MISSISSIPPI CORN FOR GRAIN

HYBRID TRIALS, 2019

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS

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This Mississippi Agricultural and Forestry Experiment Station information bulletin is a summary of research conducted under project number MIS 1414 at locations shown on the map on the second page. It is intended for colleagues, cooperators, and sponsors. The interpretation of data presented in this report may change after additional experimentation. Information included is not to be construed as a recommendation for use or as an endorsement of a specific product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

This report contains data generated as part of the Mississippi Agricultural and Forestry Experiment Station research program. Joint sponsorship by the organizations listed on pages 32–33 is gratefully acknowledged.

Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e., trade names, chemical names, etc.) of products used in this research project are listed on pages 32–33.

Mississippi Corn for Grain Hybrid Trials, 2019

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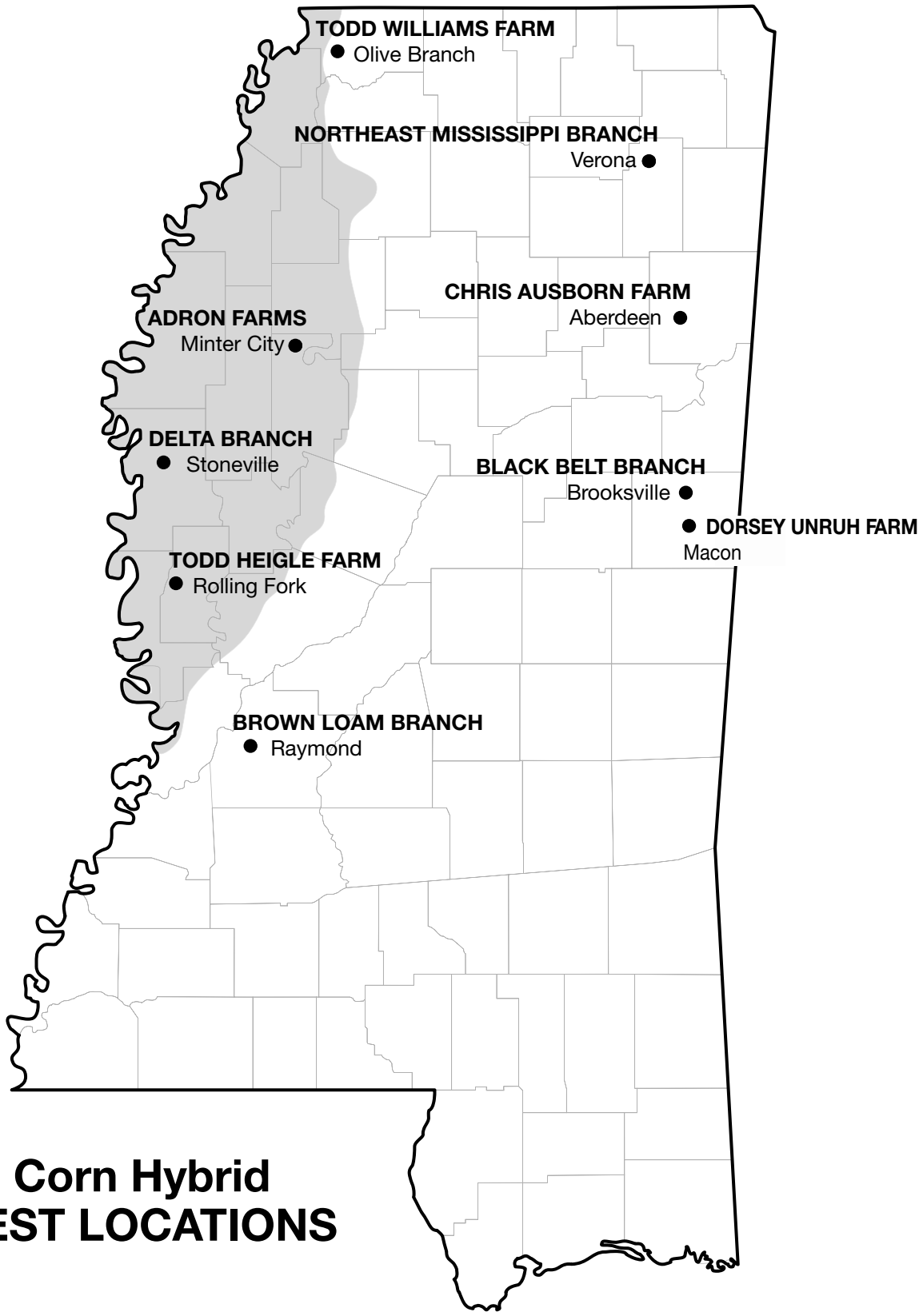
Find variety trial information online at ***mafes.msstate.edu/variety-trials***.



Corn Hybrid TEST LOCATIONS

Mississippi Corn for Grain Hybrid Trials, 2019

PROCEDURES

Trials were conducted on Experiment Station land or on grower-cooperator fields in two geographical areas in Mississippi: Area I, located in the hill region of Mississippi (one irrigated and four dryland locations); and Area II, located in the Delta region of Mississippi (three irrigated locations) (see map). Commercial seed companies were given the opportunity to enter hybrids in either Area I or Area II or both.

Plots consisted of two 30-inch rows, 15 feet long. Weeds were controlled by cultivation and/or herbicides. Only herbicides currently registered for use on corn were used in these studies, with strict adherence to all label instructions.

All hybrids were treated with Poncho or Cruiser for seedling insect control. Experimental design was a randomized complete block with four replications at each location.

Seed of all entries were supplied by participating companies. All seed were packaged for planting at seeding rates suggested by the participating company and planted with a precision vacuum planter. Fertilizer was applied according to soil test recommendations. Plots in Area I were grown under both dryland and irrigated conditions, and plots in Area II were grown under irrigated conditions. All irrigated trials were either furrow or center-pivot irrigated, as necessary.

VARIABLES MEASURED IN THE CORN HYBRID TESTS

Yield: An Almaco SPC 40 plot combine was used to harvest the total area of each plot. Harvested grain was weighed, moisture was determined, and yields were converted to bushels per acre at 14% moisture.

Ear Height: Ear height is the distance from the soil to the highest ear-bearing node.

Harvest Population: Harvest population is a measure of the number of plants per acre, based on actual stand counts.

USE OF DATA TABLES AND SUMMARY STATISTICS

The yield potential of a given hybrid cannot be measured with complete accuracy. Consequently, replicate plots of all hybrids are evaluated for yield, and the yield of a given hybrid is estimated as the mean of all replicate plots of that hybrid. Yields vary somewhat from one replicate plot to another, which introduces a certain degree of error to the value. As a result, although the mean yields of some hybrids are numerically different, the two hybrids may not be significantly different from each other within the range of natural variation. That is, the ability to measure yield is not precise enough to determine what the small differences are, other than what might be observed purely by chance.

The least significant difference (LSD) is an estimate of the smallest difference between two hybrids that can be declared to be the result of something other than random variation in a particular trial. Consider the following example for a given trial:

Hybrid	Yield
A	90 bu/A
B	85 bu/A
C	81 bu/A
LSD	7 bu/A

The difference between hybrid A and hybrid B is 5 bu/A (i.e., 90 - 85 = 5). This difference is smaller than the LSD (7 bu/A). Consequently, we would conclude that hybrid A and hybrid B have the same yield potential, since we are unable to say that the observed difference did not occur purely due to chance. However, the differ-

ence between hybrid A and hybrid C is 9 bu/A (i.e., 90 - 81 = 9), which is larger than the LSD (7 bu/A). We would therefore conclude that the yield potential of hybrid A is superior to that of hybrid C.

The coefficient of variation (CV) is a measure of the relative precision of a given trial and is used to compare the relative precision of different trials. The CV is generally considered an estimate of the amount of unexplained variation in a given trial. This unexplained variation can be the result of variation between plots with respect to soil type, fertility, insects, diseases, moisture stress, etc. Overall, as the CV increases, the precision of a given trial decreases.

The coefficient of determination (R^2) is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The R^2 is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an R^2 value of 90 percent indicates that 90 percent of the observed variation in the trial has been accounted for in the trial, with the remaining 10 percent being unaccounted for. The higher the R^2 value, the more precise the trial. The R^2 is generally considered a better measure of precision than the CV for comparison of different trials.

Table 1. 2019 corn hybrid trials location summary.

Location	Soil type	Irrigation	Planting date	Harvest date	Row spacing
Aberdeen, Chris Ausborn	Houston clay	Not Irrigated	4/2, replanted 4/29	9/9	30”
Brooksville, Black Belt Branch	Brooksville silty clay	Not Irrigated	3/22	8/19	30”
Macon, Dorsey Unruh Farm	Brooksville silty clay	Irrigated	3/27	9/3	30”
Olive Branch, Todd Williams Farm	Collins silt loam	Not Irrigated	4/29	9/13	30”
Stoneville (clay), Delta Branch	Sharkey clay	Irrigated	5/1	9/5	30”
Stoneville (loam), Delta Branch	Bosket very fine sandy loam	Irrigated	3/20	8/30	30”
Stoneville (loam), Delta Branch	Bosket very fine sandy loam	Not Irrigated	4/24	9/5	30”
Raymond, Brown Loam Branch	Loring silt loam	Not Irrigated	3/21	8/20	30”
Minter City, Adron Farms	Dubbs silt loam	Irrigated	4/2	8/21	30”
Verona, Northeast Mississippi Branch	Leeper fine sandy loam	Not Irrigated	3/22	9/4	30”
Rolling Fork, Todd Heigle Farm[1]	—	—	—	—	—

[1]Location not planted in 2019 due to flooding in the south Delta

Table 2. 2019 corn hybrid yield summary for dryland locations.

