	--	--	10/16	--	26
MIDLAND	4677NXS	RR2X/STS	45.9	58.7	51.7	52.3	52.1	89	115	111	10/23	--	33
MORSOY	MS 3907 RXT	RR2X	50.1	--	--	--	--	97	--	--	10/16	--	33
MORSOY	MS 4117 RXT	RR2X	53.7	--	--	--	--	104	--	--	10/18	--	30
MORSOY	MS 4426 RXT	RR2X	55.9	--	53.0	--	--	108	--	113	10/20	--	36
PHILLIPS	427 NR2XS	RR2X	50.7	--	--	--	--	98	--	--	10/18	--	37
PHILLIPS	430NR2XSE	RR2X	49.8	--	--	--	--	97	--	--	10/18	--	31
PHILLIPS	456NR2XS	RR2X	52.6	--	--	--	--	102	--	--	10/18	--	36
PHILLIPS	478 NR2XSE	RR2X	55.2	--	--	--	--	107	--	--	10/22	--	37
STRATTON	Go Soy 40GL18	LL/GT27	52.0	--	--	--	--	101	--	--	10/17	--	34
STRATTON	Go Soy 43C17S	STS	50.7	47.3	--	49.0	--	98	93	--	10/15	--	25
STRATTON	Go Soy 44GL18	LL/GT27	51.2	--	--	--	--	99	--	--	10/16	--	32
WILLCROSS	WX1046NSGT	LLRR	49.0	--	--	--	--	95	--	--	10/18	--	34
	AVERAGES		51.6	50.9	46.8								
	CV (%)		6.7	9.6	6.8								
	LSD (0.10)		4.1	5.8	3.5								

Values in bold are in the upper LSD group.

Columbus, Cherokee County: Gretchen Sassenrath, agronomist; Lonnie Mengarelli, technician

Parsons Silt Loam

Planting went very well and emergence was good even though we had an extremely wet spring and early summer. Rain most of the summer. Plots did very well other than where water was standing in areas of poor drainage. Harvest was spotty, trying to harvest between rains.

April May June July Aug. Sept. Total
 Rainfall: 6.0 16.0 7.2 3.2 14.6 8.0 59.5

Planted 6/27/2019 at 100,000 seeds/ft; Harvested 11/18/2019; 14 ft. by 4-row plot; Pesticides: 2 pt/ac gramoxone; 2 pt/ac Dual II Mag; 1.5 lb/ac metribuzin; 6 oz/ac Authority XL.

Table 10. Columbus, Cherokee County Dryland Soybean Performance Test, Maturity Groups IV-V, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG48x9		53.1	--	--	--	--	103	--	--	10/23	--	35
CHECK	19MG4.8	RR	51.9	--	--	--	--	101	--	--	10/22	--	35
GOLDEN HARVEST	4741	RR2X	52.2	--	--	--	--	102	--	--	10/21	--	32
GOLDEN HARVEST	4823	RR2X,STS	58.6	--	--	--	--	114	--	--	10/18	--	36
GOLDEN HARVEST	S51-R3X	RRX	57.2	--	--	--	--	112	--	--	10/21	--	30
KANSAS AES	K13-1830	C	52.0	60.1	47.7	56.1	53.3	101	111	96	10/20	--	35
KANSAS AES	K15-1809	C, STS	53.3	55.0	--	54.1	--	104	102	--	10/22	--	31
KANSAS AES	K15-1855	C, STS	52.5	61.0	--	56.7	--	102	113	--	10/23	--	37
KANSAS AES	K15-1874	C, STS	51.4	50.6	--	51.0	--	100	94	--	10/18	--	35
KANSAS AES	KS4919N	C	49.9	58.1	--	54.0	--	97	108	--	10/22	--	36
KANSAS AES	KS5004N	C	45.9	53.2	43.7	49.5	47.6	89	98	88	10/22	--	38
KANSAS AES	KS5518	C	49.2	57.9	52.9	53.5	53.3	96	107	106	10/24	--	37
LG SEEDS	LGS4845RX	RR2X	55.7	--	--	--	--	109	--	--	10/22	--	33
MIDLAND	4956NXS	RR2X	41.9	55.9	51.2	48.9	49.7	82	104	103	10/24	--	36
MIDLAND	5020NXS	RR2X	45.5	--	--	--	--	89	--	--	10/21	--	37
MORSOY	MS 4706 RXT	RR2X	48.4	--	50.3	--	--	94	--	101	10/22	--	40
MORSOY	MS 4846 RXT	RR2X	56.5	--	--	--	--	110	--	--	10/22	--	35
PHILLIPS	478 NR2XSE	RR2X	53.4	--	--	--	--	104	--	--	10/24	--	39
PHILLIPS	500NR2XS	RR2X	55.4	--	--	--	--	108	--	--	10/21	--	41
PHILLIPS	506NR2XS	RR2X	53.4	--	--	--	--	104	--	--	10/22	--	39
STRATTON	Go Soy 471E19S	Enlist, STS	50.2	--	--	--	--	98	--	--	10/27	--	41
STRATTON	Go Soy 512E18	Enlist	50.5	--	--	--	--	98	--	--	10/22	--	35
STRATTON	Go Soy 56C16		50.4	--	--	--	--	98	--	--	10/24	--	40
WILLCROSS	WX1748NLL	LL	50.0	--	--	--	--	97	--	--	10/17	--	35
WILLCROSS	WX9447NC		44.8	--	--	--	--	87	--	--	10/18	--	36
WILLCROSS	WXE8048NS	RR/LL	51.5	--	--	--	--	100	--	--	10/18	--	34
WILLCROSS	WXR7878NS	RR	52.1	--	--	--	--	102	--	--	10/20	--	37
WILLCROSS	WXX3487NS	RR2X	49.8	--	48.8	--	--	97	--	98	10/22	--	35
	AVERAGES		51.3	54.0	49.7								
	CV (%)		6.6	10.7	6.0								
	LSD (0.10)		4.0	6.8	3.5								

Values in bold are in the upper LSD group.

