

Performance of Corn Hybrids in Louisiana, 2016



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Performance of corn hybrids is annually evaluated by Louisiana Agricultural Experiment Station (LAES) researchers in Official Variety Trials (OVT's). The purpose of these trials is to provide to Louisiana growers, seedsmen, county agents of the Louisiana Cooperative Extension Service (LCES), and other interested individuals and organizations with unbiased performance data for commercial corn hybrids submitted for evaluation by private agencies. The cooperating LAES units in 2016 were: Dean Lee Research Station, Alexandria; Red River Research Station, Bossier City; Northeast Research Station, St. Joseph; and Macon Ridge Research Station, Winnsboro.

PROCEDURES

In 2016, 43 corn hybrids were entered in the LAES yield trials. Soil type, cultural practices, location summaries, and weather graphs are listed prior to data tables for each location. In weather graphs, maximum and minimum temperatures are weekly averages and rainfall weekly totals. At St. Joseph, trials were conducted both on Commerce silt loam, Commerce sandy loam, and Sharkey silty clay Mississippi River alluvial soils. Bossier City, St. Joseph (Commerce silt loam and Sharkey silty clay trials), and Winnsboro trials were furrow irrigated.

The experimental design at each location was a randomized complete block design with four or five replications. Traits measured and rating scales are listed in Table 1. Traits not listed in Table 1 are footnoted at the base of the respective table. Analysis of variance and least significant differences (LSD) were computed using SAS (Statistical Analysis System). We used the protected F-test, which means LSD's were calculated only if differences among hybrids existed at the 90% confidence level. If differences were significant, a LSD at the 10% probability level was calculated. If the LSD (0.10) for yield in a trial is 10 bu/acre, there is a 10% chance that two hybrids with a reported yield difference of 10 bu/acre are genetically equal and a 90% probability they have differences in genetic potential in that particular environment. LSD values are influenced by how well soil fertility, stand establishment, plot length, harvest efficiency, and other variables are controlled and by number of replications for each hybrid. The letters NS are used in the text and tables to indicate lack of significance (not significantly different) at the 10% probability level. The coefficient of variation (CV) reflects the magnitude of experimental error (random variation not accounted for by hybrids and replications) in relation to the trial mean. A high CV means that relative differences among hybrids were not consistent among replications, which reduces the precision of a test.

RESULTS

Yield data for 2016 and two-year averages (2015 and 2016) and other agronomic data for each location are presented in Tables 2-8. To be considered for a two-year average, hybrids must have the same seed traits each year (refer to Table 10). Yields for the hybrids in the highest-yielding group for 2016 (yields falling within one LSD value) are in bold print. Hybrids in bold print with a single asterisk are in the highest-

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yielding group for both years, 2015 and 2016. Yield summary across Louisiana for 2016 is presented in Table 9, seed traits and hybrid maturities are listed in Table 10, and participating seed companies are listed in Table 11. Ratings for corn earworm damage have been taken in previous years; however, there was minimal corn earworm damage in 2016. Foliar diseases were also monitored in the trials with ratings taken at Alexandria, St. Joseph (Commerce silt loam trial), and Winnsboro. There was little or no problems with lodging. There were ten seed companies that participated in the 2016 corn hybrid performance trials.

Table 1. Traits and rating scales for 2016 LAES Official Variety Trials.

Trait	Abbreviation	Description
Yield	Yield	Grain yield, bu/a, @ 15.5% harvest grain moisture (2016)
2-year yield average	2- Yr avg	Average grain yield for 2015 and 2016, bu/a
Grain moisture	Gr mo	Grain moisture at harvest, %
Test weight	Test wt	Volume weight of grain, lb/bu
Plant population	Stand	Number of plants at harvest, plt/a
Mid-silking date	Mid-silk	Date of silk emergence in 50% of plants in plots, days after planting (DAP)
Plant height	Plt ht	Height from ground to flag leaf, inches (in)
Ear height	Ear ht	Height from ground to where primary ear attaches to the plant, inches (in)
Husk cover	HC	Measure of how well the kernels are covered by the husk, with ratings of 1-3; 1- closed and 3- open husk
Kernel weight	Ker wt	Grams/100 kernels (g/100)
Kernels per ear (ear size)	KPE	Number of kernels/ear (no/ear)

For additional information on corn trials, please contact Dr. Rick Mascagni, NERS (Ph: 318-766-3769; e:mail: rmascagni@agcenter.lsu.edu); or Dr. Dan Fromme, DLRS (Ph: 318-427-4424; e:mail: dfromme@agcenter.lsu.edu).

Corn Hybrid Performance Trial at the Dean Lee Research Station – Alexandria

Location Summary

Rainfall was well distributed throughout the growing season, except for May, when very little rainfall occurred (see graph below). Temperatures were also relatively mild. Although this trial had to be replanted at a relatively late date (April 5), grain yields were excellent ranging from 171.8 to 217.9 bu/acre, with a trial average of 195.8 bu/acre at this dryland site (Table 2). Twenty hybrids had yields of 200 bu/acre or greater. Highest-yielding group could not be determined because difference in grain yield among hybrids was not statistically significant. There was some Green Snap present; however, it was relatively low and not consistent among hybrids.

Soil type	Coushatta silt loam
Tillage	Conventional
Row spacing	38 inches
Seeding rate	36,000 seed/acre
Previous crop	Soybeans
Planting date	April 5 (replant due to bird damage)
Fertilization	Fall (2015): 30 lb P ₂ O ₅ /acre and 60 lb K ₂ O/acre; 150-0-0-10 (4/8); 70-0-0-5 (4/29); 2 qts Trafix Zn/acre (5/10);
Pesticides	<i>At Planting:</i> 1.9 qt Bicep Magnum/acre (3/4, original planting); <i>Post-emerge:</i> 3 oz Capreno/acre (4/29);
Harvest date	September 1