Brand	Hybrid [1]	Aberdeen hills (clay)	Brooksville hills (clay)	Olive Branch hills (loam)	Raymond hills (loam)	Stoneville delta (loam)	Verona hills (loam)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriGold	A644-32TRCRIB	215.2	158.0	263.8	211.3	231.3	204.9	214.1
AgriGold	A645-16VT2PRO	196.8	178.6	246.2	150.8	229.0	219.5	203.5
AgriGold	A647-46VT2PRO	217.7	152.8	229.0	198.2	205.7	218.0	203.6
AgriGold	A648-54STX	194.5	186.1	239.2	165.5	222.0	213.9	203.5
AgriGold	A6544VT2RIB	208.1	183.0	267.1	196.4	234.4	204.0	215.5
AgriGold	A6659VT2RIB	210.8	166.4	256.4	219.1	219.4	211.9	214.0
AgriGold	A6572VT2RIB	206.1	168.4	257.0	206.9	239.4	217.6	215.9
Agventure	AV8614 YHB	225.8	157.6	252.3	237.3	235.4	220.8	221.5
Agventure	AV7516 YHB	209.0	168.2	272.9	221.4	239.9	189.8	216.9
DeKalb	DKC62-53	222.0	164.7	256.9	203.7	235.0	211.1	215.6
DeKalb	DKC64-35	202.0	168.1	257.9	169.8	226.2	197.5	203.6
DeKalb	DKC65-95	217.1	173.0	246.7	192.8	250.3	200.5	213.4
DeKalb	DKC66-18	197.9	174.4	264.0	181.2	231.2	205.0	208.9
DeKalb	DKC66-75	204.0	183.4	266.2	192.5	238.9	200.6	214.3
DeKalb	DKC67-44	229.9	182.0	274.1	170.9	219.2	201.0	212.8
DeKalb	DKC68-26	198.3	171.4	266.6	197.0	210.3	213.8	209.6
DeKalb	DKC68-69	220.7	171.2	263.3	193.9	236.6	198.8	214.1
DeKalb	DKC70-27	211.5	165.2	275.8	226.6	229.2	213.0	220.2
Dyna Gro	D54VC14	204.4	150.9	227.0	187.1	199.5	194.5	193.9
Dyna Gro	D57VC51	210.9	163.5	240.6	212.9	215.5	204.7	208.0
Dyna-Gro	D57VC17	200.3	152.7	223.0	180.5	197.7	194.3	191.4
Dyna-Gro	D58VC65	176.2	159.7	214.9	178.8	211.9	199.9	190.2
Great Heart Seed	HT-7381VT2P	210.3	145.7	234.0	185.6	207.7	182.5	194.3
Great Heart Seed	HT-7676VT2P	199.3	161.2	214.6	161.2	226.2	194.0	192.7
Great Heart Seed	HX-6321VT2P	194.8	167.3	232.5	192.6	190.4	199.6	196.2
Local Seed	LC0877 VT2P	180.7	165.7	213.1	159.0	197.4	199.6	185.9
Local Seed	LC1577 VT2P	200.2	181.6	227.8	187.9	221.1	188.5	201.2
Local Seed	LC1776VT2P	202.0	192.7	252.9	195.9	231.9	220.1	215.9
Local Seed	LC1878VT2P	212.5	171.0	232.5	183.2	221.6	196.5	202.9
Local Seed	LC1987VT2P	210.1	163.4	226.4	174.9	218.8	204.3	199.7
Local Seed	LS1586TC	190.7	151.5	236.4	179.2	211.0	199.8	194.8
Local Seed	LC1289 VT2P	182.3	153.4	244.7	158.8	202.6	195.8	189.6
Local Seed	LC1488 VT2P	198.0	147.1	230.5	191.4	230.0	203.1	200.0
Local Seed	LCX16-91 *	185.2	155.4	230.6	186.6	226.5	181.3	194.3
Local Seed	LCX17-98 *	199.1	158.2	243.1	192.1	204.2	191.1	198.0
Mission Seeds	A1687VT2P	195.6	136.5	244.7	150.8	219.6	193.3	190.1
MorCorn	MC 4255	195.0	160.9	245.1	196.5	212.9	200.9	201.9
MorCorn	MC4319	193.1	137.4	244.8	171.6	193.7	184.1	187.5
MorCorn	MC4725	207.2	179.2	247.5	204.5	230.0	221.0	214.9
Pioneer	P1464VYHR	202.1	153.4	265.8	221.3	241.5	210.9	215.8
Progeny Ag	PGY 8116SS	215.1	174.1	255.1	211.0	213.0	219.5	214.6
Progeny Ag	PGY 9114VT2P	221.7	181.9	259.5	186.2	235.9	222.1	217.9
Progeny Ag	PGY 9117VT2P	200.9	165.6	244.0	204.9	219.4	217.1	208.6
Progeny Ag	PGY 6119VT2P	201.6	185.4	226.8	217.1	214.5	201.9	207.9
Progeny Ag	EXP1912 *	202.6	134.2	243.7	210.0	216.4	197.5	200.7
Progeny Ag	EXP1913 *	193.0	149.1	229.2	194.5	207.5	201.7	195.8
Progeny Ag	EXP1915 *	194.2	161.5	253.0	162.5	204.3	194.9	195.1
Progeny Ag	EXP1918 *	196.7	141.5	230.2	178.1	209.3	202.9	193.1
Progeny Ag	PGY 6116VT2P	215.5	177.2	257.4	227.5	232.4	213.3	220.6
Progeny Ag	PGY 5115VT2P	212.2	182.9	249.6	149.3	222.3	204.9	203.5
Terral Seed	REV 24BHR99	190.2	153.7	230.9	213.7	246.6	183.1	203.0
Terral Seed	REV 24LPR70	182.7	142.1	218.0	177.4	181.3	175.0	179.4
Terral Seed	REV 25BHR80	196.7	164.7	239.6	175.4	221.9	211.6	201.6
Terral Seed	REV 25BHR89	213.8	170.3	248.6	207.2	236.6	195.8	212.1
Terral Seed	REV 26BHR30	189.7	170.1	233.0	203.5	225.1	190.2	201.9
Terral Seed	REV 2858SXE	198.8	161.7	211.4	201.0	205.1	192.0	195.0
Terral Seed	REV 28BHR18	193.0	161.8	244.2	209.9	243.4	203.8	209.4
Mean		202.7	164.2	243.9	191.5	220.7	202.3	204.2
CV		7.4	9.7	7.4	10.9	8.1	7.3	
LSD (0.05)		20.8	22.1	25.1	29.3	53.6	20.6	
R^2		45.0	54.0	54.5	64.0	25.0	54.9	
Error DF		168	168	168	168	168	168	

[1]Hybrid followed by an asterisk indicates an experimental entry.

Table 3. Two-year corn hybrid yield summary for dryland locations.

Brand	Hybrid	Aberdeen hills (clay)	Brooksville hills (clay)	Olive Branch hills (loam)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriGold	A6544VT2RIB	192.9	174.1	253.4	238.0	214.6
AgriGold	A6659VT2RIB	186.3	174.1	257.5	227.3	211.3
AgriGold	A6572VT2RIB	194.5	183.2	264.1	221.2	215.8
Agventure	AV8614 YHB	204.3	162.2	252.1	228.5	211.8
DeKalb	DKC64-35	192.4	176.3	259.1	226.6	213.6
DeKalb	DKC65-95	185.4	185.9	241.6	240.4	213.3
DeKalb	DKC67-44	208.9	190.9	264.7	227.3	222.9
DeKalb	DKC68-26	178.3	185.6	246.1	223.5	208.3
DeKalb	DKC68-69	197.4	180.5	259.4	231.3	217.1
DeKalb	DKC70-27	197.1	183.1	255.5	234.2	217.5
Dyna Gro	D54VC14	174.2	162.4	225.5	203.4	191.4
Dyna Gro	D57VC51	194.9	169.2	238.4	220.3	205.7
Dyna-Gro	D58VC65	173.6	177.5	237.8	212.2	200.3
Local Seed	LC0877 VT2P	156.5	171.1	208.9	203.8	185.1
Local Seed	LC1577 VT2P	169.4	175.8	225.5	202.9	193.4
Local Seed	LC1776 VT2P	162.2	172.7	221.8	219.6	194.1
Local Seed	LC1878 VT2P	196.3	174.2	223.8	217.3	202.9
Local Seed	LC1987 VT2P	180.6	170.3	217.0	209.0	194.2
Local Seed	LS1586TC	148.0	167.9	235.8	224.8	194.1
MorCorn	MC4319	179.0	156.6	240.9	203.3	194.9
MorCorn	MC4725	176.7	181.8	234.1	217.2	202.5
Progeny Ag	PGY 8116SS	210.7	188.5	258.5	223.3	220.3
Progeny Ag	PGY 9114VT2P	189.5	183.7	259.8	233.1	216.5
Progeny Ag	PGY 9117VT2P	190.1	175.1	241.1	228.9	208.8
Progeny Ag	PGY 6119VT2P	180.9	189.5	236.9	216.9	206.0
Progeny Ag	PGY 6116VT2P	189.8	176.2	253.9	225.7	211.4
Progeny Ag	PGY 5115VT2P	195.5	191.3	257.9	236.0	220.2
Terral Seed	REV 24BHR99	191.9	168.6	246.2	237.8	211.1
Terral Seed	REV 25BHR89	187.9	167.2	225.6	224.7	201.3
Terral Seed	REV 28BHR18	189.1	170.5	239.1	244.2	210.7
Overall mean		185.8	176.2	242.7	223.4	207.0

Table 4. Three-year corn hybrid yield summary for dryland locations.

Brand	Hybrid	Aberdeen hills (clay)	Brooksville hills (clay)	Olive Branch hills (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*
AgriGold	A6544VT2RIB	220.0	174.2	250.8	215.0
AgriGold	A6659VT2RIB	214.5	175.2	248.7	212.8
AgriGold	A6572VT2RIB	208.1	173.3	243.1	208.1
DeKalb	DKC64-35	216.8	173.1	255.5	215.1
DeKalb	DKC65-95	208.2	179.5	230.9	206.2
DeKalb	DKC67-44	225.5	184.5	259.1	223.0
DeKalb	DKC68-26	202.8	184.8	244.0	210.5
DeKalb	DKC70-27	214.3	178.3	242.2	211.6
Dyna Gro	D57VC51	213.7	175.6	222.2	203.9
Dyna-Gro	D58VC65	196.9	179.3	237.1	204.4
MorCorn	MC4319	200.0	158.8	229.7	196.2
MorCorn	MC4725	200.0	172.3	225.5	199.2
Progeny Ag	PGY 8116SS	220.5	186.1	245.3	217.3
Progeny Ag	PGY 6116VT2P	213.7	179.9	249.5	214.4
Progeny Ag	PGY 5115VT2P	211.8	183.7	245.6	213.7
Terral Seed	REV 28BHR18	203.9	167.9	234.3	202.0
Overall Mean		210.7	176.7	241.5	209.6

Table 5. 2019 corn hybrid yield summary for irrigated locations.