Joe Harris Farm, Erie, Neosho County; Gretchen Sassenrath, agronomist; Lonnie Mengarelli, research technician

Planting went very well and emergence was good even though we had an extremely wet spring and early summer. Rain most of the summer. Plots did very well other than where water was standing in areas of poor drainage. Harvest was spotty trying to harvest between rains.

April May June July Aug. Sept. Total
 Rainfall: 3.3 17.0 5.3 5.5 6.4 8.3 58.8

Planted 6/26/2019 at 100,000 seeds/ft; Harvested 11/18/2019; 10 ft. by 4-row plot; Pesticides: 2 pt/ac gramoxone; 2 pt/ac Dual II Mag; 1.5 lb/ac metrobuzin; 6 oz/ac Authority XL.

Table 11. Erie, Neosho County Dryland Soybean Performance Test, Maturity Groups III-IV, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	41.3	--	--	--	--	80	--	--	10/4	--	28
ASGROW	AG41x8	RR2X	52.9	--	--	--	--	102	--	--	10/15	--	36
CHECK	19MG3.9	RR	40.4	--	--	--	--	78	--	--	10/7	--	29
DONMARIO	DM EXP (19E419)		56.2	--	--	--	--	108	--	--	10/15	--	31
GOLDEN HARVEST	4531	RR2X,STS	53.8	--	--	--	--	104	--	--	10/16	--	32
GOLDEN HARVEST	4628	RR2X	55.1	--	--	--	--	106	--	--	10/17	--	33
KANSAS AES	K4117Nsgr	RR1, STS	48.6	--	--	--	--	94	--	--	10/9	--	25
KANSAS AES	KS4117Ns	C, STS	52.1	61.8	--	56.9	--	101	106	--	10/11	--	28
MIDLAND	4677NXS	RR2X/STS	58.0	59.8	49.4	58.9	55.7	112	102	108	10/24	--	37
MISSOURI	S13-2743C	C	52.5	--	--	--	--	101	--	--	10/12	--	32
MISSOURI	S13-3851C	C	52.2	--	--	--	--	101	--	--	10/16	--	28
MISSOURI	S14-15146R	RR/STS	47.7	--	--	--	--	92	--	--	10/12	--	33
MORSOY	MS 3907 RXT	RR2X	48.9	--	--	--	--	94	--	--	10/8	--	29
MORSOY	MS 4117 RXT	RR2X	54.8	--	--	--	--	106	--	--	10/14	--	27
MORSOY	MS 4426 RXT	RR2X	61.7	--	54.1	--	--	119	--	118	10/20	--	38
PHILLIPS	387 NR2X	RR2X	48.1	--	--	--	--	93	--	--	10/7	--	29
PHILLIPS	408 NR2XS	RR2X	49.5	--	--	--	--	96	--	--	10/16	--	29
PHILLIPS	427 NR2XS	RR2X	53.1	--	--	--	--	102	--	--	10/16	--	36
PHILLIPS	430NR2XSE	RR2X	51.2	--	--	--	--	99	--	--	10/17	--	35
PHILLIPS	450NR2XSE	RR2X	48.1	--	--	--	--	93	--	--	10/18	--	34
PHILLIPS	456NR2XS	RR2X	52.3	64.5	--	58.4	--	101	110	--	10/19	--	31
PHILLIPS	478 NR2XSE	RR2X	57.6	--	--	--	--	111	--	--	10/24	--	37
STRATTON	Go Soy 40GL18	LL/GT27	55.7	--	--	--	--	108	--	--	10/17	--	35
STRATTON	Go Soy 43C17S	STS	48.2	57.3	--	52.7	--	93	98	--	10/12	--	29
STRATTON	Go Soy 44GL18	LL/GT27	54.4	--	--	--	--	105	--	--	10/15	--	33
WILLCROSS	WX1046NSGT/LL	RR/LL	53.1	--	--	--	--	102	--	--	10/19	--	32
	AVERAGES		51.8	58.5	45.8								
	CV (%)		7.4	7.5	12.7								
	LSD (0.10)		4.5	5.2	6.5								

Values in bold are in the upper LSD group.

Joe Harris Farm, Erie, Neosho County; Gretchen Sassenrath, agronomist; Lonnie Mengarelli, research technician

Planting went very well and emergence was good even though we had an extremely wet spring and early summer. Rain most of the summer. Plots did very well other than where water was standing in areas of poor drainage. Harvest was spotty trying to harvest between rains.

April May June July Aug. Sept. Total
 Rainfall: 3.3 17.0 5.3 5.5 6.4 8.3 58.8

Planted 6/26/2019 at 100,000 seeds/ft; Harvested 11/18/2019; 10 ft. by 4-row plot; Pesticides: 2 pt/ac gramoxone; 2 pt/ac Dual II Mag; 1.5 lb/ac metribuzin; 6 oz/ac Authority XL.