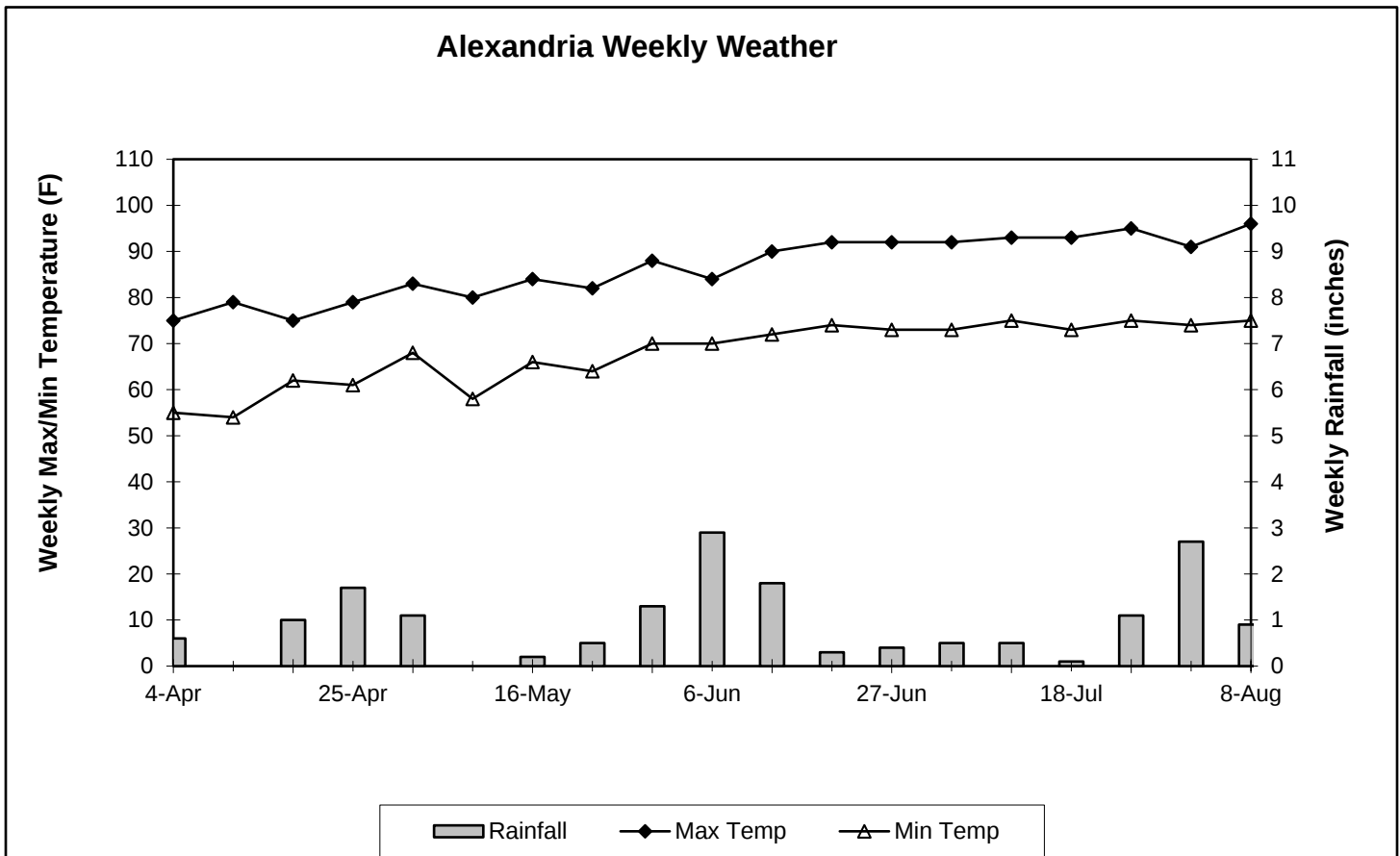


Table 2. Performance of corn hybrids at Alexandria, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	2-Yr avg bu/a	Gr mo %	Stand plt/a	Mid- silk DAP	Plt ht in	Ear ht in	HC 1-3	SR ² 0-9
Armor AXC6116	217.9	-	14.8	33,860	61	105	49	2	4
DEKALB DKC68-26	214.2	197.5	16.3	35,240	60	100	47	2	4
Mycogen MY12G35	212.7	-	15.7	33,000	60	105	45	2	3
DEKALB DKC66-75	210.6	-	15.1	33,000	62	106	47	2	2
Mycogen X13813VH	210.5	195.4	15.7	34,380	62	102	44	2	2
DEKALB DKC66-87	208.7	186.7	15.6	33,000	60	104	47	3	4
BH 8721VT2P	208.4	-	16.0	27,670	61	104	47	2	5
Dyna-Gro D58VC37	207.0	188.8	15.8	33,000	61	99	46	2	3
DEKALB DKC66-59	206.9	183.0	16.1	32,660	61	104	48	2	5
Dyna-Gro D54DC94	206.2	194.0	16.1	32,490	62	105	49	2	3
Dyna-Gro 57VP51	205.6	192.2	15.8	30,770	60	104	45	2	2
Mycogen 2Y744	205.3	191.5	15.8	31,630	61	103	48	1	2
Augusta 7768	205.2	-	16.4	33,860	61	99	42	2	3
DEKALB DKC70-27	205.1	-	16.2	34,030	62	105	48	2	3
Dyna-Gro 56VC46	203.9	187.9	15.8	32,660	61	102	48	2	2
Syngenta N68K-3111A Brand	203.0	-	17.0	34,380	61	102	45	1	3
DEKALB DKC67-14	201.1	185.5	16.0	33,860	61	102	46	2	1
REV®26BHR50™	201.0	188.4	16.5	31,800	61	102	45	2	5
Dyna-Gro D58VC65	200.7	-	16.0	29,220	60	103	49	1	4
DEKALB DKC62-08	200.0	184.0	16.6	34,720	60	100	47	2	2
DEKALB DKC64-35	199.2	-	16.0	31,280	60	106	49	2	1
REV®28R10™	198.8	186.5	16.5	31,110	61	105	45	2	3
Mycogen 2D848	198.7	178.9	16.8	31,800	60	99	46	3	1
Delta Grow 3660	198.5	177.5	16.1	31,970	62	101	48	2	3
REV®25BHR26™	197.8	185.7	17.2	32,660	61	106	47	2	3
Mycogen 2C797	196.7	190.6	15.9	34,720	62	106	49	2	2
Pioneer P1197YHR	194.8	-	15.5	30,940	62	102	48	3	2
Mycogen MY13M87	194.6	-	16.0	30,250	60	101	48	2	2
Armor 1500	194.5	-	16.2	32,490	61	101	44	2	3
DEKALB DKC67-44	194.4	-	15.7	32,660	61	97	43	1	3
Armor 1717	193.1	182.8	16.3	29,220	59	105	47	2	4
Syngenta N69D-3000GT Brand	192.4	-	15.3	32,310	61	96	46	2	2
Delta Grow 2688	191.7	-	15.8	32,490	60	103	45	2	3
BH 8735VTP	190.7	-	16.8	27,840	62	101	44	2	3
REV®28HR20™	189.9	183.1	16.7	32,660	61	99	45	1	3
REV®23BHR55™	189.3	185.1	16.0	33,340	61	103	48	1	3
Dyna-Gro D54VC52	188.7	-	16.2	33,690	61	105	47	2	3
Pioneer P1637YHR	187.7	-	16.1	34,890	60	104	44	3	3
Delta Grow 2888	184.8	170.3	16.9	34,890	60	100	45	2	3
Armor 1414	181.4	173.1	15.3	35,410	61	101	44	2	4
Pioneer P1916YHR	179.3	-	15.5	33,170	61	104	47	2	4
DEKALB DKC67-72	178.8	169.4	17.1	33,520	63	108	48	2	1
Armor AXG6118	171.8	-	16.1	32,660	63	105	46	2	2
Average	195.8	-	16.1	32,580	61	103	46	2	3
CV, %	12	-	7	9	3	7	7	29	30
LSD (0.10)	NS ³	-	NS	3,550	NS	NS	NS	1	1

¹Highest yielding group could not be determined because there was no statistical difference for grain yield among hybrids in 2016.

²SR – Southern rust ratings, 0-9 (0=no symptoms and 9=severe symptoms on whole plant) recorded on July 15 (approximately one month after mid-silk date).

³NS – Non-significant at the 0.10 probability level.

Corn Hybrid Performance Trial at the Red River Research Station – Bossier City

Location Summary

Rainfall was well distributed, except for mid-May and July (see below). There were six furrow-irrigation applications made between May 23 and July 21 (see chart on right). Grain yields ranged from 121.3 bu/acre to 176.9 bu/acre with a trial average of 158.5 bu/acre (Table 3). There were 16 hybrids in the 2016 high-yielding group and six hybrids in the highest-yielding group for both years, 2015 and 2016. Based on mid-silk dates, maturities varied among hybrids ranged from 73 to 81 DAP (days after planting). Other agronomic data are presented in Table 3.

Soil type	Caplis very fine sand
Tillage	Conventional
Row spacing	40 inches
Seeding rate	36,000 seed/acre
Previous crop	Soybean
Planting date	March 21
Fertilization	<i>Sidedress</i> : 210 lb N/acre – 30-0-0-2 (4/26);
Irrigation	Furrow irrigations – 5/23, 6/9, 6/27, 7/5, 7/11, 7/21
Pesticides	<i>Pre-emerge</i> : 1.75 pt Harness/acre + 0.25 NIS; <i>Post-emerge</i> : 22 oz Roundup/acre (5/12); <i>Insecticides</i> : 1.67 oz Karate Z/acre (4/4);
Harvest date	September 9