Brand	Hybrid[1]	Macon hills (clay)	Minter City delta (loam)	Stoneville delta (clay)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriGold	A644-32TRCRIB	237.5	204.8	180.1	195.1	204.4
AgriGold	A645-16VT2PRO	256.5	237.9	161.6	233.2	222.3
AgriGold	A647-46VT2PRO	242.7	222.0	173.0	203.7	210.4
AgriGold	A648-54STX	239.6	215.0	155.0	211.7	205.3
AgriGold	A6544VT2RIB	260.8	226.6	184.9	229.3	225.4
AgriGold	A6659VT2RIB	259.9	226.6	211.6	237.2	233.8
AgriGold	A6572VT2RIB	244.8	205.5	189.6	232.1	218.0
Agventure	AV8614 YHB	261.8	198.8	204.9	244.6	227.5
Agventure	AV7516 YHB	268.6	195.7	169.1	225.9	214.8
Armor	A1688T	248.8	218.2	197.2	198.6	215.7
Armor	A1810	258.2	205.7	156.2	221.7	210.5
Armor	X8117 *	257.0	202.6	171.4	231.3	215.6
Armor	X9115 *	272.1	234.4	173.4	229.3	227.3
Armor	X9115B *	251.8	220.4	175.9	192.0	210.0
Augusta Seed	A1065	234.8	212.9	163.1	197.3	202.0
Augusta Seed	A4565	255.6	212.4	192.0	226.3	221.6
Augusta Seed	A1367	265.7	205.6	206.2	220.0	224.4
BH Genetics	XP 8509TRE	250.1	208.2	187.4	192.4	209.5
BH Genetics	XP 8511VT2P	256.3	223.6	167.7	204.8	213.1
B-H Genetics	BH 8721VT2P	261.7	210.8	194.5	246.0	228.2
Croplan	C5678	263.9	218.0	159.3	214.1	213.8
Dekalb	DKC62-53	269.1	227.4	178.7	266.5	235.4
Dekalb	DKC64-35	253.3	223.9	174.0	206.6	214.4
Dekalb	DKC65-95	270.5	233.3	186.6	249.9	235.1
Dekalb	DKC66-18	253.3	230.6	168.2	246.6	224.6
Dekalb	DKC66-75	270.6	238.4	178.2	231.9	229.8
Dekalb	DKC67-44	263.0	213.9	190.6	198.2	216.4
Dekalb	DKC68-26	267.4	228.4	161.6	216.8	218.5
Dekalb	DKC68-69	274.5	220.4	190.5	228.2	228.4
Dekalb	DKC70-27	254.6	232.9	173.1	252.4	228.2
Dyna Gro	D54VC14	239.5	216.9	165.6	217.7	209.9
Dyna Gro	D57VC51	273.1	237.5	198.8	231.9	235.3
Dyna-Gro	D55VC80	262.6	230.9	184.2	218.0	223.9
Dyna-Gro	D57VC17	251.6	220.0	177.3	224.3	218.3
Dyna-Gro	D58VC65	268.0	231.0	184.7	253.2	234.3
Great Heart Seed	HT-7302VT2P	256.6	228.8	171.1	226.7	220.8
Great Heart Seed	HT-7381VT2P	252.6	207.1	153.1	202.5	203.8
Great Heart Seed	HT-7425DGVT2P	241.8	213.8	176.6	217.9	212.5
Great Heart Seed	HT-7676VT2P	263.4	216.7	174.1	194.2	212.1
LG Seeds	LG5643VT2RIB	267.7	220.1	168.1	243.5	224.9
LG Seeds	LG5650VT2RIB	265.1	224.9	182.2	260.5	233.2
LG Seeds	LG5701VT2RIB	269.5	230.8	195.0	268.5	241.0
LG Seeds	LG64C30TRCRIB	242.6	209.0	174.5	176.6	200.7
LG Seeds	LG66C32VT2RIB	264.4	213.3	154.9	224.0	214.1
LG Seeds	LG68C22VT2RIB	273.8	226.3	162.0	219.7	220.5
Local Seed	LC0877 VT2P	256.7	227.9	160.1	191.7	209.1
Local Seed	LC1577 VT2P	261.0	222.8	166.8	255.5	226.5
Local Seed	LC1776VT2P	264.7	236.4	178.9	261.8	235.5
Local Seed	LC1878VT2P	261.6	215.0	177.5	197.0	212.8
Local Seed	LC1987VT2P	253.8	212.4	182.4	208.8	214.3
Local Seed	LS1586TC	230.3	186.1	169.0	207.6	198.3
Local Seed	LC1289 VT2P	246.0	207.7	148.7	165.8	192.1
Local Seed	LC1488 VT2P	251.1	215.9	171.9	217.1	214.0
Local Seed	LCX16-91 *	239.3	201.7	163.3	194.5	199.7
Local Seed	LCX17-98 *	261.2	223.7	173.5	207.1	216.4
Mission Seeds	A1687VT2P	255.7	214.8	200.3	209.6	220.1
MorCorn	MC 4255	250.8	211.3	151.2	227.6	210.2
MorCorn	MC4319	234.9	214.9	158.9	206.2	203.7
MorCorn	MC4725	273.7	207.0	182.5	248.1	227.8
Pioneer	P1870YHR	269.7	216.7	190.5	282.5	239.8
Progeny Ag	PGY 8116SS	271.9	182.5	173.0	219.7	211.8
Progeny Ag	PGY 9114VT2P	262.7	216.6	151.3	219.9	212.6
Progeny Ag	PGY 9117VT2P	257.6	205.1	157.5	238.6	214.7

Continued.

Table 5 (cont.). 2019 corn hybrid yield summary for irrigated locations.

Brand	Hybrid[1]	Macon hills (clay)	Minter City delta (loam)	Stoneville delta (clay)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Progeny Ag	PGY 6119VT2P	246.8	209.8	175.4	200.3	208.1
Progeny Ag	EXP1912 *	253.2	219.2	165.7	244.6	220.6
Progeny Ag	EXP1913 *	253.5	194.5	169.6	208.6	206.5
Progeny Ag	EXP1915 *	249.9	187.3	179.0	200.4	204.1
Progeny Ag	PGY 6116VT2P	270.3	201.1	186.4	212.3	217.5
Progeny Ag	PGY 5115VT2P	264.8	223.5	174.1	228.0	222.6
Terral Seed	REV 24BHR99	274.0	208.6	182.7	252.1	229.4
Terral Seed	REV 24LPR70	240.7	194.9	167.4	209.2	203.1
Terral Seed	REV 25BHR80	261.2	197.4	177.1	229.9	216.4
Terral Seed	REV 25BHR89	262.6	192.3	174.7	267.1	224.2
Terral Seed	REV 26BHR30	259.0	197.0	189.1	247.0	223.0
Terral Seed	REV 28BHR18	270.1	205.4	177.4	264.8	229.4
Mean		257.7	215.1	175.6	223.8	218.1
CV		5.8	8.3	8.4	9.6	
LSD (0.05)		20.8	24.8	23.9	34.6	
R^2		43.5	8.3	59.0	65.0	
Error DF		222	222	148	148	

[1]Hybrid followed by an asterisk indicates an experimental entry.

Table 6. Two-year corn hybrid yield summary for irrigated locations.

Brand	Hybrid [1]	Macon hills (clay)	Stoneville delta (clay)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*
AgriGold	A6544VT2RIB	255.3	204.6	223.6	227.8
AgriGold	A6659VT2RIB	257.4	226.6	237.5	240.5
AgriGold	A6572VT2RIB	245.9	211.9	237.6	231.8
Agventure	AV8614 YHB	255.1	234.7	261.3	250.4
Armor	1778 VT2P	233.8	199.5	227.3	220.2
Augusta Seed	A1367	243.2	227.2	227.4	232.6
Croplan	C5678	252.4	198.1	208.9	219.8
Dekalb	DKC64-35	250.5	208.0	214.2	224.2
Dekalb	DKC65-95	257.4	226.4	239.0	241.0
Dekalb	DKC66-75	254.6	216.9	220.5	230.7
Dekalb	DKC67-44	248.8	214.6	222.6	228.7
Dekalb	DKC68-26	250.0	186.3	212.5	216.3
Dekalb	DKC68-69	253.5	222.1	214.1	229.9
Dekalb	DKC70-27	250.9	211.7	246.6	236.4
Dyna Gro	D54VC14	236.2	203.5	208.6	216.1
Dyna Gro	D57VC51	259.0	207.0	219.9	228.7
Dyna-Gro	D58VC65	257.1	209.3	222.1	229.5
Great Heart Seed	HT-7302VT2P	241.2	198.8	218.5	219.5
Great Heart Seed	HT-7381VT2P	243.8	193.6	212.1	216.5
Great Heart Seed	HT-7425DGVT2P	239.5	222.4	223.1	228.3
Great Heart Seed	HT-7676VT2P	246.6	199.0	198.1	214.6
Local Seed	LC0877 VT2P	240.7	190.1	206.5	212.4
Local Seed	LC1577 VT2P	234.2	201.8	239.4	225.1
Local Seed	LC1776VT2P	240.6	203.0	244.3	229.3
Local Seed	LC1878VT2P	238.8	211.4	211.9	220.7
Local Seed	LC1987VT2P	235.1	194.7	210.0	213.3
Local Seed	LS1586TC	230.5	204.3	215.5	216.8
MorCorn	MC4319	233.5	181.6	205.8	207.0
MorCorn	MC4725	265.1	181.9	226.2	224.4
Progeny Ag	PGY 8116SS	252.5	209.1	224.0	228.5
Progeny Ag	PGY 9114VT2P	240.8	193.1	223.0	219.0
Progeny Ag	PGY 9117VT2P	258.8	185.3	227.4	223.8
Progeny Ag	PGY 6119VT2P	242.2	204.0	224.7	223.6

Continued

Table 6 (cont.). Two-year corn hybrid yield summary for irrigated locations.

Brand	Hybrid [1]	Macon hills (clay)	Stoneville delta (clay)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*
Progeny Ag	PGY 6116VT2P	253.2	208.4	214.0	225.2
Progeny Ag	PGY 5115VT2P	243.6	209.8	232.3	228.5
Terral Seed	REV 24BHR99	252.4	214.9	253.2	240.2
Terral Seed	REV 25BHR89	243.9	195.1	244.4	227.8
Terral Seed	REV 28BHR18	250.3	212.9	264.8	242.7
Overall Mean		247.1	205.9	225.3	226.1

[1]Hybrid followed by an asterisk indicates an experimental entry.

Table 7. Three-year corn hybrid summary for irrigated locations.