Table 12. Erie, Neosho County Dryland Soybean Performance Test, Maturity Groups IV-V, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG48x9	RR2X	53.2	--	--	--	--	102	--	--	10/22	--	35
CHECK	19MG4.8	RR	51.1	--	--	--	--	98	--	--	10/18	--	32
KANSAS AES	K13-1830	C	51.2	63.1	39.1	57.2	51.2	99	102	90	10/21	--	30
KANSAS AES	K15-1809	C, STS	57.6	70.2	--	63.9	--	111	113	--	10/27	--	25
KANSAS AES	K15-1855	C, STS	51.2	58.9	--	55.0	--	99	95	--	10/19	--	29
KANSAS AES	K15-1874	C, STS	49.9	61.2	--	55.6	--	96	98	--	10/21	--	30
KANSAS AES	KS4919N	C	51.0	62.4	--	56.7	--	98	100	--	10/19	--	32
KANSAS AES	KS5004N	C	48.6	67.2	43.2	57.9	53.0	94	108	100	10/17	--	31
KANSAS AES	KS5518	C	51.4	54.0	36.5	52.7	47.3	99	87	84	10/21	--	30
MIDLAND	4956NXS	RR2X	54.4	63.6	48.9	59.0	55.6	105	102	113	10/24	--	35
MIDLAND	5020NXS	RR2X	57.4	--	--	--	--	111	--	--	10/23	--	36
MISSOURI	S14-15138R	RR/STS	48.5	--	--	--	--	93	--	--	10/20	--	32
MORSOY	MS 4706 RXT	RR2X	53.9	--	54.5	--	--	104	--	126	10/27	--	40
MORSOY	MS 4846 RXT	RR2X	51.4	--	--	--	--	99	--	--	10/20	--	31
STRATTON	Go Soy 471E19S	Enlist, STS	51.8	--	--	--	--	100	--	--	10/29	--	38
STRATTON	Go Soy 512E18	Enlist	50.9	--	--	--	--	98	--	--	10/18	--	33
STRATTON	Go Soy 56C16		51.2	--	--	--	--	99	--	--	10/27	--	34
WILLCROSS	WX1748NLL	LL	50.2	--	--	--	--	97	--	--	10/17	--	36
WILLCROSS	WX9447NC		46.5	--	--	--	--	90	--	--	10/17	--	31
WILLCROSS	WXE8048NS	RR/LL	51.8	--	--	--	--	100	--	--	10/19	--	31
WILLCROSS	WXR7878NS	RR	53.2	--	--	--	--	102	--	--	10/22	--	34
WILLCROSS	WXX3487NS	RR2X	56.0	--	--	--	--	108	--	--	10/24	--	37
	AVERAGES		51.9	62.2	43.3								
	CV (%)		8.0	7.6	11.9								
	LSD (0.10)		4.9	5.6	6.1								

Values in bold are in the upper LSD group.

North Central Experiment Field, Scandia, Republic County; Andrew Esser, agronomist

Planted into sufficient moisture. Good growing conditions throughout entire season.

	April	May	June	July	Aug.	Sept.	Total
Rainfall:	0.6	7.1	5.6	3.1	4.7	1.8	25.5
Irrigation:		8.9	6.8	1.3	1.3	1.3	19.49

Planted 6/7/2019 at 167,000 seeds/ft; Harvested 10/23/2019; 26 ft. by 2-row plot; Pesticides: 0.75 pt/ac dicamba + 0.75 pt/ac 2,4-D; 1 qt/ac Glyphosate + 3.75 oz/ac Fierce; .6 oz/ac First Rate + 10 oz/ac Clethodim.

Table 13. Scandia, Republic County Irrigated Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	66.1	--	--	--	--	104	--	--	10/6	1.0	35
ASGROW	AG41x8	RR2X	59.9	--	--	--	--	94	--	--	10/16	1.0	41
CHECK	19MG3.1	RR	61.7	--	--	--	--	97	--	--	9/29	1.0	33
CHECK	19MG3.9	RR	62.4	--	--	--	--	98	--	--	10/13	1.0	35
KANSAS AES	K15-1283	C, STS	64.4	--	--	--	--	101	--	--	10/13	1.0	31
KANSAS AES	K4117Nsg	RR1, STS	61.4	--	--	--	--	97	--	--	10/6	1.0	27
KANSAS AES	KS3618Ngr	RR1	57.8	52.7	59.1	55.3	56.5	91	106	93	10/6	1.0	30
KANSAS AES	KS4117Ns	C, STS	64.0	51.3	65.0	57.6	60.1	101	104	102	10/6	1.0	28
MIDLAND	3537NX	RR2X	67.7	51.3	68.5	59.5	62.5	107	104	108	10/13	1.0	33
MIDLAND	3779NXS	RR2X/STS	63.8	51.9	--	57.9	--	100	105	--	10/13	1.0	38
MIDLAND	3930NXS	RR2X	64.7	--	--	--	--	102	--	--	10/13	1.0	37
MIDLAND	4140NXS	RR2X	61.6	--	--	--	--	97	--	--	10/16	1.0	38
MISSOURI	S13-2743C	C	65.9	--	61.7	--	--	104	--	97	10/13	1.0	34
MISSOURI	S13-3851C	C	63.3	57.3	67.0	60.3	62.5	100	116	105	10/13	1.0	33
MISSOURI	S14-15138R	RR/STS	61.0	49.0	--	55.0	--	96	99	--	10/16	1.0	34
MISSOURI	S14-15146R	RR/STS	64.6	--	--	--	--	102	--	--	10/13	1.0	31
PHILLIPS	379 NR2XSE	RR2X	66.2	48.3	--	57.2	--	104	98	--	10/13	1.0	37
PHILLIPS	387 NR2X	RR2X	64.9	45.0	62.7	55.0	57.5	102	91	98	10/13	1.0	37
PHILLIPS	408 NR2XS	RR2X	66.5	48.7	68.0	57.6	61.1	105	98	107	10/16	1.0	35
	AVERAGES		63.5	49.5	63.7								
	CV (%)		4.7	12.4	8.3								
	LSD (0.10)		4.1	8.4	7.2								