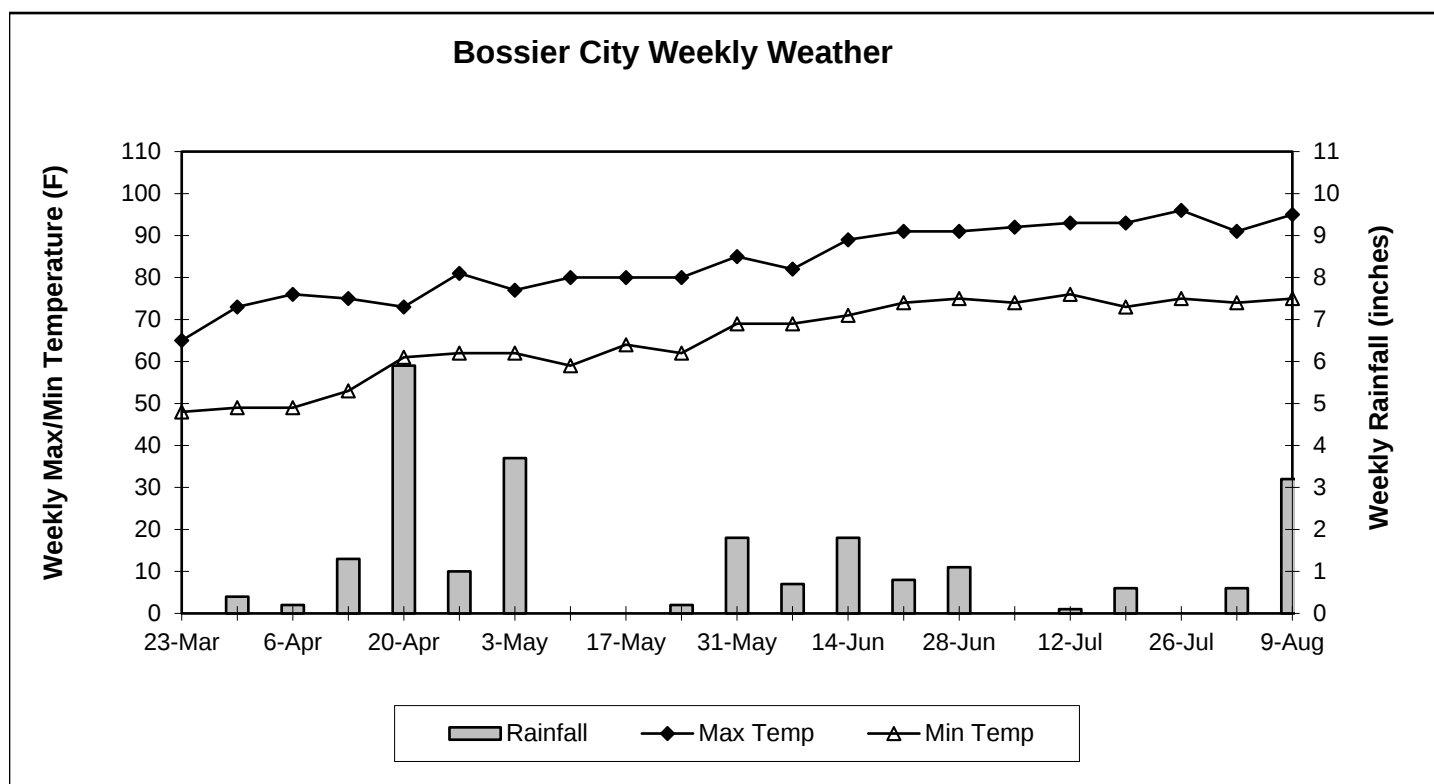


Table 3. Performance of corn hybrids at Bossier City, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	2-Yr avg ² bu/a	Gr mo %	Test wt lb/bu	Stand plt/a	Mid- silk DAP	Plt ht in	Ear ht in	HC 1-3
REV®23BHR55™*	176.9	182.1	14.4	55.4	36,100	76	106	32	2
Armor 1717*	176.3	174.2	14.2	58.1	36,100	78	100	31	2
DEKALB DKC70-27	174.3	-	14.3	57.9	41,860	77	97	35	1
DEKALB DKC67-44	174.2	-	14.6	57.9	35,840	74	90	30	2
Mycogen 2D848	173.8	166.8	14.9	57.3	35,840	80	104	43	1
REV®26BHR50™	172.6	157.9	14.7	58.9	40,030	77	107	31	1
BH 8721VT2P	168.7	-	14.1	57.8	39,760	77	99	34	1
Mycogen 2C797*	168.5	169.7	14.0	55.6	34,270	75	93	32	1
Mycogen MY12G35	168.2	-	14.1	56.3	36,100	79	91	31	1
Dyna-Gro D58VC37*	167.8	170.2	14.4	57.7	33,220	73	86	29	1
Pioneer P1637YHR	167.6	-	14.2	57.5	36,890	76	110	38	2
BH 8735VTTP	166.9	-	14.4	57.7	40,550	77	101	38	1
DEKALB DKC67-14*	166.3	176.7	14.5	56.8	36,890	73	92	30	1
Pioneer P1916YHR	165.3	-	14.8	58.1	31,390	76	100	29	1
DEKALB DKC66-75	164.9	-	14.1	57.4	37,410	75	95	30	2
Dyna-Gro 57VP51*	164.5	173.9	14.3	56.4	36,890	73	83	27	1
Augusta 7768	164.2	-	14.8	58.3	36,100	75	100	32	1
Mycogen X13813VH	164.0	169.4	14.3	54.8	36,620	79	104	38	1
Armor 1414	163.1	175.9	14.6	55.6	37,930	74	92	34	2
Syngenta N68K-3111A Brand	161.8	-	14.6	53.9	37,410	74	92	30	1
DEKALB DKC66-87	161.8	165.6	14.1	60.9	37,670	76	94	29	2
Dyna-Gro D54DC94	160.2	155.8	14.3	55.2	37,670	75	92	33	2
REV®28R10™	157.7	155.8	14.3	57.1	36,620	81	111	38	1
Pioneer P1197YHR	157.7	-	14.0	56.0	40,810	77	100	36	2
Mycogen MY13M87	155.7	-	14.5	56.6	38,190	75	94	34	1
REV®25BHR26™	154.7	164.4	14.3	57.9	40,550	77	102	33	1
Dyna-Gro D58VC65	154.0	-	14.3	61.0	36,890	74	87	30	1
Delta Grow 2888	153.8	152.6	14.3	57.3	41,590	78	104	34	1
Armor 1500	153.8	-	13.9	56.8	38,190	74	93	33	1
DEKALB DKC64-35	153.3	-	14.1	56.5	37,670	76	94	30	2
DEKALB DKC62-08	152.0	149.4	14.0	56.6	40,810	73	84	31	1
Dyna-Gro D54VC52	152.0	-	14.0	56.3	37,410	74	89	33	1
DEKALB DKC67-72	151.2	164.3	14.6	56.1	39,760	73	79	26	1
Armor AXC6116	150.9	-	14.4	55.2	36,890	76	92	33	1
REV®28HR20™	150.1	164.1	14.4	57.7	36,890	81	115	37	1
DEKALB DKC66-59	149.8	149.3	14.1	55.4	36,360	75	91	28	2
Syngenta N69D-3000GT Brand	148.7	-	14.4	55.1	36,360	78	102	39	1
Armor AXG6118	146.8	-	14.4	55.5	38,190	76	104	30	1
DEKALB DKC68-26	146.5	147.4	14.1	57.8	35,840	76	88	28	1
Delta Grow 3660	143.1	153.4	15.0	58.5	33,750	73	96	27	1
Dyna-Gro 56VC46	140.4	165.1	14.5	56.7	37,930	75	86	30	1
Mycogen 2Y744	132.9	135.1	14.1	53.0	39,500	77	86	25	1
Delta Grow 2688	121.3	-	14.1	53.3	38,190	77	102	33	1
Average	158.5	-	14.3	56.8	37,460	76	96	32	1
CV, %	7	-	2	4	13	2	4	9	34
LSD (0.10)	12.4	-	0.3	2.4	NS ³	1	4	3	1

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016.²Hybrids in bold with an asterisk (*) were in the highest-yielding group in both 2015 and 2016.³NS = Non-significant at the 0.10 probability level.

Corn Hybrid Performance Trial on Commerce silt loam at the Northeast Research Station – St. Joseph

Location Summary

Rainfall was relatively well distributed during the growing season at this dryland site. Grain yields ranged from 154.3 to 212.4 bu/acre with a trial average of 186.9 bu/acre (Table 4). Six hybrids had average yields of 200 bu/acre or greater. Eleven hybrids were in the highest-yielding group for 2016 and three hybrids in the highest-yielding group for both years, 2015 and 2016. Kernel weight (g/100 kernels) averaged 37.5 g/100 kernels and ear size averaged 390 kernels/ear (Table 4). Other agronomic data are presented in Table 4.

Soil type	Commerce silt loam
Tillage	Conventional
Row spacing	40 inches
Seeding rate	36,000 seed/acre
Previous crop	Cotton
Planting date	April 8
Fertilization	<i>Preplant:</i> Applied 0-60-40 (early Mar) <i>Sidedress:</i> 225 lb N/acre (30-0-0-2) (4/25)
Pesticides	<i>Post-emerge:</i> 48 oz Cinch ATZ/acre t 24 oz Roundup/acre (4/26);
Harvest date	September 6