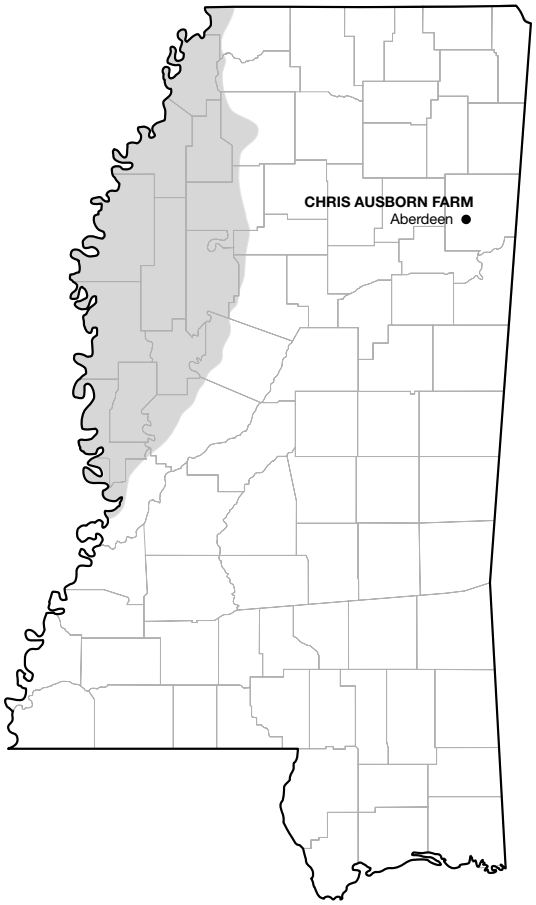
Brand	Hybrid [1]	Macon hills (clay)	Stoneville delta (clay)	Stoneville delta (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*
AgriGold	A6544VT2RIB	255.2	213.0	231.7	233.3
AgriGold	A6659VT2RIB	257.7	234.4	247.7	246.6
AgriGold	A6572VT2RIB	247.4	213.1	235.1	231.9
Croplan	C5678	258.3	211.7	225.1	231.7
Dekalb	DKC64-35	246.9	216.0	227.5	230.1
Dekalb	DKC65-95	254.7	236.7	235.3	242.3
Dekalb	DKC66-75	260.3	227.0	233.8	240.4
Dekalb	DKC67-44	249.9	224.7	229.8	234.8
Dekalb	DKC68-26	257.4	196.7	226.2	226.8
Dekalb	DKC70-27	256.5	227.9	241.2	241.9
Dyna-Gro	D58VC65	262.4	218.8	231.2	237.5
Great Heart Seed	HT-7302VT2P	249.0	209.8	214.6	224.4
Great Heart Seed	HT-7381VT2P	242.7	206.6	223.6	224.3
MorCorn	MC4319	238.3	194.9	209.9	214.4
MorCorn	MC4725	268.5	199.7	239.5	235.9
Progeny Ag	PGY 8116SS	257.1	224.4	239.4	240.3
Progeny Ag	PGY 6116VT2P	257.8	215.5	224.9	232.7
Progeny Ag	PGY 5115VT2P	250.7	219.9	237.5	236.0
Terral Seed	REV 28BHR18	248.7	220.9	259.9	243.1
Overall Mean		253.7	216.4	232.3	234.1

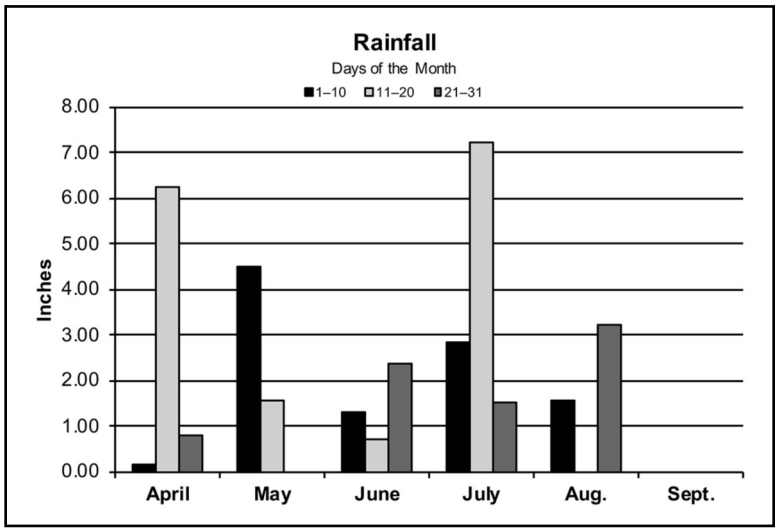
CHRIS AUSBORN FARM, ABERDEEN

Crop Summary

The corn plots were originally planted on April 2 into a stale seedbed that had been hipped the previous fall. After planting, the plot area received over 6 inches of rainfall over a 1-week period. This saturated soil caused significant seedling mortality, so this planting was abandoned. The original planting was destroyed with SelectMax and then replanted on April 29. After the replant, an excellent stand was achieved. Rainfall occurred at the necessary times during the growing season to allow for adequate soil moisture throughout the season. Good yields were observed at this dryland location and harvest was completed in a timely manner.

Soil type . . . . . .Houston clay
Soil pH 6.2
Soil fertility . . . . .P=M, K=M
Fertilizer . . . . . .Preplant — 0-26-26 @ 350 lb/A
Sidedress — N @ 180 lb/A (28-0-0-5S) on May 24
Herbicide . . . . . .Burndown — Glyphosate @ 32 oz/A and 2,4-D @ 16 oz/A on March 5
Preemergence — Corvus @ 5 oz/A, Gramoxone @ 32 oz/A, and Dual II Magnum @ 32 oz/A on April 29
Postemergence — (crop destruction for replant) Select Max @ 6 oz/A on April 22; Glyphosate @ 1 qt/A and Atrazine @ 2 qt/A on May 24
Previous crop . . .Soybeans
Planting date . . .April 2, replanted on April 29
Harvest date . . . .September 9





Rainfall Summary

	Inches
April	7.18
May	6.06
June	4.40
July	11.58
August	4.82
September	0.00
Total	34.04

Table 8. Results from 56 corn hybrids grown without irrigation on a Houston clay soil near Aberdeen, Monroe County, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
DeKalb	DKC67-44	229.9	208.9	225.5	31	15.8	8.2	36
Agventure	AV8614 YHB	225.8	204.3	—	34	15.2	8.2	32
DeKalb	DKC62-53	222.0	—	—	35	14.7	7.3	36
Progeny Ag	PGY 9114VT2P	221.7	189.5	—	36	14.5	7.7	36
DeKalb	DKC68-69	220.7	197.4	—	37	16.7	8.2	35
AgriGold	A647-46VT2PRO	217.7	—	—	35	15.5	8.0	33
DeKalb	DKC65-95	217.1	185.4	208.2	38	15.6	7.9	34
Progeny Ag	PGY 6116VT2P	215.5	189.8	213.7	34	15.5	7.9	32
AgriGold	A644-32TRCRIB	215.2	—	—	40	15.4	7.6	32
Progeny Ag	PGY 8116SS	215.1	210.7	220.5	36	14.8	8.2	34
Terral Seed	REV 25BHR89	213.8	187.9	—	37	15.0	8.1	29
Local Seed	LC1878 VT2P	212.5	196.3	—	34	15.0	7.7	31
Progeny Ag	PGY 5115VT2P	212.2	195.5	211.8	30	14.6	7.9	36
DeKalb	DKC70-27	211.5	197.1	214.3	34	16.8	7.9	35
Dyna Gro	D57VC51	210.9	194.9	213.7	38	15.7	7.9	32
AgriGold	A6659VT2RIB	210.8	186.3	214.5	30	14.5	7.7	33
Great Heart Seed	HT-7381VT2P	210.3	—	—	33	15.6	7.8	33
Local Seed	LC1987 VT2P	210.1	180.6	—	34	14.6	8.1	32
Local Seed	AV7516 YHB	209.0	—	—	34	16.1	8.3	32
AgriGold	A6544VT2RIB	208.1	192.9	220.0	33	14.6	7.6	35
MorCorn	MC4725	207.2	176.7	200.0	32	15.5	7.7	32
AgriGold	A6572VT2RIB	206.1	194.5	208.1	37	15.5	8.0	33
Dyna Gro	D54VC14	204.4	174.2	—	31	14.7	7.3	30
DeKalb	DKC66-75	204.0	—	—	30	15.4	7.7	34
Progeny Ag	EXP1912 *	202.6	—	—	38	14.3	7.7	33
Pioneer	P1464VYHR	202.1	—	—	41	15.4	7.9	31
DeKalb	DKC64-35	202.0	192.4	216.8	38	15.2	8.1	35
Local Seed	LC1776 VT2P	202.0	162.2	—	35	15.6	7.9	31
Progeny Ag	PGY 6119VT2P	201.6	180.9	—	40	15.8	7.5	33
Progeny Ag	PGY 9117VT2P	200.9	190.1	—	29	15.4	7.9	31
Dyna-Gro	D57VC17	200.3	—	—	38	15.4	8.0	29
Local Seed	LC1577 VT2P	200.2	169.4	—	31	14.5	7.3	32
Great Heart Seed	HT-7676VT2P	199.3	—	—	37	15.9	8.2	33
Local Seed	LCX17-98 *	199.1	—	—	35	15.6	7.6	30
Terral Seed	REV 2858SXE	198.8	—	—	33	17.1	7.5	29
DeKalb	DKC68-26	198.3	178.3	202.8	33	15.3	7.9	32
Local Seed	LC1488 VT2PRIB	198.0	—	—	32	14.4	7.8	32
DeKalb	DKC66-18	197.9	—	—	30	15.3	7.9	35
AgriGold	A645-16VT2PRO	196.8	—	—	37	15.7	7.7	34
Progeny Ag	EXP1918 *	196.7	—	—	33	15.2	7.3	28
Terral Seed	REV 25BHR80	196.7	—	—	30	15.0	8.3	29
Mission Seeds	A1687VT2P	195.6	—	—	31	15.5	7.8	36
MorCorn	MC 4255	195.0	—	—	33	15.0	7.9	32
Great Heart Seed	HX-6321VT2P	194.8	—	—	34	15.2	0.0	31
AgriGold	A648-54STX	194.5	—	—	36	15.8	7.7	32
Progeny Ag	EXP1915 *	194.2	—	—	33	15.6	7.6	35
MorCorn	MC4319	193.1	179.0	200.0	40	15.3	7.8	31
Terral Seed	REV 28BHR18	193.0	189.1	203.9	39	16.7	8.5	28
Progeny Ag	EXP1913 *	193.0	—	—	32	15.0	7.9	33
Local Seed	LS1586TC	190.7	148.0	—	36	15.5	7.5	32
Terral Seed	REV 24BHR99	190.2	191.9	—	32	14.7	7.9	34
Terral Seed	REV 26BHR30	189.7	—	—	30	15.7	8.3	29
Local Seed	LCX16-91 *	185.2	—	—	27	16.0	7.6	31
Terral Seed	REV 24LPR70	182.7	—	—	31	15.0	7.5	29
Local Seed	LC1289 VT2P	182.3	—	—	30	15.0	7.9	30
Local Seed	LC0877 VT2P	180.7	156.5	—	33	13.6	7.5	30
Dyna-Gro	D58VC65	176.2	173.6	196.9	36	15.1	7.9	29

Mean	202.7
CV	7.4
LSD (0.05)	20.8
R^2	45.0
Error DF	168

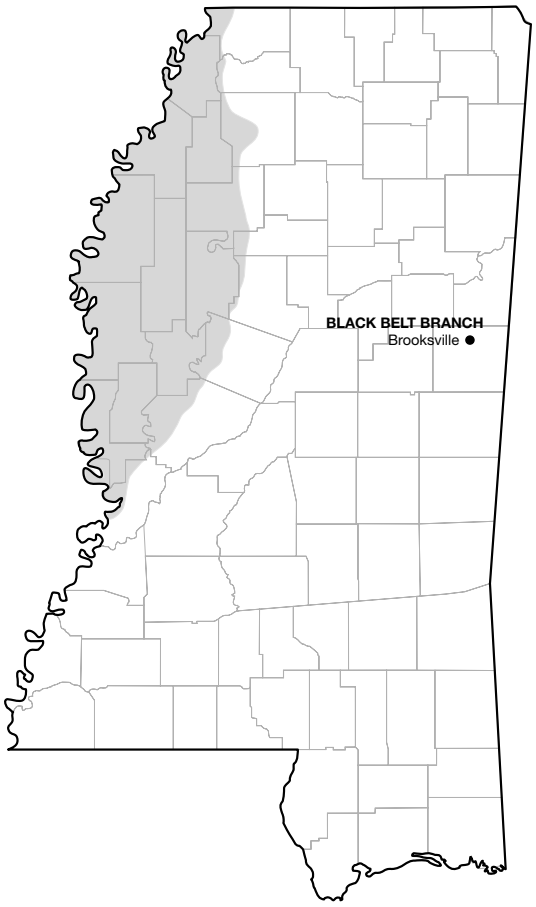
[1]Hybrid followed by an asterisk indicates an experimental entry.