Values in bold are in the upper LSD group.

Clayton Short Farm, Assaria, Saline County; Bill Schapaugh, agronomist

Ladysmith silty clay loam

Planted into rough, cloddy soil but with available moisture. Accumulated precipitation from planting until October was 8 inches above the 30-year average. Strong growth and timely rains provided optimum conditions through majority of summer. The field development was set back from Dicamba drift mid season, finishing out with good October weather allowed for a timely harvest.

	April	May	June	July	Aug.	Sept.	Total
Rainfall:	2.2	8.7	5.9	1.5	8.8	1.1	30.1

Planted 6/7/2019 at 155,000 seeds/ft; Harvested 10/23/2019; 12 ft. by 4-row plot; Pesticides: 3.3 oz/ac Zidua, 4 oz/ac Authority

Table 14. Assaria, Saline County Dryland Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	66.0	--	--	--	--	113	--	--	9/28	1.0	31
ASGROW	AG41x8	RR2X	63.7	--	--	--	--	109	--	--	9/29	1.0	34
CHECK	19MG3.1	RR	52.3	--	--	--	--	89	--	--	9/26	1.0	28
CHECK	19MG3.9	RR	63.2	--	--	--	--	108	--	--	9/27	1.0	30
DONMARIO	DM EXP (19E419)		56.3	--	--	--	--	96	--	--	9/29	1.0	28
KANSAS AES	K15-1283	C, STS	55.1	--	--	--	--	94	--	--	9/28	1.0	26
KANSAS AES	K4117Nsg	RR1, STS	57.8	--	--	--	--	98	--	--	9/28	1.0	24
KANSAS AES	KS3618Ngr	RR1	55.8	51.4	27.9	53.6	45.0	95	101	90	9/27	1.0	25
KANSAS AES	KS4117Ns	C, STS	60.6	54.3	30.9	57.4	48.6	103	107	99	9/28	1.0	26
PHILLIPS	387 NR2X	RR2X	61.5	--	30.4	--	--	105	--	98	9/28	1.0	32
PHILLIPS	408 NR2XS	RR2X	61.7	52.7	33.0	57.2	49.1	105	104	106	10/4	1.0	29
PHILLIPS	427 NR2XS	RR2X	59.3	--	--	--	--	101	--	--	10/4	1.0	38
PHILLIPS	427 NR2XS	RR2X	60.0	--	--	--	--	102	--	--	10/3	1.0	35
PHILLIPS	430NR2XSE	RR2X	61.3	--	--	--	--	104	--	--	10/5	1.0	35
PHILLIPS	456NR2XS	RR2X	56.5	53.5	33.1	55.0	47.7	96	105	106	10/6	2.0	42
PHILLIPS	478 NR2XSE	RR2X	47.8	54.4	32.0	51.1	44.7	82	107	103	10/9	1.3	37
	AVERAGES		58.7	50.8	31.1								
	CV (%)		4.8	8.4	7.1								
	LSD (0.10)		3.3	5.0	2.6								

Values in bold are in the upper LSD group.

Northwest Research-Extension Center, Colby, Thomas County; Rob Aiken, agronomist

April May June July Aug. Sept. Total
 Rainfall: 0.2 6.8 2.7 0.9 8.7 0.6 20.8
 Irrigation: 4.0 2.5 1.0 7.5

Planted 6/3/2019 at 180,000 seeds/ft; Harvested 10/09/2019; 20 ft. by 2-row plot; Pesticides: Authority Assist + Zidua.

Table 15. Colby, Thomas County Irrigated Soybean Performance Test, 2017-2019

BRAND	NAME	TRAIT	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			2019		
			2019	2018	2017	2-Yr. AVG.	3-Yr. AVG.	2019	2018	2017	Mat	Lodge score	Ht (in)
ASGROW	AG35x9	RR2X	67.7	--	--	--	--	117	--	--	--	2.5	32
ASGROW	AG41x8	RR2X	51.8	--	--	--	--	89	--	--	--	2.8	41
CHECK	19MG3.1	RR	63.0	--	--	--	--	108	--	--	--	1.8	33
CHECK	19MG3.9	RR	56.4	--	--	--	--	97	--	--	--	2.0	35
KANSAS AES	K4117Nsgr	RR1, STS	51.0	--	--	--	--	88	--	--	--	1.5	28
KANSAS AES	KS4117Ns	C, STS	59.4	69.0	73.2	64.2	67.2	102	107	97	--	1.0	27
LG SEEDS	C3550RX	RR2X	58.4	67.3	81.2	62.9	69.0	101	105	107	--	1.5	33
LG SEEDS	C3985RX	RR2X	62.4	--	--	--	--	107	--	--	--	1.8	34
LG SEEDS	C4227RX	RR2X/STS	55.9	--	--	--	--	96	--	--	--	2.3	36
LG SEEDS	CS3333RX	RR2X	57.0	--	--	--	--	98	--	--	--	1.5	32
LG SEEDS	LGS2989RX	RR2X	63.6	--	--	--	--	110	--	--	--	1.0	32
LG SEEDS	LGS3600RX	RR2X	52.7	66.8	--	--	--	91	104	--	--	1.5	34
LG SEEDS	LGS3777RX	RR2X/STS	55.8	--	--	--	--	96	--	--	--	2.5	36
	AVERAGES		58.1	64.3	75.8								
	CV (%)		6.6	7.7	5.9								
	LSD (0.10)		4.5	5.8	5.1								