St. Joseph Weekly Weather

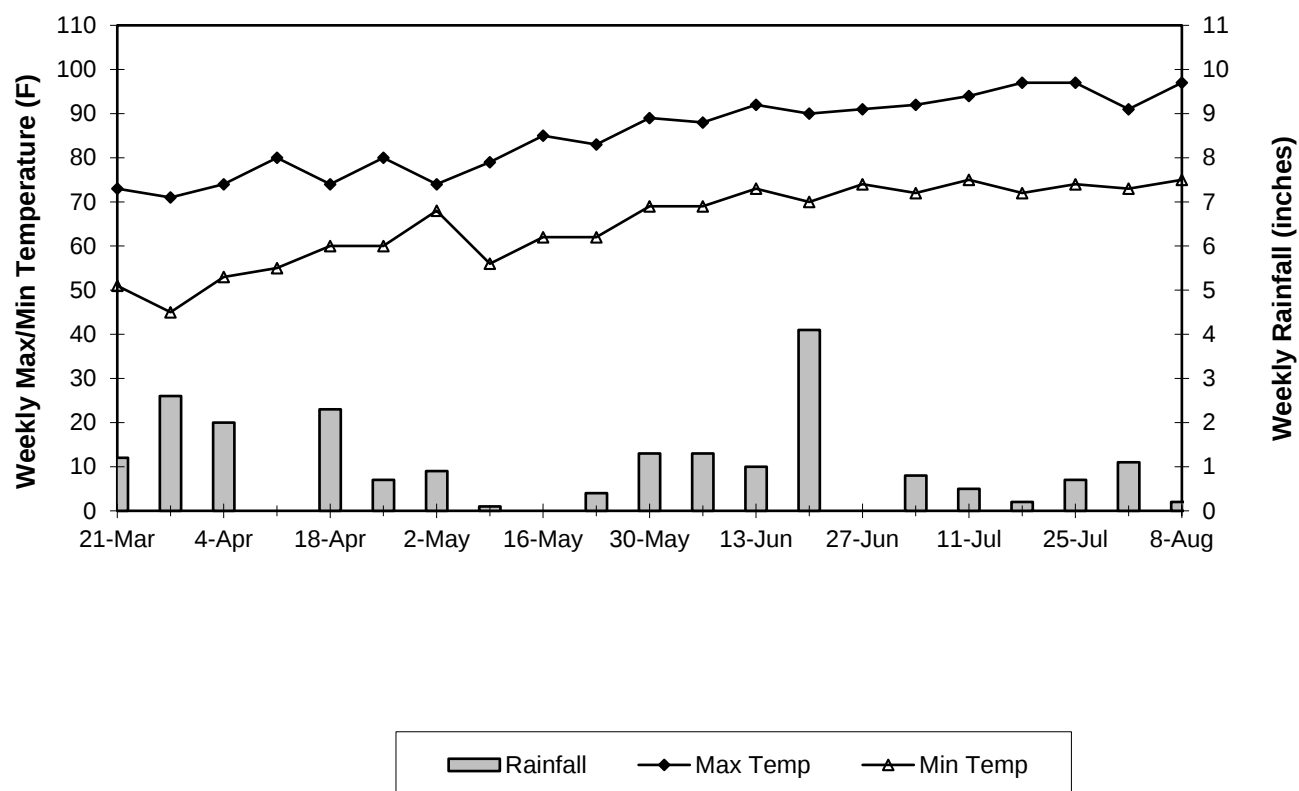


Table 4. Performance of corn hybrids on Commerce silt loam at St. Joseph, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	2-Yr avg ² bu/a	Gr mo %	Test wt lb/bu	Stand plt/a	Mid silk DAP	Plt ht in	Ear ht in	HC 1-3	Ker wt g/100	KPE no/ear	NC LB ³ 0-9	SR ⁴ 0-9
REV®26BHR50**	212.4	219.4	15.6	58.3	30,410	61	98	46	3	40.1	454	2	2
DEKALB DKC67-44	207.8	-	15.1	59.6	35,320	60	93	44	3	40.3	356	0	1
Mycogen X13813VH	206.2	205.0	14.6	55.5	30,410	61	93	49	2	33.1	482	0	1
DEKALB DKC70-27	204.6	-	14.8	58.9	33,350	62	93	42	2	37.7	412	0	1
Armor 1717	203.6	206.6	14.8	59.7	36,620	58	89	43	2	37.8	372	1	2
Armor 1414	200.3	205.4	14.7	56.7	37,610	61	95	51	3	37.0	379	1	1
REV®23BHR55™	199.4	208.0	15.5	56.5	34,660	60	95	43	3	35.7	429	1	2
REV®25BHR26**	198.2	212.1	15.1	59.5	33,030	59	95	49	2	37.2	410	1	0
BH 8721VT2P	198.2	-	14.8	58.3	32,050	60	89	45	2	37.7	437	0	2
Dyna-Gro D54DC94	198.1	207.5	15.1	55.9	36,950	61	98	46	2	37.5	360	1	3
REV®28R10**	197.7	210.4	14.7	59.2	34,340	63	97	46	2	39.9	393	1	2
Armor AXC6116	196.7	-	14.8	55.1	31,390	59	93	43	2	36.8	484	0	1
DEKALB DKC66-75	195.2	-	14.7	58.3	35,970	60	96	44	2	39.2	357	1	2
DEKALB DKC66-87	193.6	206.4	15.0	56.8	30,740	59	89	40	3	36.0	437	1	1
Mycogen 2D848	192.9	204.5	16.6	59.3	34,350	62	90	45	2	36.0	423	1	1
DEKALB DKC67-72	192.3	201.5	14.6	55.3	32,700	60	87	42	2	38.7	402	0	0
BH 8735VTTP	192.3	-	15.1	59.0	37,930	62	93	48	2	37.1	371	1	1
Pioneer P1637YHR	192.1	-	15.1	56.1	39,240	61	94	47	2	37.5	327	1	1
REV®28HR20™	190.8	213.0	15.2	58.5	31,070	63	99	48	2	38.9	380	2	1
Mycogen MY12G35	190.6	-	15.0	58.0	34,340	62	88	45	2	34.9	405	0	1
DEKALB DKC67-14	189.8	201.3	15.0	58.3	33,350	59	94	41	1	39.1	379	1	1
DEKALB DKC66-59	189.4	197.8	15.6	57.8	36,950	60	91	47	3	38.6	353	2	1
DEKALB DKC64-35	189.3	-	15.1	59.0	34,340	58	95	41	3	36.6	390	0	0
Mycogen 2C797	188.8	196.1	14.7	57.9	35,320	60	96	45	1	34.9	398	1	2
Pioneer P1197YHR	188.4	-	14.6	55.8	37,610	61	88	44	2	35.2	380	1	1
Dyna-Gro D58VC37	187.7	196.1	15.0	58.6	33,350	60	87	41	1	37.1	428	3	1
DEKALB DKC68-26	185.4	203.1	14.3	58.7	29,430	60	90	40	2	39.3	426	1	1
Mycogen 2Y744	184.0	198.9	15.2	55.3	36,950	61	83	38	2	35.1	403	1	1
Dyna-Gro D58VC65	182.9	-	14.7	55.6	33,030	60	86	43	1	40.6	342	1	2
Augusta 7768	179.2	-	15.7	57.3	33,350	60	97	46	2	36.6	393	1	1
Armor AXG6118	179.1	-	15.5	58.1	36,950	60	89	44	1	36.9	341	1	1
Delta Grow 3660	176.8	184.4	15.3	58.1	34,660	59	95	42	1	37.9	375	1	2
Pioneer P1916YHR	175.9	-	15.3	55.4	29,430	61	92	44	1	37.5	410	4	1
Dyna-Gro 56VC46	174.4	195.8	15.2	57.5	30,740	61	89	44	2	38.8	386	2	1
Dyna-Gro D54VC52	170.9	-	14.9	58.5	33,350	58	90	48	2	41.8	330	1	1
Mycogen MY13M87	170.3	-	14.9	57.9	33,350	59	86	42	1	38.1	358	1	1
Delta Grow 2888	169.9	174.3	15.3	55.6	31,070	61	94	48	1	34.5	427	1	2
Syngenta N69D-3000GT Brand	168.3	-	14.8	57.1	29,100	61	94	45	2	37.7	405	1	1
Syngenta N68K-3111A Brand	166.1	-	15.0	53.0	32,700	59	86	44	2	33.7	393	0	1
DEKALB DKC62-08	163.8	-	14.8	54.7	26,810	61	84	41	2	37.9	.	1	1
Dyna-Gro 57VP51	162.7	189.9	14.7	55.2	28,120	60	89	43	2	41.8	367	1	1
Armor 1500	161.2	-	15.0	58.7	34,340	60	86	40	2	36.5	316	1	2
Delta Grow 2688	154.3	-	15.2	54.9	28,450	60	90	49	3	37.3	343	1	0
Average	186.9	-	15.0	57.3	33,700	60	91	44	2	37.5	390	1	1
CV, %	8	-	3	4	10	2	4	7	28	4	12	73	67
LSD (0.10)	14.8	-	NS ⁵	NS	NS	2	6	5	1	2.4	NS	1	1

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016.²Hybrids in bold with an asterisk (*) were in the highest-yielding group in both 2015 and 2016.³NCLB = Northern corn leaf blight ratings, 0-9 (0=no symptoms and 9=severe symptoms on whole plant) recorded on July 20 (approximately one month after mid-silk).⁴SR = Southern rust ratings, 0-9 (0=no symptoms and 9=severe symptoms on whole plant) recorded on July 20 (approximately one month after mid-silk).⁵NS = Non-significant at the 0.10 probability level.

Corn Hybrid Performance Trial on Commerce sandy loam at the Northeast Research Station – St. Joseph

Location Summary

Although rainfall was relatively well distributed during the growing season, there were five furrow-irrigations, beginning on May 20 and terminating on July 15 (see chart on right). Grain yields were excellent on this sandy loam soil, ranging from 180.4 to 235.9 bu/acre with a trial average of 209.0 bu/acre (Table 5). Thirty-one of the 43 hybrids had yields of 200.0 bu/acre or greater. This site has high natural fertility, which promotes high yield potentials. Plant populations were good with a trial average of 34,410 plants/acre. Kernel weight was the yield component that dominated averaging 39.7 g/100 kernels. Other agronomic data are presented in Table 5.

Soil type	Commerce silt loam
Tillage	Conventional
Row spacing	40 inches
Seeding rate	36,000 seed/acre
Previous crop	Soybean
Planting date	March 23
Fertilization	<i>Topdress:</i> Applied 30 lb N/acre broadcast (granular 33-0-0-11) (4/18). <i>Sidedress:</i> 220 lb N/acre (30-0-0-2) (4/20);
Pesticides	<i>Post-emerge:</i> 3 qt Accuron/acre + 24 oz Roundup/acre (4/20);
Irrigation	Furrow irrigated: 5/20, 5/27, 6/10, 7/11, 7/15
Harvest date	September 3