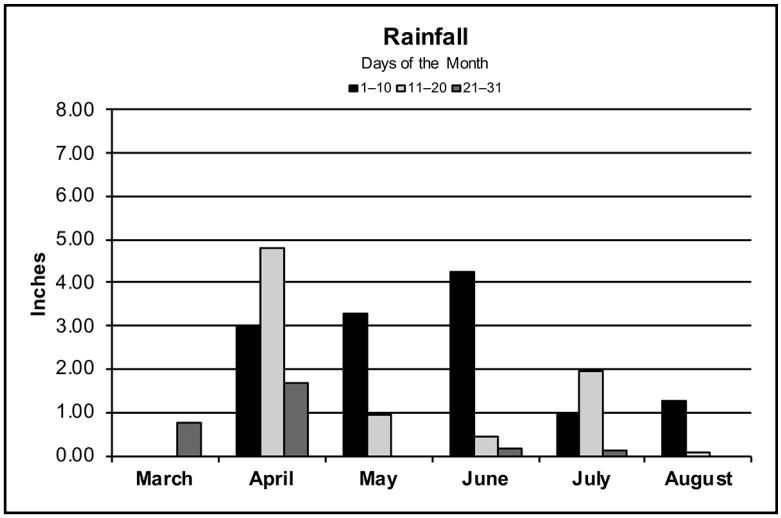
MAFES BLACK BELT BRANCH, BROOKSVILLE

Crop Summary

The corn plots were planted into a stale seedbed that had been hipped the previous fall. This location experienced above-average rainfall the first 6 weeks after planting. Timely herbicide and fertility applications were made during the season, but the crop experienced a midsummer dry spell while the crop was trying to tassel and pollinate. This dry period might have contributed to yields that were slightly below average for this location. Harvest was completed in a timely manner.

Soil type . . . . . .Brooksville silty clay
Soil pH 6.3
Soil fertility . . . . .P=M, K=M
Fertilizer . . . . . .Preplant — 0-26-26 @ 220 lb/A
At planting — 46-0-0 @ 65 lb/A
Topdress — N @ 35 lb/A (46-0-0) on May 2; N @ 155 lb/A (33-0-0-12S) on May 15
Herbicide . . . . . .Preemergence — Accuron @ 2 qt/A and Gramoxone @ 1 qt/A on March 22
Postemergence — Roundup PowerMax @ 24 oz/A and Callisto @ 3 oz/A on May 15
Previous crop . . .Soybeans
Planting date . . . .March 22
Harvest date . . . .August 19





Rainfall Summary

	Inches
March	0.76
April	0.49
May	4.25
June	4.83
July	3.02
August	1.37
Totals	14.72

Table 9. Results from 56 corn hybrids grown without irrigation on a Brooksville silty clay soil at the MAFES Black Belt Branch, Brooksville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Local Seed	LC1776 VT2P	192.7	172.7	—	37	14.0	8.0	31
AgriGold	A648-54STX	186.1	—	—	36	16.3	7.5	33
Progeny Ag	PGY 6119VT2P	185.4	189.5	—	33	16.0	7.2	33
DeKalb	DKC66-75	183.4	—	—	38	15.2	7.4	35
AgriGold	A6544VT2RIB	183.0	174.1	174.2	39	13.7	7.3	34
Progeny Ag	PGY 5115VT2P	182.9	191.3	183.7	28	15.5	7.7	35
DeKalb	DKC67-44	182.0	190.9	184.5	31	16.0	7.8	33
Progeny Ag	PGY 9114VT2P	181.9	183.7	—	33	15.4	6.9	35
Local Seed	LC1577 VT2P	181.6	175.8	—	31	13.7	7.1	31
MorCorn	MC4725	179.2	181.8	172.3	35	15.7	7.5	30
AgriGold	A645-16VT2PRO	178.6	—	—	38	15.0	7.6	34
Progeny Ag	PGY 6116VT2P	177.2	176.2	179.9	35	15.5	7.5	35
DeKalb	DKC66-18	174.4	—	—	27	14.9	7.0	35
Progeny Ag	PGY 8116SS	174.1	188.5	186.1	38	15.8	7.6	33
DeKalb	DKC65-95	173.0	185.9	179.5	31	14.8	7.4	33
DeKalb	DKC68-26	171.4	185.6	184.8	36	14.5	7.4	33
DeKalb	DKC68-69	171.2	180.5	—	37	17.3	7.5	35
Local Seed	LC1878 VT2P	171.0	174.2	—	38	14.8	7.3	32
Terral Seed	REV 25BHR89	170.3	167.2	—	36	14.4	8.1	29
Terral Seed	REV 26BHR30	170.1	—	—	36	16.0	8.0	28
AgriGold	A6572VT2RIB	168.4	183.2	173.3	38	14.6	7.4	35
Local Seed	AV7516 YHB	168.2	—	—	31	14.8	7.5	31
DeKalb	DKC64-35	168.1	176.3	173.1	37	14.3	7.5	34
Great Heart Seed	HX-6321VT2P	167.3	—	—	31	13.7	0.0	31
AgriGold	A6659VT2RIB	166.4	174.1	175.2	38	15.3	7.4	34
Local Seed	LC0877 VT2P	165.7	171.1	—	31	12.9	7.1	29
Progeny Ag	PGY 9117VT2P	165.6	175.1	—	31	15.6	7.9	29
DeKalb	DKC70-27	165.2	183.1	178.3	31	16.0	7.1	34
DeKalb	DKC62-53	164.7	—	—	31	13.9	7.2	36
Terral Seed	REV 25BHR80	164.7	—	—	39	15.2	7.9	30
Dyna Gro	D57VC51	163.5	169.2	175.6	35	14.6	7.6	31
Local Seed	LC1987 VT2P	163.4	170.3	—	32	15.3	7.7	31
Terral Seed	REV 28BHR18	161.8	170.5	167.9	39	15.3	8.4	28
Terral Seed	REV 2858SXE	161.7	—	—	39	17.7	7.2	29
Progeny Ag	EXP1915 *	161.5	—	—	37	15.6	7.4	34
Great Heart Seed	HT-7676VT2P	161.2	—	—	36	14.5	7.5	33
MorCorn	MC 4255	160.9	—	—	26	14.1	7.1	30
Dyna-Gro	D58VC65	159.7	177.5	179.3	26	14.1	7.3	28
Local Seed	LCX17-98 *	158.2	—	—	36	14.9	7.5	31
AgriGold	A644-32TRCRIB	158.0	—	—	36	15.5	7.2	30
Agventure	AV8614 YHB	157.6	162.2	—	24	15.6	7.8	31
Local Seed	LCX16-91 *	155.4	—	—	35	14.6	7.7	30
Terral Seed	REV 24BHR99	153.7	168.6	—	39	14.2	8.1	33
Pioneer	P1464VYHR	153.4	—	—	28	14.5	7.4	31
Local Seed	LC1289 VT2P	153.4	—	—	31	14.7	7.3	31
AgriGold	A647-46VT2PRO	152.8	—	—	36	15.1	7.2	32
Dyna-Gro	D57VC17	152.7	—	—	35	14.1	7.2	29
Local Seed	LS1586TC	151.5	167.9	—	34	14.4	7.4	29
Dyna Gro	D54VC14	150.9	162.4	—	30	15.4	6.9	28
Progeny Ag	EXP1913 *	149.1	—	—	36	14.3	7.4	34
Local Seed	LC1488 VT2PRIB	147.1	—	—	28	13.6	7.3	32
Great Heart Seed	HT-7381VT2P	145.7	—	—	32	15.0	7.5	32
Terral Seed	REV 24LPR70	142.1	—	—	32	14.5	7.2	29
Progeny Ag	EXP1918 *	141.5	—	—	28	14.4	6.9	28
MorCorn	MC4319	137.4	156.6	158.8	27	15.1	7.2	31
Mission Seeds	A1687VT2P	136.5	—	—	32	15.3	7.3	33
Progeny Ag	EXP1912 *	134.2	—	—	36	14.0	7.4	33

Mean	164.2
CV	9.7
LSD (0.05)	22.1
R^2	54.0
Error DF	168

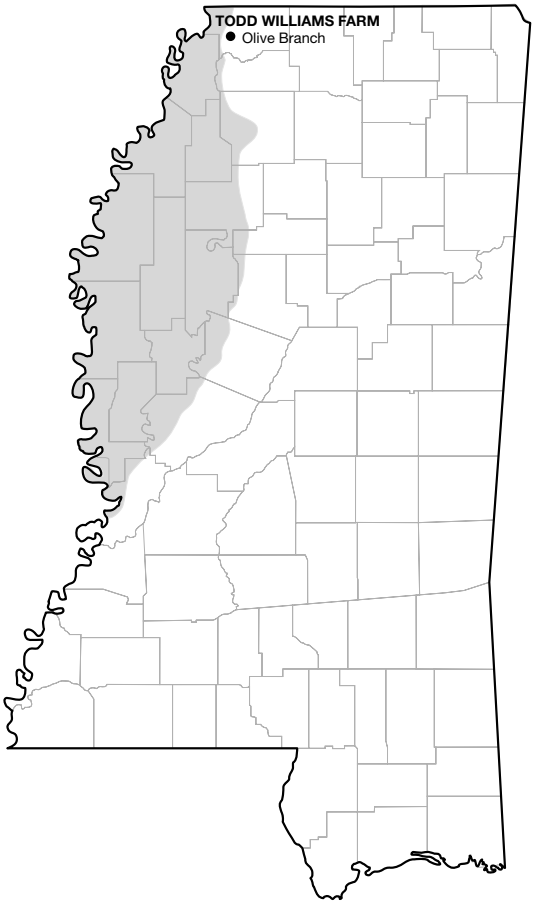
[1]Hybrid followed by an asterisk indicates an experimental entry.