Values in bold are in the upper LSD group.

Table 16. Yield as a Percentage of Test Average from 2019 Soybean Tests

BRAND/NAME	Kiro		Topeka	Ottawa		Columbus		McCune		Erie		Pittsburg	Belle-		Assaria	Colby	AVG
	Riley	dryland	irrigated	MG4	MG 5	MG4	MG 5	MG 4	MG 5	MG 4	MG 5	MG 5	Scandia	ville			
ASGROW																	
AG35x9	108	100	104	104	--	108	--	--	--	80	--	--	104	--	113	117	104
AG41x8	105	101	95	92	--	102	--	--	--	102	--	--	94	--	109	89	99
AG48x9	--	--	--	--	104	--	103	--	--	--	102	--	--	--	--	--	103
CHECK																	
19MG3.1	--	89	102	99	--	94	--	--	--	--	--	--	97	--	89	108	96
19MG3.9	91	80	95	99	--	93	--	--	--	78	--	--	98	--	108	97	94
19MG4.8	--	--	--	--	104	--	101	--	--	--	98	--	--	--	--	--	101
DONMARIO																	
DM EXP (19E419)	--	--	--	101	--	91	--	--	--	108	--	--	--	--	96	--	98
GOLDEN HARVEST																	
3728	95	90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	92
3934	--	--	95	97	--	--	--	--	--	--	--	--	--	--	--	--	96
4531	--	--	--	--	--	--	--	--	--	104	--	--	--	--	--	--	104
4628	--	--	103	--	--	--	--	--	--	106	--	--	--	--	--	--	105
4741	--	--	--	--	--	--	102	--	--	--	--	--	--	--	--	--	102
4823	--	--	--	--	--	--	114	--	--	--	--	--	--	--	--	--	114
S37-A4X	101	91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	96
S39-G2X	103	96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	99
S42-B9XS	106	107	--	107	--	--	--	--	--	--	--	--	--	--	--	--	107
S43-V3X	--	--	--	101	--	--	--	--	--	--	--	--	--	--	--	--	101
S45-Z5XS	--	--	--	--	--	114	--	--	--	--	--	--	--	--	--	--	114
S46-W2X	105	108	--	96	--	107	--	--	--	--	--	--	--	--	--	--	104
S51-R3X	--	--	--	--	--	--	112	--	--	--	--	--	--	--	--	--	112
INTEGRA																	
4149NS	--	--	--	102	--	--	--	--	--	--	--	--	--	--	--	--	102
S3809N	--	--	--	100	--	--	--	--	--	--	--	--	--	--	--	--	100
S4920N	--	--	--	--	102	--	--	--	--	--	--	--	--	--	--	--	102
KANSAS AES																	
K13-1830	--	--	--	--	100	--	101	--	--	--	99	--	--	--	--	--	100
K15-1283	95	112	107	98	--	--	--	--	--	--	--	--	101	--	94	--	101
K15-1809	--	--	--	--	109	--	104	--	--	--	111	--	--	--	--	--	108
K15-1855	--	--	--	--	101	--	102	--	--	--	99	--	--	--	--	--	101
K15-1874	--	--	--	--	97	--	100	--	--	--	96	--	--	--	--	--	98
K4117Nsgr	94	106	100	103	--	99	--	--	--	94	--	--	97	--	98	88	98
KS3618Ngr	--	--	--	--	--	--	--	--	--	--	--	--	91	--	95	--	93
KS4117Ns	101	104	104	103	--	97	--	--	--	101	--	--	101	--	103	102	102
KS4919N	--	--	--	--	94	--	97	--	--	--	98	--	--	--	--	--	96
KS5004N	--	--	--	--	88	--	89	--	--	--	94	--	--	--	--	--	90
KS5518	--	--	--	--	93	--	96	--	--	--	99	--	--	--	--	--	96

Table 16 continued. Yield as a Percentage of Test Average from 2019 Soybean Tests