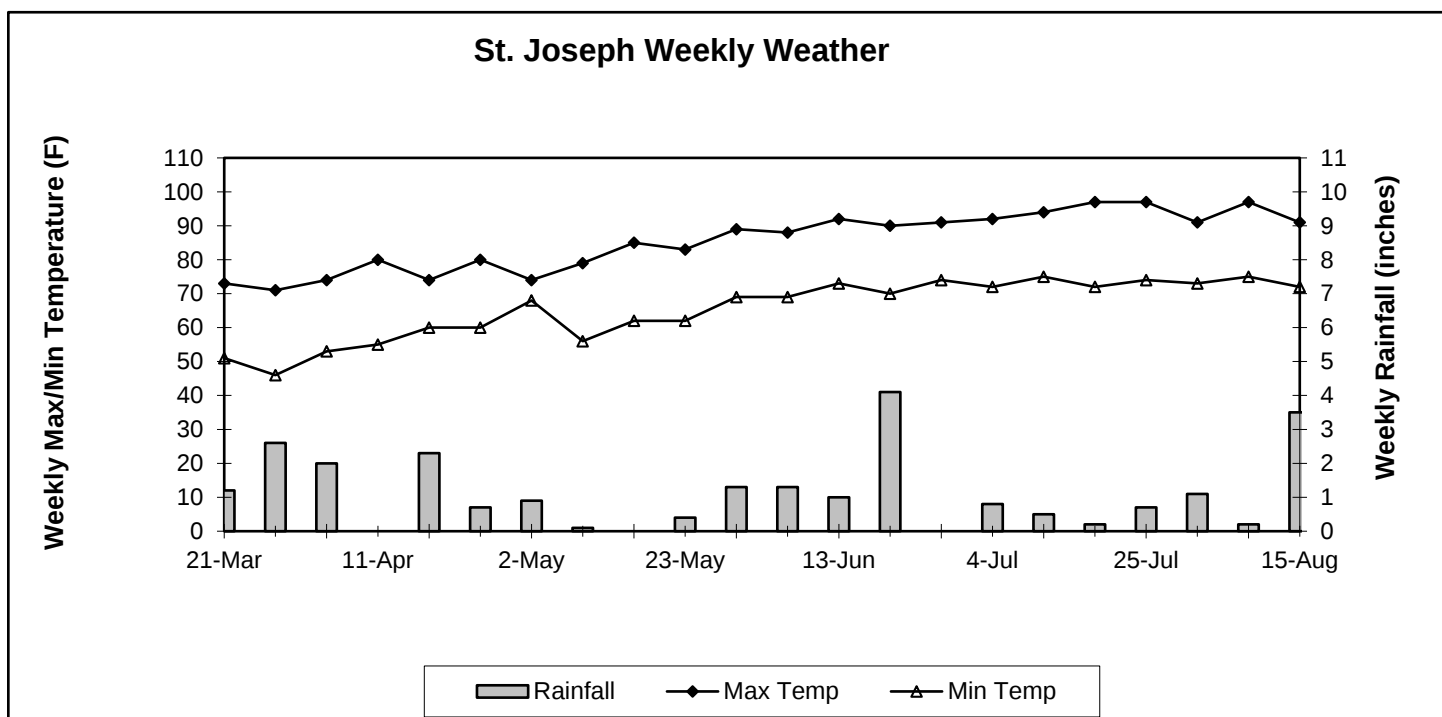


Table 5. Performance of corn hybrids on Commerce sandy loam at St. Joseph, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	Gr mo %	Test wt lb/bu	Stand plts/a	Mid silk DAP	Plt ht in	Ear ht in	Ker wt g/100	KPE no/ear
REV®26BHR50™	235.9	14.0	61.1	32,370	68	95	48	40.5	463
REV®23BHR55™	229.1	13.0	57.0	34,340	65	96	54	37.4	513
DEKALB DKC66-75	223.8	13.2	59.0	36,300	67	91	48	42.2	378
Pioneer P1637YHR	223.7	13.2	59.4	32,700	68	93	48	42.0	407
Dyna-Gro 57VP51	222.6	13.5	59.8	35,970	65	89	46	42.0	385
DEKALB DKC70-27	220.0	13.6	61.4	36,300	67	94	48	41.7	366
Armor 1717	219.4	13.5	60.4	35,320	66	90	46	40.4	400
DEKALB DKC67-14	219.3	13.7	59.2	34,010	65	93	46	41.7	409
BH 8721VT2P	219.3	13.4	60.3	39,890	66	88	50	40.8	335
Dyna-Gro D58VC65	219.0	13.2	59.4	33,030	66	92	44	41.0	419
REV®28R10™	218.7	13.5	59.9	33,030	70	97	51	42.5	407
Armor AXC6116	218.1	13.2	56.8	34,990	66	95	48	38.6	414
DEKALB DKC67-44	216.7	13.2	60.1	34,990	66	97	49	41.9	383
Pioneer P1916YHR	215.8	14.0	60.4	29,430	68	94	47	39.0	486
Mycogen X13813VH	215.8	13.4	57.0	34,990	68	90	53	38.0	426
Armor 1414	215.1	13.3	57.1	37,280	66	98	49	37.6	397
Mycogen 2D848	213.5	14.4	59.5	35,320	68	93	51	39.3	389
Augusta 7768	213.2	14.0	58.9	37,280	67	98	52	39.2	377
DEKALB DKC66-87	213.0	13.2	58.2	33,350	66	90	45	41.0	417
Armor AXG6118	212.8	13.6	58.5	33,680	67	92	44	36.8	433
Pioneer P1197YHR	210.8	12.9	58.5	29,430	66	92	52	39.3	479
DEKALB DKC68-26	209.4	13.3	59.5	35,640	66	89	47	42.2	382
BH 8735VTP	209.4	13.4	60.1	29,760	69	98	53	38.8	446
Dyna-Gro D54DC94	208.1	13.2	57.2	32,700	65	91	50	39.5	405
Mycogen 2Y744	208.0	13.1	55.2	37,280	66	79	37	36.7	391
REV®28HR20™	206.5	13.9	59.4	30,740	70	99	51	42.2	415
DEKALB DKC67-72	205.4	13.2	57.6	35,970	66	85	46	41.3	366
Mycogen MY12G35	205.1	13.3	58.7	32,370	69	92	48	37.2	436
DEKALB DKC62-08	201.3	12.8	59.0	37,280	65	89	51	40.4	355
Mycogen 2C797	201.0	13.2	58.0	34,010	65	94	52	38.7	400
DEKALB DKC66-59	200.7	13.6	58.9	34,340	66	93	50	40.4	360
Dyna-Gro D54VC52	199.0	13.1	59.6	35,970	65	92	51	42.7	346
Dyna-Gro 56VC46	198.9	13.3	59.9	34,010	65	93	51	40.1	371
Delta Grow 2688	198.4	13.0	55.9	33,350	65	96	52	38.3	398
Mycogen MY13M87	198.2	13.4	59.4	37,930	65	90	49	38.4	363
REV®25BHR26™	198.1	13.3	60.1	34,660	67	97	52	38.8	374
Dyna-Gro D58VC37	197.1	13.2	59.5	35,320	65	87	44	41.0	373
Syngenta N69D-3000GT Brand	196.2	13.1	58.4	38,590	67	94	52	37.6	344
Delta Grow 3660	194.9	13.5	58.9	29,760	64	92	47	40.8	409
DEKALB DKC64-35	194.0	12.8	60.0	34,990	66	91	48	40.3	335
Armor 1500	189.1	13.1	59.9	32,700	65	93	47	40.8	378
Syngenta N68K-3111A Brand	185.7	12.8	54.4	33,350	65	86	45	34.0	417
Delta Grow 2888	180.4	13.4	59.0	34,990	67	93	53	37.3	378
Average	209.0	13.3	58.8	34,410	66	92	49	39.7	398
CV, %	6	2	1	9	1	3	6	3	11
LSD (0.10)	15.7	0.4	0.7	NS ²	2	5	5	2.2	76

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016. Only one-year data available for this site.

²NS = Non-significant at the 0.10 probability level.

Corn Hybrid Performance Trial on Sharkey silty clay at the Northeast Research Station – St. Joseph

Location Summary

Rainfall distribution was relative good over the growing season, except for July (see below). The relatively good rainfall resulted in only three furrow irrigations. (see chart on right). Grain yield across hybrids averaged 170.0 bu/acre for non-irrigated trial (Table 6) and 184.5 bu/acre for irrigated trial (Table 7). Two-year hybrid yield averages could not be determined for the non-irrigated trial because a non-irrigated trial was not conducted in 2015. In the irrigated trail, there were five hybrids that fell in the highest-yielding group for both years, 2015 and 2016. Plant populations were down on this clay soil, averaging 29,800 plants/acre in non-irrigated trial and 26,200 plants/acre in irrigated trial. Both kernel weight and ear size (kernels/ear) were higher in the irrigated trial.

Soil type	Sharkey clay
Tillage	Stale seedbed, with no spring cultivation.
Row spacing	40 inches
Seeding rate	36,000 seed/acre
Previous crop	Cotton
Planting date	March 23
Fertilization	<i>Sidedress</i> : 250 lb N/acre (30-0-0-2) (4/20);
Pesticides	<i>Post-emerge</i> : 2 qt Accuron/acre + 24 oz Roundup/acre (4/20);
Irrigation	Furrow irrigated - 5/20, 7/5, 7/11;
Harvest date	August 30-31

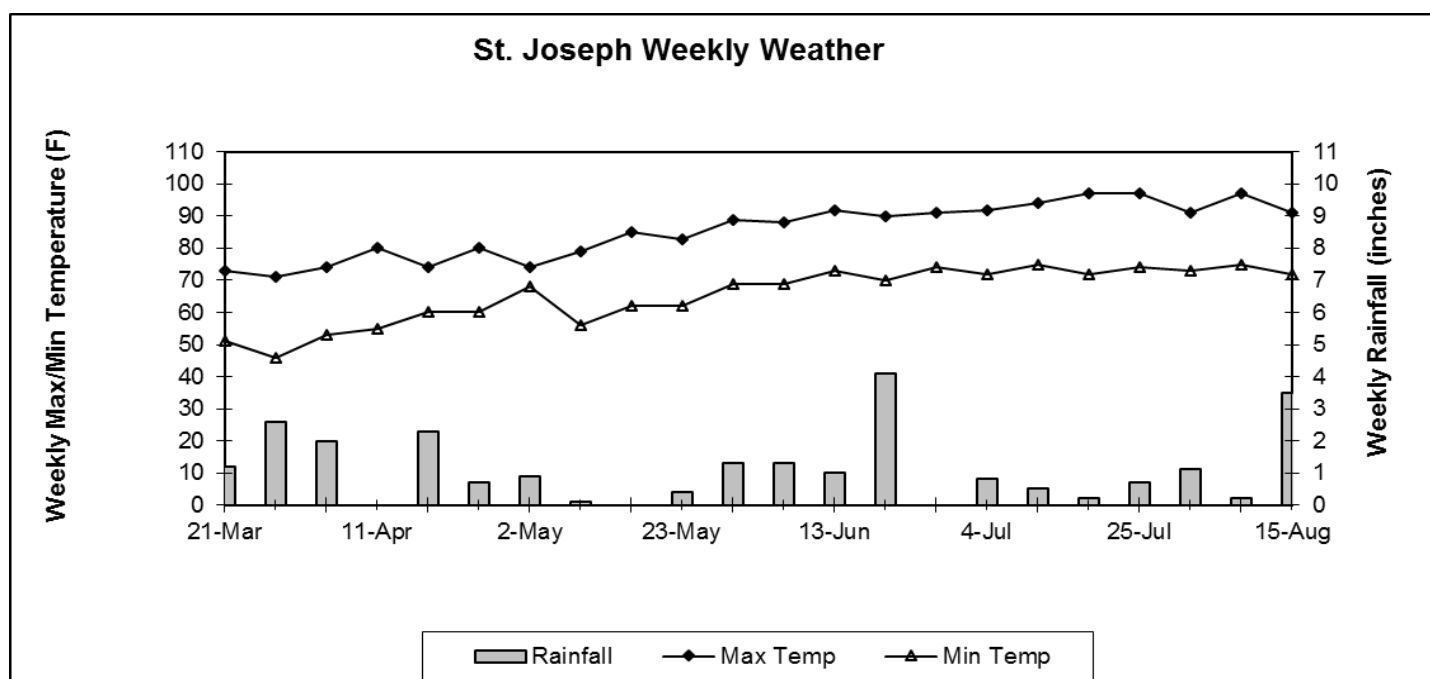


Table 6. Performance of corn hybrids on non-irrigated Sharkey silty clay at St. Joseph, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	Gr mo %	Test wt lb/bu	Stand pl/t/a	Mid silk DAP	Plt ht in	Ear ht In	Ker wt g/100	KPE no/ear
REV®26BHR50™	189.8	14.4	61.5	28,450	69	84	37	37.4	428
REV®28R10™	189.0	14.8	60.3	27,470	70	84	43	40.6	442
DEKALB DKC67-44	188.6	14.3	59.7	28,120	68	86	37	37.2	469
Pioneer P1637YHR	184.1	13.9	59.4	29,100	69	84	38	38.2	361
Armor 1414	182.9	13.5	57.6	31,070	68	82	39	35.8	394
Dyna-Gro D54DC94	182.6	14.2	53.6	29,100	67	81	38	36.0	435
REV®28HR20™	181.5	14.4	59.3	27,140	70	91	43	37.1	465
BH 8735VTP	180.6	14.5	58.3	29,760	69	81	43	37.1	406
DEKALB DKC67-72	180.1	13.8	58.5	30,080	67	68	36	38.1	391
BH 8721VT2P	178.2	13.8	58.6	27,800	68	81	37	36.3	466
Mycogen 2D848	177.1	15.4	55.7	29,100	69	78	39	35.2	394
DEKALB DKC68-26	176.9	14.0	60.4	33,680	68	75	35	40.5	331
DEKALB DKC67-14	175.8	14.0	56.0	26,490	66	78	34	38.1	414
DEKALB DKC62-08	174.6	14.0	58.5	30,080	66	79	37	37.9	369
Dyna-Gro D58VC65	174.2	13.9	60.2	26,490	68	77	34	41.0	384
REV®25BHR26™	174.0	13.8	58.2	29,760	69	79	37	36.5	420
Armor AXG6116	173.3	13.8	57.4	33,680	67	76	35	35.9	372
DEKALB DKC66-59	173.1	14.3	58.8	34,660	67	79	40	37.2	339
Mycogen X13813VH	173.0	13.8	55.0	29,100	68	81	42	33.8	470
Armor 1717	172.5	13.9	60.8	27,470	69	83	39	36.7	417
REV®23BHR55™	171.3	13.6	57.6	27,140	68	86	40	36.9	439
Armor AXG6118	171.2	14.3	50.7	32,370	67	83	38	34.2	391
DEKALB DKC66-87	171.2	14.1	54.1	31,070	68	81	33	36.9	354
Dyna-Gro 57VP51	170.0	14.4	58.9	29,430	68	72	34	38.7	366
DEKALB DKC66-75	169.7	13.9	59.3	28,450	69	82	38	37.9	380
Pioneer P1916YHR	169.6	15.0	55.4	27,800	70	85	37	34.3	458
DEKALB DKC70-27	169.3	14.6	59.2	32,050	69	83	39	36.9	356
Mycogen 2C797	167.8	13.6	55.5	26,810	66	84	40	35.1	459
Augusta 7768	167.4	14.7	57.3	30,410	69	86	41	35.5	419
Mycogen MY13M87	167.1	13.4	59.1	31,720	66	74	38	37.5	337
Mycogen 2Y744	165.8	13.8	52.7	31,070	68	67	34	32.7	362
Mycogen MY12G35	162.0	14.0	56.6	33,350	70	79	39	33.5	368
DEKALB DKC64-35	161.6	13.7	57.8	25,830	67	77	35	35.4	552
Pioneer P1197YHR	160.8	13.3	58.1	25,830	68	83	40	37.1	350
Dyna-Gro D54VC52	159.1	13.9	58.0	36,300	66	81	43	38.3	308
Dyna-Gro 56VC46	158.0	14.2	58.3	24,530	68	78	37	36.6	474
Armor 1500	156.4	13.8	59.4	27,140	66	80	39	38.3	372
Delta Grow 2888	155.9	14.2	54.3	27,470	69	89	42	33.3	430
Syngenta N68K-3111A Brand	155.1	13.7	53.7	35,970	65	78	41	33.2	361
Syngenta N69D-3000GT Brand	154.4	13.7	56.5	33,030	68	80	39	33.2	362
Dyna-Gro D58VC37	154.1	14.3	54.8	29,430	67	73	32	37.1	374
Delta Grow 3660	152.5	14.6	54.0	34,990	67	71	31	38.0	300
Delta Grow 2688	130.9	13.9	54.8	30,740	68	81	37	32.6	344
Average	170.0	14.0	57.3	29,800	68	80	38	36.5	397
CV, %	9	3	4	12	1	4	8	4	12
LSD (0.10)	17.5	0.7	4.0	NS ²	1	6	5	2.4	78