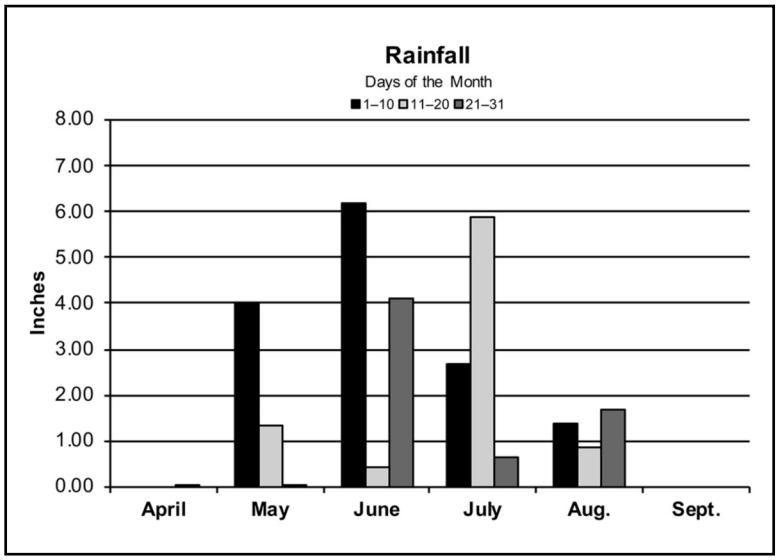
TODD WILLIAMS FARM, OLIVE BRANCH

Crop Summary

The corn plots were planted in late April into a flat seedbed. Soil moisture at planting was adequate for germination. All plots quickly emerged to a good stand. Timely rains fell at critical points during the growing season, which supplied ample soil moisture throughout the summer. This resulted in very good dryland yields at this location. Harvest was completed in a timely manner without difficulties.

Soil type . . . . . .Collins silt loam
Soil pH 6.1
Soil fertility . . . . .P=H, K=H
Fertilizer . . . . . .Preplant — 70-30-120-10S-1B
At Planting — 46-0-0 @ 65 lb/A
Topdress —N @ 120 lb/A (urea + Agritain)
Herbicide . . . . . .Preemergence — Corvus @ 5 oz/A and Gramoxone @ 32 oz/A on April 29
Postemergence — Glyphosate @ 32 oz/A, Atrazine @ 1.2 qt/A, Dual II Magnum @ 1pt/A, and Mesotrione @ 3.2 oz/A
Previous crop . . .Soybeans
Planting date . . .April 29
Harvest date . . . .September 13





Rainfall Summary

	Inches
April	0.04
May	5.34
June	10.71
July	9.18
August	3.89
September	0.00
Total	29.16

Table 10. Results from 56 corn hybrids grown without irrigation on a Collins silt loam soil near Olive Branch, DeSoto County, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Stalk lodging	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*%*	*ft*	*x1000*
DeKalb	DKC70-27	275.8	255.5	242.2	49	0	17.0	9.7	27
DeKalb	DKC67-44	274.1	264.7	259.1	44	0	16.7	9.4	34
Local Seed	AV7516 YHB	272.9	—	—	47	0	16.8	9.5	31
AgriGold	A6544VT2RIB	267.1	253.4	250.8	47	0	15.7	9.3	33
DeKalb	DKC68-26	266.6	246.1	244.0	45	0	16.2	9.2	32
DeKalb	DKC66-75	266.2	—	—	52	0	16.1	8.6	26
Pioneer	P1464VYHR	265.8	—	—	52	0	16.3	9.6	33
DeKalb	DKC66-18	264.0	—	—	48	3	16.2	9.3	30
AgriGold	A644-32TRCRIB	263.8	—	—	58	0	16.3	9.4	33
DeKalb	DKC68-69	263.3	259.4	—	43	0	16.5	9.4	32
Progeny Ag	PGY 9114VT2P	259.5	259.8	—	43	0	16.6	9.2	33
DeKalb	DKC64-35	257.9	259.1	255.5	46	0	16.5	9.3	33
Progeny Ag	PGY 6116VT2P	257.4	253.9	249.5	48	0	14.8	9.4	31
AgriGold	A6572VT2RIB	257.0	264.1	243.1	54	0	17.4	9.3	34
DeKalb	DKC62-53	256.9	—	—	47	3	16.5	9.6	33
AgriGold	A6659VT2RIB	256.4	257.5	248.7	45	0	16.0	9.5	32
Progeny Ag	PGY 8116SS	255.1	258.5	245.3	47	0	16.2	9.1	30
Progeny Ag	EXP1915 *	253.0	—	—	52	3	16.5	9.1	34
Local Seed	LC1776 VT2P	252.9	221.8	—	45	0	16.5	9.3	29
Agventure	AV8614 YHB	252.3	252.1	—	51	0	16.1	9.4	34
Progeny Ag	PGY 5115VT2P	249.6	257.9	245.6	38	0	16.6	9.2	29
Terral Seed	REV 25BHR89	248.6	225.6	—	51	0	16.2	8.9	29
MorCorn	MC4725	247.5	234.1	225.5	49	6	15.7	9.5	32
DeKalb	DKC65-95	246.7	241.6	230.9	46	3	16.3	9.3	32
AgriGold	A645-16VT2PRO	246.2	—	—	52	3	15.7	9.3	34
MorCorn	MC 4255	245.1	—	—	45	0	15.4	9.0	32
MorCorn	MC4319	244.8	240.9	229.7	44	3	16.2	9.0	34
Mission Seeds	A1687VT2P	244.7	—	—	47	0	14.8	9.3	32
Local Seed	LC1289 VT2P	244.7	—	—	45	0	16.7	9.6	32
Terral Seed	REV 28BHR18	244.2	239.1	234.3	47	0	15.9	9.3	33
Progeny Ag	PGY 9117VT2P	244.0	241.1	—	53	0	15.6	8.9	27
Progeny Ag	EXP1912 *	243.7	—	—	47	0	16.8	9.7	28
Local Seed	LCX17-98 *	243.1	—	—	44	0	15.1	8.6	28
Dyna Gro	D57VC51	240.6	238.4	222.2	47	0	16.2	9.3	32
Terral Seed	REV 25BHR80	239.6	—	—	45	0	15.0	9.0	33
AgriGold	A648-54STX	239.2	—	—	49	0	16.6	9.8	32
Local Seed	LS1586TC	236.4	235.8	—	46	0	16.1	9.3	30
Great Heart Seed	HT-7381VT2P	234.0	—	—	48	0	15.3	9.0	28
Terral Seed	REV 26BHR30	233.0	—	—	45	0	17.0	9.9	31
Local Seed	LC1878 VT2P	232.5	223.8	—	44	0	15.7	9.0	29
Great Heart Seed	HX-6321VT2P	232.5	—	—	37	0	17.5	9.4	33
Terral Seed	REV 24BHR99	230.9	246.2	—	47	0	15.9	8.9	30
Local Seed	LCX16-91 *	230.6	—	—	41	0	15.3	9.4	29
Local Seed	LC1488 VT2PRIB	230.5	—	—	43	0	16.1	9.3	30
Progeny Ag	EXP1918 *	230.2	—	—	40	0	15.2	9.2	30
Progeny Ag	EXP1913 *	229.2	—	—	55	0	18.9	8.8	30
AgriGold	A647-46VT2PRO	229.0	—	—	44	0	16.3	9.2	33
Local Seed	LC1577 VT2P	227.8	225.5	—	45	0	16.2	9.7	32
Dyna Gro	D54VC14	227.0	225.5	—	48	0	15.7	9.9	29
Progeny Ag	PGY 6119VT2P	226.8	236.9	—	48	11	16.5	9.4	29
Local Seed	LC1987 VT2P	226.4	217.0	—	51	0	16.5	9.5	31
Dyna-Gro	D57VC17	223.0	—	—	45	0	15.7	8.9	33
Terral Seed	REV 24LPR70	218.0	—	—	41	0	16.8	9.0	34
Dyna-Gro	D58VC65	214.9	237.8	237.1	41	0	16.1	9.3	30
Great Heart Seed	HT-7676VT2P	214.6	—	—	49	0	15.7	9.4	30
Local Seed	LC0877 VT2P	213.1	208.9	—	39	0	14.6	8.8	27
Terral Seed	REV 2858SXE	211.4	—	—	43	3	16.0	8.8	29

Mean	243.9
CV	7.4
LSD (0.05)	25.1
R^2	54.5
Error DF	168

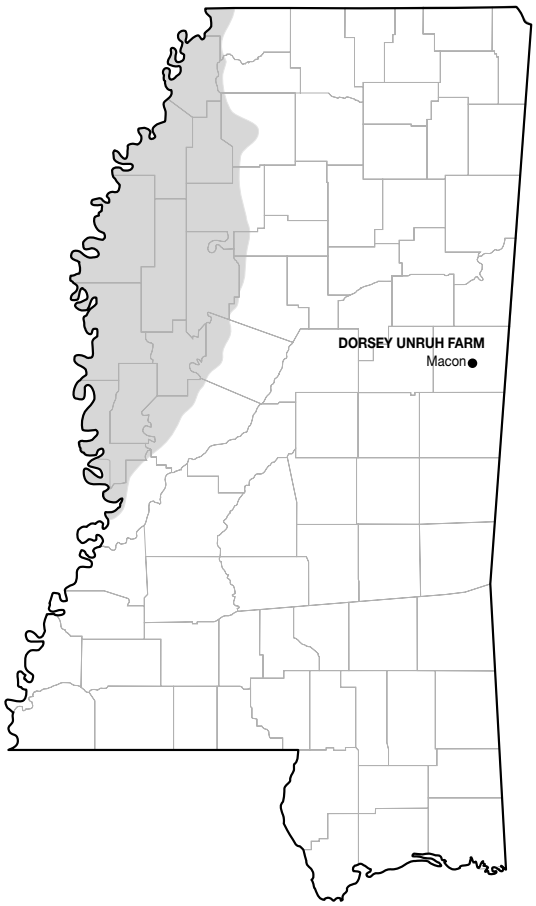
[1]Hybrid followed by an asterisk indicates an experimental entry.