BRAND/NAME	Kiro		Topeka	Ottawa		Columbus		McCune		Erie		Pittsburg	Belle-		Colby	AVG	
	Riley	dryland	irrigated	MG4	MG 5	MG4	MG 5	MG 4	MG 5	MG 4	MG 5	MG 5	Scandia	ville			Assaria
LG SEEDS																	
C3550RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	101	101
C3985RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	107	107
C4227RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	96	96
CS3333RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	98	98
LGS2989RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110	110
LGS3600RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	91	95
LGS3777RX	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	96	96
LGS4845RX	--	--	--	--	--	--	109	--	--	--	--	--	--	--	--	--	109
MIDLAND																	
3537NX	93	--	--	--	--	--	--	--	--	--	--	--	107	--	--	--	100
3779NXS	98	100	--	--	--	--	--	--	--	--	--	--	100	--	--	--	99
3930NXS	110	108	119	--	--	--	--	--	--	--	--	--	102	--	--	--	110
4140NXS	--	111	100	97	--	--	--	--	--	--	--	--	97	--	--	--	101
4328NX	--	98	102	101	--	--	--	--	--	--	--	--	--	--	--	--	101
4488NXS	--	--	110	105	--	--	--	--	--	--	--	--	--	--	--	--	107
4677NXS	--	--	--	91	--	89	--	--	--	112	--	--	--	--	--	--	97
4956NXS	--	--	--	--	--	--	82	--	--	--	105	--	--	--	--	--	93
5020NXS	--	--	--	--	--	--	89	--	--	--	111	--	--	--	--	--	100
MISSOURI																	
S13-2743C	--	--	76	107	--	--	--	--	--	101	--	--	104	--	--	--	97
S13-3851C	--	--	105	98	--	--	--	--	--	101	--	--	100	--	--	--	101
S14-15138R	--	--	105	--	100	--	--	--	--	--	93	--	96	--	--	--	99
S14-15146R	--	--	89	95	--	--	--	--	--	92	--	--	102	--	--	--	94
MORSOY																	
MS 3907 RXT	--	--	103	103	--	97	--	--	--	94	--	--	--	--	--	--	99
MS 4117 RXT	--	--	90	102	--	104	--	--	--	106	--	--	--	--	--	--	100
MS 4426 RXT	--	--	118	106	--	108	--	--	--	119	--	--	--	--	--	--	113
MS 4706 RXT	--	--	111	--	92	--	94	--	--	--	104	--	--	--	--	--	100
MS 4846 RXT	--	--	104	--	104	--	110	--	--	--	99	--	--	--	--	--	104
PHILLIPS																	
379 NR2XSE	89	--	100	--	--	--	--	--	--	--	--	--	101	--	--	--	97
387 NR2X	103	--	103	97	--	--	--	--	--	93	--	--	102	--	105	--	101
408 NR2XS	104	--	96	105	--	--	--	--	--	96	--	--	105	--	105	--	103
427 NR2XS	99	--	80	95	--	98	--	--	--	102	--	--	--	--	102	--	97
430NR2XSE	--	--	--	104	--	97	--	--	--	99	--	--	--	--	104	--	103
450NR2XSE	--	--	--	--	--	--	--	--	--	93	--	--	--	--	--	--	96
456NR2XS	--	--	--	--	--	102	--	--	--	101	--	--	--	--	96	--	99
478 NR2XSE	--	--	--	--	--	107	104	--	--	111	--	--	--	--	82	--	99
500NR2XS	--	--	--	--	--	--	108	--	--	--	--	--	--	--	--	--	108
506NR2XS	--	--	--	--	--	--	104	--	--	--	--	--	--	--	--	--	104

Table 16 continued. Yield as a Percentage of Test Average from 2019 Soybean Tests

BRAND/NAME	Kiro		Topeka irrigated	Ottawa		Columbus		McCune		Erie		Pittsburg		Belle-		Assaria	Colby	AVG
	Riley	dryland		MG4	MG 5	MG4	MG 5	MG 4	MG 5	MG 4	MG 5	MG 5	Scandia	ville				
STRATTON																		
Go Soy 40GL18	--	--	--	--	--	101	--	--	--	108	--	--	--	--	--	--	--	104
Go Soy 43C17S	--	--	--	--	--	98	--	--	--	93	--	--	--	--	--	--	--	96
Go Soy 44GL18	--	--	--	--	--	99	--	--	--	105	--	--	--	--	--	--	--	102
Go Soy 471E19S	--	--	--	--	--	--	98	--	--	--	100	--	--	--	--	--	--	99
Go Soy 512E18	--	--	--	--	--	--	98	--	--	--	98	--	--	--	--	--	--	98
Go Soy 56C16	--	--	--	--	--	--	98	--	--	--	99	--	--	--	--	--	--	98
WILLCROSS																		
WX1038NGT/LL	--	--	110	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110
WX1046NSGT/LL	--	--	64	94	--	95	--	--	--	102	--	--	--	--	--	--	--	89
WX1441NLL	--	--	85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	85
WX1748NLL	--	--	--	--	102	--	97	--	--	--	97	--	--	--	--	--	--	99
WX9447NC	--	--	--	--	100	--	87	--	--	--	90	--	--	--	--	--	--	92
WXE8038NS	--	--	98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	98
WXE8043NS	--	--	122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	122
WXE8048NS	--	--	--	--	99	--	100	--	--	--	100	--	--	--	--	--	--	100
WXR7878NS	--	--	--	--	104	--	102	--	--	--	102	--	--	--	--	--	--	103
WXX3386N	--	--	108	--	--	--	--	--	--	--	--	--	--	--	--	--	--	108
WXX3487NS	--	--	--	--	107	--	97	--	--	--	108	--	--	--	--	--	--	104