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016. Since a non-irrigated Sharkey silty clay trial was not conducted in 2015, two-year averages (2015 and 2016) could not be determined.

²NS = Non-significant at the 0.10 probability level.

Table 7. Performance of corn hybrids on irrigated Sharkey silty clay at St. Joseph, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	2-Yr avg ² bu/a	Gr mo %	Test wt lb/bu	Stand plt/a	Mid silk DAP	Plt ht in	Ear ht in	Ker wt g/100	KPE no/ear
REV®28HR20™*	204.0	199.6	14.4	60.4	23,540	70	96	43	41.0	535
DEKALB DKC70-27	203.7	-	14.1	60.0	24,530	68	92	42	38.7	540
REV®28R10™*	202.7	201.6	14.7	58.4	26,160	70	97	47	39.0	523
Armor 1414	202.3	186.2	14.0	58.1	22,890	68	91	45	40.0	571
Dyna-Gro D54DC94	199.2	194.1	13.7	55.7	27,140	68	92	47	36.1	552
DEKALB DKC67-44	197.9	-	14.0	60.3	27,140	68	84	40	39.2	479
Pioneer P1637YHR	196.2	-	14.2	59.7	25,830	68	97	40	38.5	537
BH 8735VTP	195.0	-	14.3	59.7	24,530	69	91	48	36.3	583
DEKALB DKC68-26	193.9	187.9	14.0	59.3	30,410	68	86	41	40.1	405
Armor AXC6116	193.7	-	14.0	56.0	30,080	67	85	46	37.2	441
REV®26BHR50™*	193.5	194.5	14.6	61.6	23,870	70	94	41	38.2	563
DEKALB DKC66-75	193.3	-	13.7	59.5	28,780	69	91	44	38.8	434
Mycogen X13813VH*	193.0	191.4	14.7	52.2	31,070	68	87	45	36.3	443
DEKALB DKC66-59	192.1	186.1	14.2	58.1	25,180	68	83	40	36.6	531
Dyna-Gro D58VC65	190.9	-	13.4	55.2	31,720	68	80	37	39.5	391
Dyna-Gro 57VP51*	190.1	194.2	14.6	56.9	28,450	67	87	34	40.2	443
Armor AXG6118	188.6	-	14.4	58.1	26,490	68	89	41	34.2	555
Pioneer P1916YHR	188.5	-	14.3	59.2	24,530	69	87	38	38.5	508
Mycogen 2D848	187.7	189.0	15.2	50.3	26,160	69	88	43	33.8	607
REV®23BHR55™	187.4	184.8	14.2	56.6	21,910	68	93	43	38.4	524
Augusta 7768	186.0	-	15.2	57.9	22,240	68	94	46	37.5	570
DEKALB DKC67-14	185.3	188.7	14.3	58.7	29,100	67	90	40	37.6	474
Mycogen MY12G35	183.7	-	14.2	55.4	26,490	69	88	40	35.3	505
REV®25BHR26™	182.8	188.0	13.7	60.4	24,530	68	94	42	36.7	506
Dyna-Gro D54VC52	182.8	-	14.0	58.9	24,530	66	87	45	37.9	512
Mycogen 2C797	181.0	188.3	13.4	56.8	26,810	68	84	42	34.8	524
DEKALB DKC64-35	180.3	-	13.9	59.3	29,430	68	89	42	35.7	429
DEKALB DKC67-72	180.0	178.9	13.7	57.1	24,850	68	79	39	38.4	508
DEKALB DKC66-87	179.0	179.3	15.0	56.3	22,240	69	85	40	38.0	549
Pioneer P1197YHR	178.7	-	13.1	58.9	27,140	67	84	41	38.0	445
Mycogen MY13M87	177.4	-	13.9	57.5	25,510	66	81	41	37.5	486
Armor 1717	177.1	185.2	14.2	60.9	25,510	68	89	45	39.8	466
Mycogen 2Y744	177.1	179.6	14.0	53.5	24,850	68	82	36	34.2	478
Dyna-Gro 56VC46	176.9	180.2	14.3	58.3	21,580	67	85	44	37.0	578
BH 8721VT2P	173.6	-	14.3	58.9	28,120	69	88	43	37.4	399
Dyna-Gro D58VC37	171.9	173.0	13.8	59.2	21,910	68	81	35	38.4	556
DEKALB DKC62-08	171.1	175.5	13.8	58.1	28,120	66	88	43	38.5	422
Delta Grow 3660	171.0	166.5	14.6	57.8	27,800	66	83	38	38.6	409
Delta Grow 2888	169.9	171.4	14.7	57.8	29,100	68	91	45	35.3	419
Syngenta N69D-3000GT Brand	165.1	-	13.6	57.1	29,100	68	88	40	34.4	418
Armor 1500	165.0	-	14.2	58.6	22,890	67	85	38	39.4	479
Delta Grow 2688	160.4	-	13.8	55.4	26,490	67	91	42	34.6	492
Syngenta N68K-3111A Brand	159.1	-	13.5	54.6	27,800	66	83	43	32.2	466
Average	184.5	-	14.1	57.7	26,200	68	87	41	37.4	492
CV, %	7	-	3	4	12	1	4	8	3	15
LSD (0.10)	14.6	-	0.7	3.4	NS ³	2	6	6	1.9	NS

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016.²Hybrids in bold with an asterisk (*) were in the highest-yielding group in both 2015 and 2016.³NS = Non-significant at the 0.10 probability level.

Corn Hybrid Performance Trial at the Macon Ridge Research Station – Winnsboro

Location Summary

Rainfall was relatively low in May and June (see below) and, accordingly, nine furrow-irrigations were applied, beginning on May 13 and terminating on July 14 (see chart at right). Grain yield was excellent, ranging from 164.8 bu/acre to 218.0 bu/acre with a trial average of 197.4 bu/acre (Table 8). Eighteen hybrids had yields of 200 bu/acre and greater. Two hybrids were in the highest-yielding group for both years, 2015 and 2016. Plant population was excellent averaging 33,400 plants/acre. Disease ratings for Northern Leaf Blight (NCLB) and Southern Rust (SR) were determined about a month after mid-silk (Table 6). Other agronomic traits are presented in Table 6.

Soil type	Gigger silt loam
Tillage	Conventional
Row spacing	40 inches
Seeding rate	36,000 seed/acre
Previous crop	Soybean
Planting date	March 21
Fertilization	<i>Sidedress</i> : 220 lb N/acre - 30-0-0-2 (4/12);
Pesticides	<i>Pre-emerge</i> : 3 qt Lexar/acre (3/23); <i>Post-emerge</i> : 1 qt Atrazine/acre (5/6);
Irrigation	Furrow-irrigated - 5/13, 5/20, 5/26, 6/3, 6/9, 6/17, 6/24, 7/8, 7/14
Harvest date	August 23

Winnsboro Weekly Weather

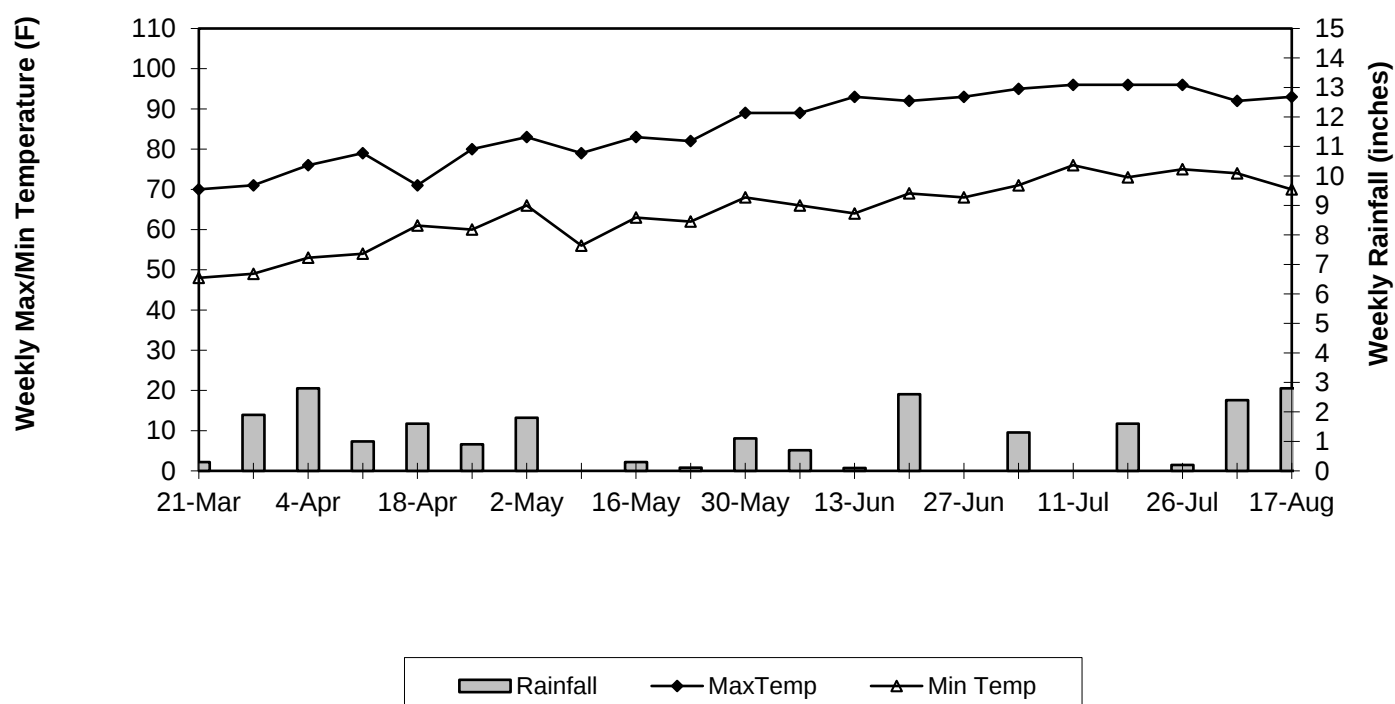


Table 8. Performance of corn hybrids at Winnsboro, 2016.