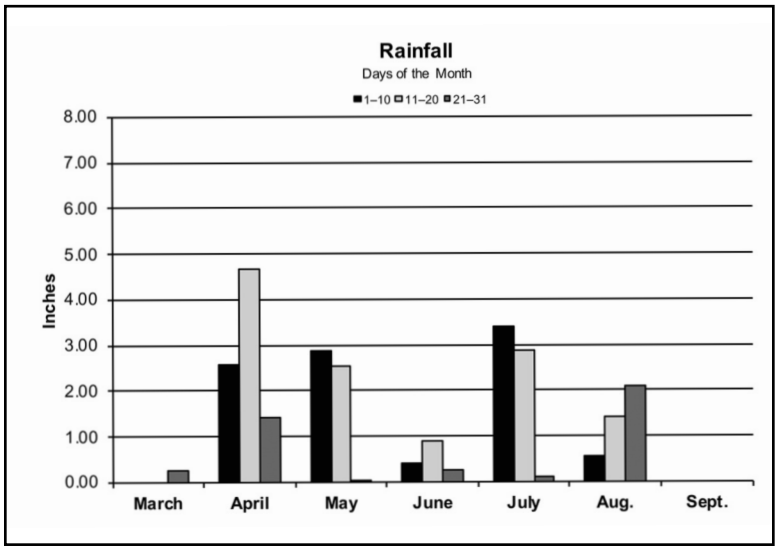
DORSEY UNRUH FARM, MACON

Crop Summary

The plots were planted into a stale seedbed that was prepared the previous fall. Planting occurred in late March in soil that had adequate moisture for germination. All plots emerged to a good stand. Rainfall in combination with a few timely irrigations allowed for good soil moisture throughout the growing season. Harvest was completed in a timely manner during early September, and excellent yields were observed at this location.

Soil type . . . . . .Brooksville and Vaiden silty clay
Soil pH 6.8
Soil fertility . . . . .P=M, K=M
Fertilizer . . . . . .Preplant — Poultry Litter @ 2 tons/A (fall applied) + P_2O_5 @ 177 lb/A and K_2O @ 175 lb/A
At planting — 46-0-0 @ 65 lb/A on March 27
Sidedress — N @ 210 lb/A (32% UAN) on May 1
Herbicide . . . . . .Preemergence — Corvus @ 5 oz/A, Gramoxone @ 32 oz/A, and Atrazine @ 32 oz/A on March 27
Postemergence — Halex GT @ 3.6 pt/A and Atrazine @ 1 qt/A on May 2
Irrigation . . . . . .Center pivot irrigation on May 26 (1”), June 2 (1”), June 13 (1”)
Previous crop . . .Soybeans
Planting date . . . .March 27
Harvest date . . . .September 3





Rainfall Summary

	Inches
March	0.27
April	8.64
May	5.42
June	1.57
July	6.39
August	4.08
September	0.00
Total	26.37

Table 11. Results from 74 corn hybrids grown with center-pivot irrigation on a Brooksville and Vaiden silty clay soil near Macon, Noxubee County, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Dekalb	DKC68-69	274.5	253.5	—	42	16.5	8.9	37
Terral Seed	REV 24BHR99	274.0	252.4	—	41	16.1	9.0	37
LG Seeds	LG68C22VT2RIB	273.8	—	—	41	16.0	9.0	37
MorCorn	MC4725	273.7	265.1	268.5	42	15.5	8.9	36
Dyna Gro	D57VC51	273.1	259.0	—	40	15.8	8.7	37
Armor	X9115 *	272.1	—	—	42	15.6	8.8	37
Progeny Ag	PGY 8116SS	271.9	252.5	257.1	44	15.7	9.0	36
Dekalb	DKC66-75	270.6	254.6	260.3	47	15.3	8.9	36
Dekalb	DKC65-95	270.5	257.4	254.7	46	15.8	8.7	37
Progeny Ag	PGY 6116VT2P	270.3	253.2	257.8	40	16.0	9.4	38
Terral Seed	REV 28BHR18	270.1	250.3	248.7	33	16.0	9.3	30
Pioneer	P1870YHR	269.7	—	—	35	16.5	8.9	37
LG Seeds	LG5701VT2RIB	269.5	—	—	43	15.8	9.0	37
Dekalb	DKC62-53	269.1	—	—	34	15.0	8.5	35
Agventure	AV7516 YHB	268.6	—	—	40	16.0	9.4	35
Dyna-Gro	D58VC65	268.0	257.1	262.4	39	15.4	8.6	35
LG Seeds	LG5643VT2RIB	267.7	—	—	42	15.0	8.7	36
Dekalb	DKC68-26	267.4	250.0	257.4	43	15.3	9.0	34
Augusta Seed	A1367	265.7	243.2	—	41	15.9	9.4	36
LG Seeds	LG5650VT2RIB	265.1	—	—	44	15.4	8.7	37
Progeny Ag	PGY 5115VT2P	264.8	243.6	250.7	35	15.4	8.5	38
Local Seed	LC1776VT2P	264.7	240.6	—	40	15.3	8.8	33
LG Seeds	LG66C32VT2RIB	264.4	—	—	33	15.4	8.6	37
Croplan	C5678	263.9	252.4	258.3	37	15.6	8.4	38
Great Heart Seed	HT-7676VT2P	263.4	246.6	—	42	15.9	8.9	37
Dekalb	DKC67-44	263.0	248.8	249.9	38	15.9	9.0	33
Progeny Ag	PGY 9114VT2P	262.7	240.8	—	40	15.0	8.6	37
Terral Seed	REV 25BHR89	262.6	243.9	—	45	15.2	8.9	33
Dyna-Gro	D55VC80	262.6	—	—	40	15.5	9.1	35
Agventure	AV8614 YHB	261.8	255.1	—	33	15.5	8.9	36
B-H Genetics	BH 8721VT2P	261.7	—	—	38	15.4	8.7	33
Local Seed	LC1878VT2P	261.6	238.8	—	41	15.9	9.0	35
Local Seed	LCX17-98 *	261.2	—	—	38	15.4	8.4	34
Terral Seed	REV 25BHR80	261.2	—	—	45	15.6	9.0	34
Local Seed	LC1577 VT2P	261.0	234.2	—	34	14.9	8.1	36
AgriGold	A6544VT2RIB	260.8	255.3	255.2	38	14.9	8.3	35
AgriGold	A6659VT2RIB	259.9	257.4	257.7	39	16.0	8.9	35
Terral Seed	REV 26BHR30	259.0	—	—	46	15.8	9.2	31
Armor	A1810	258.2	—	—	33	16.3	8.4	35
Progeny Ag	PGY 9117VT2P	257.6	258.8	—	35	15.5	9.0	29
Armor	1778 VT2P	257.0	233.8	—	36	15.7	8.4	36
Local Seed	LC0877 VT2P	256.7	240.7	—	40	14.6	8.8	34
Great Heart Seed	HT-7302VT2P	256.6	241.2	249.0	37	15.2	8.5	35
AgriGold	A645-16VT2PRO	256.5	—	—	40	15.5	9.0	35
BH Genetics	XP 8511VT2P	256.3	—	—	41	15.2	8.4	37
Mission Seeds	A1687VT2P	255.7	—	—	40	15.9	8.8	37
Augusta Seed	A4565	255.6	—	—	45	15.4	9.1	40
Dekalb	DKC70-27	254.6	250.9	256.5	32	16.2	8.3	38
Local Seed	LC1987VT2P	253.8	235.1	—	40	16.1	9.0	35
Progeny Ag	EXP1913 *	253.5	—	—	40	15.2	8.8	37
Dekalb	DKC64-35	253.3	250.5	246.9	41	15.2	9.0	38
Dekalb	DKC66-18	253.3	—	—	42	15.0	8.6	34
Progeny Ag	EXP1912 *	253.2	—	—	35	14.8	8.6	35
Great Heart Seed	HT-7381VT2P	252.6	243.8	242.7	41	15.8	8.7	36
Armor	X9115B *	251.8	—	—	38	15.2	8.8	35
Dyna-Gro	D57VC17	251.6	—	—	46	16.0	8.5	33
Local Seed	LC1488 VT2P	251.1	—	—	41	14.8	8.7	36
MorCorn	MC 4255	250.8	—	—	31	15.0	8.9	36
BH Genetics	XP 8509TRE	250.1	—	—	39	15.3	8.4	35
Progeny Ag	EXP1915 *	249.9	—	—	38	15.6	8.5	36
Armor	A1688T	248.8	—	—	42	15.4	8.4	37
Progeny Ag	PGY 6119VT2P	246.8	242.2	—	42	16.3	8.8	33
Local Seed	LC1289 VT2P	246.0	—	—	41	15.0	8.7	35

Continued.

Table 11 (cont.). Results from 74 corn hybrids grown with center-pivot irrigation on a Brooksville and Vaiden silty clay soil near Macon, Noxubee County, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
AgriGold	A6572VT2RIB	244.8	245.9	247.4	46	15.6	8.6	36
AgriGold	A647-46VT2PRO	242.7	—	—	44	15.7	9.1	33
LG Seeds	LG64C30TRCRIB	242.6	—	—	39	15.6	8.9	32
Great Heart Seed	HT-7425DGVT2P	241.8	239.5	—	43	15.4	8.7	37
Terral Seed	REV 24LPR70	240.7	—	—	43	15.2	8.2	34
AgriGold	A648-54STX	239.6	—	—	42	16.4	8.5	33
Dyna Gro	D54VC14	239.5	236.2	—	35	15.1	8.1	35
Local Seed	LCX16-91 *	239.3	—	—	39	15.6	8.5	34
AgriGold	A644-32TRCRIB	237.5	—	—	36	15.7	8.4	34
MorCorn	MC4319	234.9	233.5	238.3	39	15.7	9.0	35
Augusta Seed	A1065	234.8	—	—	36	15.0	8.8	31
Local Seed	LS1586TC	230.3	230.5	—	32	15.4	8.3	32
Mean		257.7						
CV		5.8						
LSD (0.05)		20.8						
R^2		43.5						
Error DF		222						

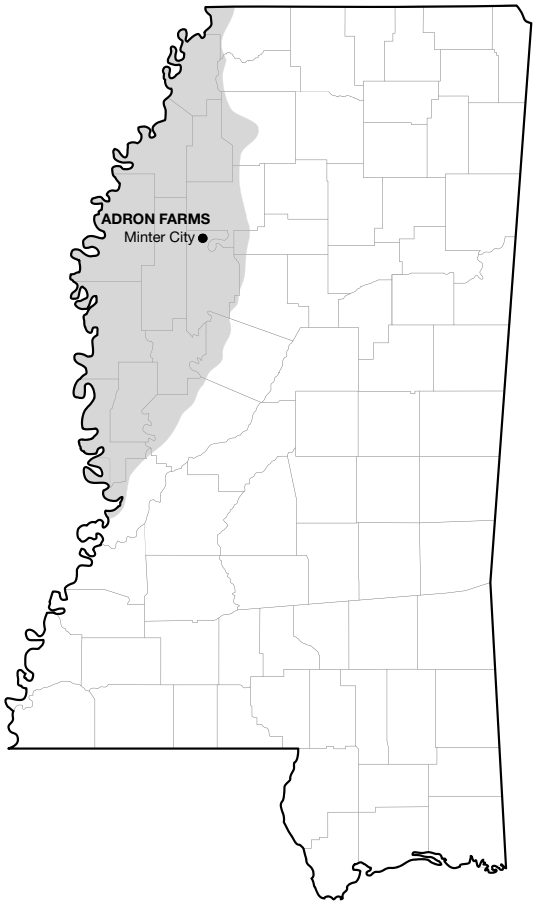
[1]Hybrid followed by an asterisk indicates an experimental entry.