Table 17. Description of Entries in 2019 Soybean Performance Tests

BRAND	NAME	TRAIT	Maturity Group	Flower color	Hilum color	SCN Resistance					Phytophthora	
						R1	R3	R4	R14	Source	RR	Tolerance
ASGROW	AG35x9	RR2X	3.5	--	--	--	--	--	--	--	--	--
ASGROW	AG41x8	RR2X	4.1	--	--	--	--	--	--	--	--	--
ASGROW	AG48x9		4.8	--	--	--	--	--	--	--	--	--
CHECK	19MG3.1	RR	3.1	--	--	--	--	--	--	--	--	--
CHECK	19MG3.9	RR	3.9	--	--	--	--	--	--	--	--	--
CHECK	19MG4.8	RR	4.8	--	--	--	--	--	--	--	--	--
DONMARIO	DM EXP (19E419)		--	--	--	--	--	--	--	--	--	--
GOLDEN HARVEST	3728	RR2X	3.7	--	--	--	R	--	R	PI88788	Rps1	2.0
GOLDEN HARVEST	3934	RR2X	3.9	--	--	--	R	--	R	PI88788	Rps1	4.0
GOLDEN HARVEST	4531	RR2X,	4.5	--	--	--	R	--	R	PI88788	S	4.0
GOLDEN HARVEST	4628	RR2X	4.6	--	--	--	R	--	R	PI88788	Rps1	4.0
GOLDEN HARVEST	4741	RR2X	4.7	--	--	--	R	--	R	PI88788	Rps1	4.0
GOLDEN HARVEST	4823	RR2X,	4.8	--	--	--	R	--	--	PI88788	Rps1	3.0
GOLDEN HARVEST	S37-A4X	RRX	3.7	P	Bl	R	MR	--	--	PI88788	Rps1c	4.0
GOLDEN HARVEST	S39-G2X	RRX	3.9	P	lb	R	R	--	--	PI88788	Rps1c	4.0
GOLDEN HARVEST	S42-B9XS	RRX	4.2	W	Br	R	--	--	--	PI88788	Rps1c	3.0
GOLDEN HARVEST	S43-V3X	RRX	4.3	P	Tn	R	MR	--	--	PI88788	S	4.0
GOLDEN HARVEST	S45-Z5XS	RRX	4.5	P	Br	R	--	--	--	PI88788	Rps1a	4.0
GOLDEN HARVEST	S46-W2X	RRX	4.6	W	Br	R	R	--	--	PI88788	Rps1k	4.0
GOLDEN HARVEST	S51-R3X	RRX	5.1	W	Bf	R	R	--	--	PI88788	Rps1k	4.0
INTEGRA	4149NS		--	--	--	--	--	--	--	--	--	--
INTEGRA	S3809N		--	--	--	--	--	--	--	--	--	--
INTEGRA	S4920N		--	--	--	--	--	--	--	--	--	--
KANSAS AES	K13-1830	C	5.3	--	--	--	R	--	MR	--	--	--
KANSAS AES	K15-1283	C, STS	4.4	--	--	--	R	--	MR	--	--	--
KANSAS AES	K15-1809	C, STS	5.2	P	Bf	--	R	--	MR	--	--	--
KANSAS AES	K15-1855	C, STS	5.3	W	Br	--	R	--	MR	--	--	--
KANSAS AES	K15-1874	C, STS	4.9	W	Br	--	R	--	MR	--	--	--
KANSAS AES	K4117Nsgr	RR1, ST	4.1	--	--	--	R	--	MR	--	--	--
KANSAS AES	KS3406RR	RR1	3.4	--	--	--	--	--	--	--	--	--
KANSAS AES	KS3618Ngr	RR1	3.6	W	Bl	--	R	--	MR	--	--	--
KANSAS AES	KS4117Ns	C, STS	4.1	P	Bl	--	R	--	MR	--	--	--
KANSAS AES	KS4919N	C	4.9	--	--	--	R	--	MR	--	--	--
KANSAS AES	KS5004N	C	5.0	W	Bl	--	R	--	MR	--	--	--
KANSAS AES	KS5518	C	5.5	w	Bf	--	--	--	--	--	--	--
LG SEEDS	C3550RX	RR2X	3.5	P	lb	--	R	--	R	PI88788	Rps1c	--
LG SEEDS	C3985RX	RR2X	3.9	P	lb	--	R	--	R	PI88788	--	--
LG SEEDS	C4227RX	RR2X/S	4.2	P	lb	--	R	--	R	PI88788	--	--
LG SEEDS	CS3333RX	RR2X	3.3	P	lb	--	R	--	R	PI88788	Rps1c	--
LG SEEDS	LGS2989RX	RR2X	2.9	P	B	--	R	--	MR	--	Rps1a	7.0
LG SEEDS	LGS3600RX	RR2X	3.6	P	B	--	R	--	MR	--	--	8.0
LG SEEDS	LGS3777RX	RR2X/S	3.7	W	Bl	--	R	--	R	--	RPS1C	--
LG SEEDS	LGS4845RX	RR2X	4.8	P	B	--	R	--	MR	--	Rps1a	9.0
LG SEEDS	LGS4899RX	RR2X	4.8	P	B	--	R	--	MR	--	Rps1c	6.0
MIDLAND	3537NX	RR2X	3.5	--	--	--	R	--	MR	PI88788	--	2.0
MIDLAND	3779NXS	RR2X/S	3.7	--	--	--	R	--	R	PI88788	--	2.0
MIDLAND	3930NXS	RR2X	3.9	--	--	--	--	--	--	--	--	--
MIDLAND	4140NXS	RR2X	4.1	--	--	--	--	--	--	--	--	3.0