Brand/hybrid	2016 Yield ¹ bu/a	2-Yr avg ² bu/a	Gr mo %	Test wt lb/bu	Stand plt/a	Mid silk DAP	Plt ht in	Ear ht in	Ker wt g/100	KPE no/ear	NC LB ³ 0-9	SR ⁴ 0-9
BH 8721VT2P	218.0	-	17.2	59.6	35,640	72	90	43	34.9	457	0	4
Dyna-Gro 57VP51	215.1	209.9	17.4	58.9	32,370	70	89	43	37.8	463	1	3
DEKALB DKC70-27	211.9	-	17.9	59.1	33,350	72	92	49	38.2	437	1	2
REV®26BHR50™*	210.4	215.6	17.2	59.1	34,010	72	97	48	34.9	447	2	4
Dyna-Gro D54DC94	209.0	206.4	17.2	56.5	33,350	71	99	50	36.6	426	1	3
Armor 1717	208.5	205.0	17.6	59.4	41,200	72	91	43	36.4	363	0	4
DEKALB DKC66-75	207.2	-	17.3	58.6	35,640	71	93	50	37.2	420	0	2
DEKALB DKC62-08	206.8	204.1	16.8	58.0	34,990	71	88	45	39.0	394	1	2
Dyna-Gro D58VC65	206.3	-	17.1	59.9	31,720	71	88	42	38.9	449	2	2
Mycogen 2C797	205.6	200.5	16.9	56.9	31,070	71	92	49	34.9	454	0	2
DEKALB DKC64-35	204.5	-	16.7	58.5	30,080	71	91	45	34.9	491	0	1
Armor AXC6116	204.1	-	17.1	56.3	36,300	71	88	51	36.0	443	1	3
DEKALB DKC67-44	203.7	-	17.1	59.8	29,760	71	94	47	37.7	485	0	3
Pioneer P1916YHR	203.5	-	18.5	59.5	32,370	72	94	46	36.6	466	5	2
Dyna-Gro 56VC46*	202.4	205.4	16.5	57.6	31,720	71	93	49	35.7	467	1	2
REV®28R10™	200.8	207.1	17.5	57.9	35,970	74	90	48	37.8	393	1	3
DEKALB DKC68-26	200.2	200.9	17.6	58.4	32,050	71	95	43	38.8	438	0	3
Dyna-Gro D54VC52	200.2	-	16.9	58.2	33,030	69	93	46	38.4	424	1	2
Armor AXG6118	199.5	-	18.1	57.3	37,280	71	93	45	33.9	447	1	1
REV®25BHR26™	199.3	201.2	16.7	57.7	33,030	72	94	50	36.4	412	2	3
Mycogen 2D848	198.4	198.5	19.2	57.7	29,760	73	93	50	31.4	547	0	2
Armor 1414	198.2	198.4	16.9	56.8	28,120	71	88	41	35.7	487	0	5
DEKALB DKC66-59	197.6	204.8	18.0	57.4	32,370	71	92	46	39.1	423	1	3
BH 8735VTP	197.3	-	16.5	59.3	36,620	71	98	53	36.1	376	1	2
Pioneer P1197YHR	196.6	-	16.4	57.9	34,990	73	88	43	38.2	392	1	2
Mycogen X13813VH	195.6	202.2	17.3	55.5	32,050	74	93	49	35.0	444	1	1
REV®23BHR55™	195.3	197.7	16.3	59.0	34,010	71	99	46	34.4	414	1	2
Mycogen MY12G35	195.3	-	18.5	55.8	36,620	73	91	43	34.0	455	1	3
Delta Grow 3660	193.9	192.2	16.8	55.8	35,640	69	90	43	34.7	420	2	2
DEKALB DKC67-14	193.9	196.0	17.4	58.3	29,760	70	90	46	37.6	449	1	1
Dyna-Gro D58VC37	192.4	200.8	17.6	58.6	35,970	69	89	49	35.5	395	1	4
DEKALB DKC67-72	191.5	195.3	17.2	57.6	33,030	70	87	47	36.5	390	1	0
DEKALB DKC66-87	191.4	201.2	17.2	57.7	29,430	71	94	46	35.6	500	1	3
Pioneer P1637YHR	190.7	-	17.1	58.8	38,590	71	100	48	37.5	351	1	2
Syngenta N69D-3000GT Brand	187.7	-	16.9	57.1	34,340	71	94	45	33.1	450	1	2
Delta Grow 2888	187.6	189.4	18.2	57.2	30,740	72	100	47	37.4	426	0	3
REV®28HR20™	186.5	202.3	17.4	59.1	32,700	73	101	51	37.6	406	2	2
Augusta 7768	184.6	-	19.5	55.7	32,050	71	102	49	35.2	459	3	2
Mycogen 2Y744	184.3	189.8	16.9	57.5	31,390	72	88	42	32.7	477	1	2
Mycogen MY13M87	184.2	-	17.0	57.0	39,570	70	98	47	34.5	355	0	1
Armor 1500	183.7	-	16.7	58.5	31,390	69	94	51	38.5	391	1	3
Delta Grow 2688	178.1	-	17.5	56.0	29,760	71	97	48	36.1	413	1	3
Syngenta N68K-3111A Brand	164.8	-	16.6	57.3	32,370	70	91	49	32.8	404	2	1
Average	197.4	-	17.3	57.9	33,400	71	93	47	36.1	432	1	2
CV, %	8	-	4	2	12	1	6	8	5	14	80	49
LSD (0.10)	16.3	-	1.1	1.9	NS ⁵	2	NS	NS	2.9	NS	1	1

¹Yields in bold denote hybrids that were in the highest-yielding group in 2016.²Hybrids in bold with an asterisk (*) were in the highest-yielding group in both 2015 and 2016.³NCLB = Northern corn leaf blight ratings, 0-9 (0=no symptoms and 9=severe symptoms on whole plant) recorded on July 12 (approximately one month after mid-silk).⁴SR = Southern rust ratings, 0-9 (0=no symptoms and 9=severe symptoms on whole plant) recorded on July 12 (approximately one month after mid-silk).⁵NS = Non-significant at the 0.10 probability level.

Table 9. Summary of yield performance of corn hybrids in the 2016 LAES official variety trials.

Brand/Hybrid	Alex ¹	BC	St. Joseph ²				WN	Avg
			Com sil	Com sl	Shar sic	Shar sic		
					Non-Irr	Irr		
					bu/a			
Armor 1414	181.4	163.1	200.3	215.1	182.9	202.3	198.2	191.9
Armor 1500	194.5	153.8	161.2	189.1	156.4	165.0	183.7	172.0
Armor 1717	193.1	176.3	203.6	219.4	172.5	177.1	208.5	192.9
Armor AXG6116	217.9	150.9	196.7	218.1	173.3	193.7	204.1	193.5
Armor AXG6118	171.8	146.8	179.1	212.8	171.2	188.6	199.5	181.4
Augusta 7768	205.2	164.2	179.2	213.2	167.4	186.0	184.6	185.7
BH 8721VT2P	208.4	168.7	198.2	219.3	178.2	173.6	218.0	194.9
BH 8735VTTP	190.7	166.9	192.3	209.4	180.6	195.0	197.3	190.3
DEKALB DKC62-08	200.0	152.0	163.8	201.3	174.6	171.1	206.8	181.4
DEKALB DKC64-35	199.2	153.3	189.3	194.0	161.6	180.3	204.5	183.2
DEKALB DKC66-59	206.9	149.8	189.4	200.7	173.1	192.1	197.6	187.1
DEKALB DKC66-75	210.6	164.9	195.2	223.8	169.7	193.3	207.2	195.0
DEKALB DKC66-87	208.7	161.8	193.6	213.0	171.2	179.0	191.4	188.4
DEKALB DKC67-14	201.1	166.3	189.8	219.3	175.8	185.3	193.9	190.2
DEKALB DKC67-44	194.4	174.2	207.8	216.7	188.6	197.9	203.7	197.6
DEKALB DKC67-72	178.8	151.2	192.3	205.4	180.1	180.0	191.5	182.8
DEKALB DKC68-26	214.2	146.5	185.4	209.4	176.9	193.9	200.2	189.5
DEKALB DKC70-27	205.1	174.3	204.6	220.0	169.3	203.7	211.9	198.4
Delta Grow 2688	191.7	121.3	154.3	198.4	130.9	160.4	178.1	162.2
Delta Grow 2888	184.8	153.8	169.9	180.4	155.9	169.9	187.6	171.8
Delta Grow 3660	198.5	143.1	176.8	194.9	152.5	171.0	193.9	175.8
Dyna-Gro 56VC46	203.9	140.4	174.4	198.9	158.0	176.9	202.4	179.3
Dyna-Gro 57VP51	205.6	164.5	162.7	222.6	170.0	190.1	215.1	190.1
Dyna-Gro D54DC94	206.2	160.2	198.1	208.1	182.6	199.2	209.0	194.8
Dyna-Gro D54VC52	188.7	152.0	170.9	199.0	159.1	182.8	200.2	179.0
Dyna-Gro D58VC37	207.0	167.8	187.7	197.1	154.1	171.9	192.4	182.6
Dyna-Gro D58VC65	200.7	154.0	182.9	219.0	174.2	190.9	206.3	189.7
Mycogen MY12G35	212.7	168.2	190.6	205.1	162.0	183.7	195.3	188.2
Mycogen MY13M87	194.6	155.7	170.3	198.2	167.1	177.4	184.2	178.2
Mycogen 2C797	196.7	168.5	188.8	201.0	167.8	181.0	205.6	187.1
Mycogen 2D848	198.7	173.8	192.9	213.5	177.1	187.7	198.4	191.7
Mycogen 2Y744	205.3	132.9	184.0	208.0	165.8	177.1	184.3	179.6
Mycogen X13813VH	210.5	164.0	206.2	215.8	173.0	193.0	195.6	194.0
Pioneer P1197YHR	194.8	157.7	188.4	210.8	160.8	178.7	196.6	184.0
Pioneer P1637YHR	187.7	167.6	192.1	223.7	184.1	196.2	190.7	191.7
Pioneer P1916YHR	179.3	165.3	175.9	215.8	169.6	188.5	203.5	185.4
REV®23BHR55™	189.3	176.9	199.4	229.1	171.3	187.4	195.3	192.7
REV®25BHR26™	197.8	154.7	198.2	198.1	174.0	182.8	199.3	186.4
REV®26BHR50™	201.0	172.6	212.4	235.9	189.8	193.5	210.4	202.2
REV®28HR20™	189.9	150.1	190.8	206.5	181.5	204.0	186.5	187.0
REV®28R10™	198.8	157.7	197.7	218.7	189.0	202.7	200.8	195.1
Syngenta N68K-3111A Brand	203.0	161.8	166.1	185.7	155.1	159.1	164.8	170.8
Syngenta N69D-3000GT Brand	192.4	148.7	168.3	196.2	154.4	165.1	187.7	173.3
Avg	195.8	158.5	186.9	209.0	170.0	184.5	197.4	