Table 17 continued. Description of Entries in 2019 Soybean Performance Tests

BRAND	NAME	TRAIT	Maturity Group	Flower color	Hilum color	SCN Resistance					Phytophthora	
						R1	R3	R4	R14	Source	RR	Tolerance
MIDLAND	4328NX	RR2X	4.3	--	--	--	R	--	MR	PI88788	--	2.0
MIDLAND	4488NXS	RR2X/S	4.4	--	--	--	R	--	R	PI88788	--	2.0
MIDLAND	4677NXS	RR2X/S	4.6	--	--	--	R	--	MR	PI88788	--	2.0
MIDLAND	4956NXS	RR2X	4.9	--	--	--	R	--	MR	PI88788	--	2.0
MIDLAND	5020NXS	RR2X	5.0	--	--	--	--	--	--	PI88788	--	2.0
MISSOURI	S13-2743C	C	4.1	W	Bf	--	--	--	--	--	--	--
MISSOURI	S13-3851C	C	4.4	P	Bl	--	--	--	--	--	--	--
MISSOURI	S14-15138R	RR/STS	4.8	W	Bf	--	MR	--	MR	--	--	--
MISSOURI	S14-15146R	RR/STS	4.6	W	Bl	--	--	--	--	--	--	--
MORSOY	MS 3907 RXT	RR2X	3.9	P	lb	--	R	--	MR	PI88788	--	4.0
MORSOY	MS 4117 RXT	RR2X	4.1	P	Bl	--	R	--	MR	PI88788	Rps1c	6.0
MORSOY	MS 4426 RXT		4.4	--	--	--	--	--	--	--	--	--
MORSOY	MS 4706 RXT	RR2X	4.7	P	lb	--	R	--	MR	PI88788	Rps1c	4.0
MORSOY	MS 4846 RXT	RR2X	4.8	P	Bl	--	R	--	MR	PI88788	Rps14	7.0
PHILLIPS	370E3S	Enlist 3	3.7	W	Bf	--	R	--	R	PI88788	Rps1k	8.5
PHILLIPS	379 NR2XSE	RR2X	3.7	W	Bl	--	R	--	MR	PI88788	RPS1C	1.0
PHILLIPS	387 NR2X	RR2X	3.8	P	lb	--	R	--	R	PI88788	Rps1c	1.0
PHILLIPS	408 NR2XS	RR2X	4.0	P	Bl	--	R	--	MR	PI88788	RPS1C	2.0
PHILLIPS	420E3S	Enlist 3	4.2	W	Bf	--	R	--	R	PI88788	NG	--
PHILLIPS	427 NR2XS	RR2X	4.2	--	--	--	--	--	--	--	--	--
PHILLIPS	430NR2XSE	RR2X	4.3	P	Bl	--	R	--	R	PI88788	Rps1c	4.0
PHILLIPS	450NR2XSE	RR2X	4.5	P	Bl	--	R	--	R	PI88788	Rps1c	3.0
PHILLIPS	456NR2XS	RR2X	4.5	P	Bl	--	R	--	R	PI88788	Rps1a	2.0
PHILLIPS	460E3SE	Enlist 3	4.6	P	lb	--	R	--	R	PI88788	NG	--
PHILLIPS	478 NR2XSE	RR2X	4.7	P	lb	--	R	--	MR	PI88788	RPS1C	1.0
PHILLIPS	500NR2XS	RR2X	5.0	W	Bl	--	R	--	R	PI88788	Rps1c	3.0
PHILLIPS	506NR2XS	RR2X	5.0	P	Bl	--	R	--	R	PI88788	Rps1a	2.0
STRATTON	Go Soy 40GL18LL/GT2		4.0	W	Bl	--	--	--	--	--	--	--
STRATTON	Go Soy 43C17SSTS		4.3	P	Bl	--	--	--	--	--	--	--
STRATTON	Go Soy 44GL18LL/GT2		4.4	W	Bl	--	--	--	--	--	--	--
STRATTON	Go Soy 471E19Enlist, S		4.7	W	lb	--	--	--	--	--	--	--
STRATTON	Go Soy 512E18Enlist		5.2	W	Bl	--	--	--	--	--	--	--
STRATTON	Go Soy 56C16		5.6	P	lb	--	--	--	--	--	--	--
WILLCROSS	WX1038NGT/LLRR		3.8	P	--	--	--	--	--	--	--	--
WILLCROSS	WX1046NSGT/LLRR		4.6	P	--	--	--	--	--	--	--	--
WILLCROSS	WX1441NLL LL		4.1	P	Bl	--	--	--	--	--	--	--
WILLCROSS	WX1748NLL LL		4.8	W	Bl	--	--	--	--	--	--	--
WILLCROSS	WX9447NC		4.7	W	B	--	--	--	--	--	--	--
WILLCROSS	WXE8038NS RR/LL		3.8	W	--	--	--	--	--	--	--	--
WILLCROSS	WXE8043NS RR/LL		4.3	W	--	--	--	--	--	--	--	--
WILLCROSS	WXE8048NS RR/LL		4.8	W	--	--	--	--	--	--	--	--
WILLCROSS	WXR7878NS RR		4.8	W	B	--	--	--	--	--	--	--
WILLCROSS	WXX3386N RR2X		3.8	P	lb	--	--	--	--	--	--	--
WILLCROSS	WXX3487NS RR2X		4.8	P	Bl	--	--	--	--	--	--	--

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

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