¹Alex=Alexandria; BC=Bossier City; WN=Winnsboro;²Com sil=Commerce silt loam; Com sl = Commerce sandy loam; Shar sic – Non-Irr = Sharkey silty clay, non-irrigated; Shar sic – Irr = Sharkey silty clay, irrigated;

Table 10. Seed traits and maturity for corn hybrids entered in the 2016 LAES official variety trials.

Brand/Hybrid	Trans-genes ¹ Insect resistance/ herbicide tolerance	Seed treatment	Days to maturity
Armor 1414	PRO2DG	Avicta 500/Votivo	114
Armor 1500	PRO2	Avicta 500/Votivo	115
Armor 1717	PRO2	Avicta 500/Votivo	117
Armor AXC6116	PRO2	Avicta 500/Votivo	116
Armor AXG6118	3000GT	Cruiser	118
Augusta 7768	3110GT	Cruiser 1250	118
BH 8721VT2P	GENVT2P	Poncho 500 + Votivo	117
BH 8735VTP	GENVT3P	Poncho 500 + Votivo	117
DEKALB DKC62-08	GENSS	Acceleron 500 HD	112
DEKALB DKC64-35	GENVT2P	Acceleron 1250 HD	114
DEKALB DKC66-59	GENVT2P	Acceleron 500 HD	116
DEKALB DKC66-75	GENVT2P	Acceleron 1250 HD	116
DEKALB DKC66-87	GENVT2P	Acceleron 500 HD	116
DEKALB DKC67-14	GENVT2P	Acceleron 500 HD	117
DEKALB DKC67-44	GENVT2P	Acceleron 1250 HD	117
DEKALB DKC67-72	GENVT2P	Acceleron 500 HD	117
DEKALB DKC68-26	GENVT2P	Acceleron 500 HD	118
DEKALB DKC70-27	GENVT2P	Acceleron 1250 HD	120
Delta Grow 2688	GTCBLL	Poncho 1250	115
Delta Grow 2888	GTCBLLVIP	Poncho 1250	116
Delta Grow 3660	GTCBLLVIP	Poncho 1250	117
Dyna-Gro 56VC46	GENVT2P	Poncho 500	116
Dyna-Gro 57VP51	GENVT2P	Poncho 500	117
Dyna-Gro D54DC94	GENVT2PDG	Poncho 500	114
Dyna-Gro D54VC52	GENVT2P	Poncho 500	114
Dyna-Gro D58VC37	GENVT2P	Poncho 500	118
Dyna-Gro D58VC65	GENVT2P	Poncho 500	118
Mycogen 2C797	SSX/RR2/LL	Crusier Maxx 1250	113
Mycogen 2D848	SSX/RR2/LL	Cruiser Maxx 1250	117
Mycogen 2Y744	RR2	Cruiser Maxx 1250	113
Mycogen MY12G35	PowerCore/RR2/LL	Cruiser Maxx 1250	112
Mycogen MY13M87	SSX/RR2/LL	Cruiser Maxx 1250	113
Mycogen X13813VH	SSX/RR2/LL	Cruiser Maxx	114
Pioneer P1197YHR	YHR	Poncho 1250 + Votivo	111
Pioneer P1637YHR	YHR	Poncho 1250 + Votivo	116
Pioneer P1916YHR	YHR	Poncho 1250 + Votivo	120
REV®23BHR55™	YGCB/HX1/LL/RR	Maxim Quattro + Poncho 1250 + Votivo	113
REV®25BHR26™	YGCB/HX1/LL/RR	Maxim Quattro + Poncho 1250 + Votivo	115
REV®26BHR50™	YGCB/HX1/LL/RR	Maxim Quattro + Poncho 1250 + Votivo	116
REV®28HR20™	HX1/LL/RR	Maxim Quattro + Poncho 1250 + Votivo	118
REV®28R10™	RR	Maxim Quattro + Poncho 1250 + Votivo	118
Syngenta N68K-3111A Brand	VIP3111A	Avicta Complete 500 + Vibrance	111
Syngenta N69D-3000GT Brand	3000GT	Avicta Complete 500 + Vibrance	112

¹DG - Droughtgard – tolerant to dry soil conditions

YG, YGCB – The YieldGard corn borer gene offers a high level of resistance to corn stalk borers (southwestern, European, and sugarcane borers). The gene also offers a moderate level of resistance to corn earworm and above average resistance to fall armyworms.

RR – Contains the Roundup Ready (glyphosate) gene.

RR2 – Contains the Roundup Ready Corn 2 gene for over-the-top applications of glyphosate.

LL – Contains the Liberty Link gene for resistance to Liberty (glufosinate) herbicide.

GT – Glyphosate tolerant

VT2P, PRO2 – Contains RR2 gene and YieldGard corn stalk borer gene.

GENVT2P – Contains RR2 gene and Genuity VT PRO genes, which provide resistance to corn stalk borers, fall armyworm, and corn earworm.

VT3P, PRO3 – Contains RR2 gene and YieldGard corn borer and corn rootworm genes.

GENVT3P – Contain RR2 gene and Genuity VT PRO gene, which provides resistance to corn stalk borers, fall armyworm, corn earworm, and corn rootworm.

HX1 – Contains the Herculex Insect Protection gene, which provides protection against corn stalk borers and fall armyworms; and suppresses corn earworm. Contains LL and RR traits.

HXX – Contains both the HX1 and Herculex corn rootworm traits.

SSX– Genuity VTPRO3, HXX, LL, and RR2, provides protection against corn stalk borers, corn earworms, fall armyworms, and corn rootworms.

PowerCore – Provides SSX protection, except for corn rootworm.

VIP3111– Agrisure's Vipteria, contains genes for control of corn stalk borer, corn earworm, fall armyworm, and corn rootworm. Also, provides tolerance to glyphosate and glufosinate.

VIP3111A – Agrisure's VIP plus water-optimized technology (use soil moisture more efficiently)

3000GT – Contains Agrisure's GT and CB/LL genes.

YHR – YGCB/HX1/LL/RR

NOTE: Corn rootworm resistance provided in all of the above traits do not provide resistance to the southern corn rootworm, which is the pest present in Louisiana.

Table 11. List of participating seed companies and corn hybrids tested in the 2016 LAES official variety trials.

Company	Brand/Hybrid
Armor Seed 183 Pennsylvania Ave Waldenburg, AR 72475	Armor AXC6116, Armor AXG6118, Armor 1414, Armor 1500, Armor 1717
Augusta Seed Corporation	Augusta 7768
BH Genetics 5933 FM 1157 Ganado, TX 77962	BH 8721VT2P, BH 8735VTP
Crop Production Services/ Dyna-Gro Seed 11 Gin Rd. Rayville, LA 71269	Dyna-Gro D54VC52, Dyna-Gro D54DC94, Dyna-Gro 56VC46, Dyna-Gro 57VP51, Dyna-Gro D58VC37, Dyna-Gro D58VC65
Delta Grow Seed Co. 220 NW 2 nd P.O. Box 219 England, AR 72046	Delta Grow 2688, Delta Grow 2888, Delta Grow 3660
Dupont Pioneer 59 Grief Parkway, Suite 200 Delaware, OH 43015	Pioneer P1197YHR, Pioneer P1637YHR, Pioneer P1916YHR
Monsanto/Dekalb 2104 Jasmine Drive Opelousas, LA 70570	DEKALB DKC62-08, DEKALB DKC64-35, DEKALB DKC66-59, DEKALB DKC66-75, DEKALB DKC66-87, DEKALB DKC67-14, DEKALB DKC67-44, DEKALB DKC67-72, DEKALB DKC68-26, DEKALB DKC70-27
Mycogen 253 Avondale Rd Greenville, MS 38703	Mycogen 2C797, Mycogen 2D848, Mycogen 2Y744, Mycogen X13813VH, Mycogen MY13M87, Mycogen MY12G35
Syngenta 106 Estate Drive New Iberia, LA 70563	Syngenta N68K-3111A Brand, Syngenta N69D-3000GT Brand
Terral Seed, Inc. 117 Ellington Drive Rayville, LA 71269	REV®23BHR55™, REV®25BHR26™, REV®26BHR50™, REV®28HR20™, REV®28R10™