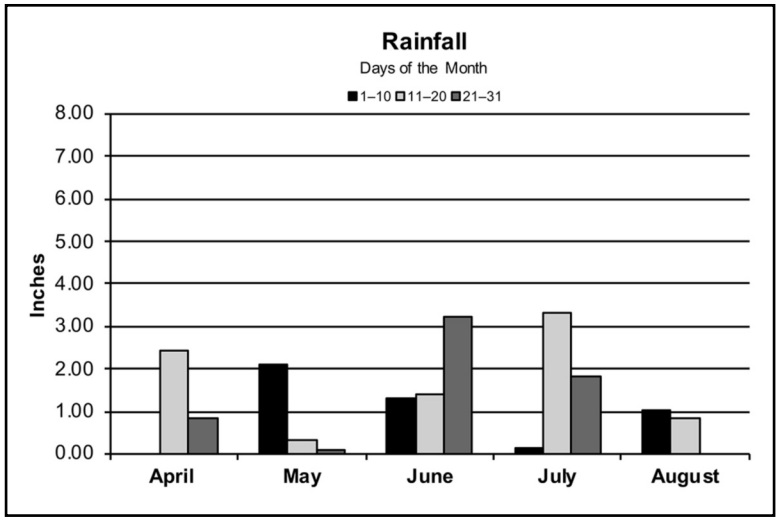
ADRON FARMS, MINTER CITY

Crop Summary

The plots were planted in a stale seedbed. Early April was the first opportunity to plant due to the frequency of spring rains. Soil moisture was ideal at planting for germination and emergence. All plots emerged to a good stand. Rainfall and furrow irrigation supplied ample soil moisture throughout the growing season. Harvest was completed in a timely manner and good yields were observed.

Soil type . . . . . .Dubbs silt loam
Soil pH 6.1
Soil fertility . . . . .P=H, K=H
Fertilizer . . . . . .Preplant — Urea @ 100 lb/A
Topdress — Applied once a week beginning 1 week after planting, 41-0-04S @ 100 lb/A for 3 weeks, then 46-0-0 A 100 lb/A for 3 weeks
Herbicide . . . . . .Preemergence — Corvus @ 5 oz/A and Atrazine @ 32 oz/A on April 2
Postemergence — Atrazine @ 32 oz/A and Halex GT @ 56 oz/A
Previous crop . . .Soybeans
Planting date . . .April 2
Harvest date . . . .August 21
Irrigation . . . . . .Furrow irrigated as needed





Rainfall Summary

	Inches
April	3.26
May	2.52
June	5.93
July	5.27
August	1.84
Totals	18.82

Table 12. Results from 74 corn hybrids grown with furrow irrigation on a Dubbs silt loam soil near Minter City, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average [2]	3-year average [3]	Ear height	Stalk lodging	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*%*	*ft*	*x1000*
Dekalb	DKC66-75	238.4	—	—	41	0	19.3	8.1	35
AgriGold	A645-16VT2PRO	237.9	—	—	37	0	20.4	8.3	35
Dyna Gro	D57VC51	237.5	—	—	36	3	19.6	8.4	35
Local Seed	LC1776VT2P	236.4	—	—	39	0	20.2	8.5	30
Armor	X9115 *	234.4	—	—	38	0	19.7	8.4	37
Dekalb	DKC65-95	233.3	—	—	35	0	19.3	8.1	34
Dekalb	DKC70-27	232.9	—	—	39	0	22.2	8.1	37
Dyna-Gro	D58VC65	231.0	—	—	31	0	19.7	8.1	32
Dyna-Gro	D55VC80	230.9	—	—	39	0	19.5	8.2	35
LG Seeds	LG5701VT2RIB	230.8	—	—	36	0	19.9	8.2	36
Dekalb	DKC66-18	230.6	—	—	33	0	18.5	7.9	36
Great Heart Seed	HT-7302VT2P	228.8	—	—	37	6	18.4	7.8	33
Dekalb	DKC68-26	228.4	—	—	39	0	19.6	8.7	32
Local Seed	LC0877 VT2P	227.9	—	—	36	0	16.9	8.2	32
Dekalb	DKC62-53	227.4	—	—	41	0	19.2	7.8	32
AgriGold	A6544VT2RIB	226.6	—	—	37	0	18.9	8.5	33
AgriGold	A6659VT2RIB	226.6	—	—	36	0	20.5	8.5	34
LG Seeds	LG68C22VT2RIB	226.3	—	—	39	0	20.4	8.3	36
LG Seeds	LG5650VT2RIB	224.9	—	—	40	0	18.8	8.4	36
Dekalb	DKC64-35	223.9	—	—	39	0	18.1	8.6	37
Local Seed	LCX17-98 *	223.7	—	—	34	0	21.1	7.9	35
BH Genetics	XP 8511VT2P	223.6	—	—	45	0	19.0	8.3	30
Progeny Ag	PGY 5115VT2P	223.5	—	—	35	0	19.3	7.9	37
Local Seed	LC1577 VT2P	222.8	—	—	34	0	19.2	8.1	32
AgriGold	A647-46VT2PRO	222.0	—	—	39	0	19.9	8.3	34
Armor	X9115B *	220.4	—	—	42	0	19.1	8.3	30
Dekalb	DKC68-69	220.4	—	—	39	0	21.6	8.3	36
LG Seeds	LG5643VT2RIB	220.1	—	—	31	0	18.9	7.9	36
Dyna-Gro	D57VC17	220.0	—	—	38	0	19.2	8.0	33
Progeny Ag	EXP1912 *	219.2	—	—	35	0	17.5	8.4	33
Armor	A1688T	218.2	—	—	38	0	18.1	8.2	36
Croplan	C5678	218.0	—	—	37	0	20.0	7.9	38
Dyna Gro	D54VC14	216.9	—	—	31	3	18.4	8.0	31
Great Heart Seed	HT-7676VT2P	216.7	—	—	35	0	20.9	8.4	36
Pioneer	P1870YHR	216.7	—	—	36	0	20.0	8.7	36
Progeny Ag	PGY 9114VT2P	216.6	—	—	33	0	19.3	7.8	35
Local Seed	LC1488 VT2P	215.9	—	—	36	6	18.4	8.3	32
AgriGold	A648-54STX	215.0	—	—	40	0	20.2	8.1	33
Local Seed	LC1878VT2P	215.0	—	—	40	0	19.7	8.4	33
MorCorn	MC4319	214.9	—	—	40	0	19.3	8.3	35
Mission Seeds	A1687VT2P	214.8	—	—	38	0	19.5	8.5	36
Dekalb	DKC67-44	213.9	—	—	32	0	20.1	8.5	32
Great Heart Seed	HT-7425DGVT2P	213.8	—	—	39	0	19.6	8.3	36
LG Seeds	LG66C32VT2RIB	213.3	—	—	36	0	18.6	8.1	34
Augusta Seed	A1065	212.9	—	—	40	0	18.4	8.2	30
Local Seed	LC1987VT2P	212.4	—	—	43	0	20.9	8.6	33
Augusta Seed	A4565	212.4	—	—	41	0	20.1	9.0	35
MorCorn	MC 4255	211.3	—	—	36	0	17.7	8.0	34
B-H Genetics	BH 8721VT2P	210.8	—	—	37	0	20.1	8.3	26
Progeny Ag	PGY 6119VT2P	209.8	—	—	34	0	20.6	8.3	31
LG Seeds	LG64C30TRCRIB	209.0	—	—	39	0	19.8	8.4	31
Terral Seed	REV 24BHR99	208.6	—	—	40	0	18.9	8.3	31
BH Genetics	XP 8509TRE	208.2	—	—	43	0	19.7	8.5	33
Local Seed	LC1289 VT2P	207.7	—	—	36	0	18.0	8.3	31
Great Heart Seed	HT-7381VT2P	207.1	—	—	41	0	19.7	8.4	33
MorCorn	MC4725	207.0	—	—	38	0	19.9	8.6	31
Armor	A1810	205.7	—	—	40	0	22.5	7.9	32
Augusta Seed	A1367	205.6	—	—	42	0	21.1	9.4	33
AgriGold	A6572VT2RIB	205.5	—	—	38	0	19.2	8.3	33
Terral Seed	REV 28BHR18	205.4	—	—	37	0	20.4	8.9	27
Progeny Ag	PGY 9117VT2P	205.1	—	—	36	0	19.9	8.3	27
AgriGold	A644-32TRCRIB	204.8	—	—	37	0	19.3	8.2	30
Armor	1778 VT2P	202.6	—	—	36	0	19.6	8.1	33
Local Seed	LCX16-91 *	201.7	—	—	38	0	19.8	8.2	34

Continued.

Table 12 (cont.). Results from 74 corn hybrids grown with furrow irrigation on a Dubbs silt loam soil near Minter City, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average [2]	3-year average [3]	Ear height	Stalk lodging	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*%*	*ft*	*x1000*
Progeny Ag	PGY 6116VT2P	201.1	—	—	33	9	21.0	8.3	33
Agventure	AV8614 YHB	198.8	—	—	43	0	20.2	8.5	33
Terral Seed	REV 25BHR80	197.4	—	—	40	0	20.1	8.8	35
Terral Seed	REV 26BHR30	197.0	—	—	35	0	20.6	8.4	30
Agventure	AV7516 YHB	195.7	—	—	43	0	20.7	8.6	33
Terral Seed	REV 24LPR70	194.9	—	—	38	0	19.0	7.7	32
Progeny Ag	EXP1913 *	194.5	—	—	34	0	18.9	8.3	33
Terral Seed	REV 25BHR89	192.3	—	—	37	3	20.0	8.6	32
Progeny Ag	EXP1915 *	187.3	—	—	39	0	20.2	8.1	35
Local Seed	LS1586TC	186.1	—	—	37	0	19.2	8.5	28
Progeny Ag	PGY 8116SS	182.5	—	—	49	0	20.6	8.6	29
Mean		214.8							
CV		8.3							
LSD (0.05)		24.8							
R^2		43.0							
Error DF		222							

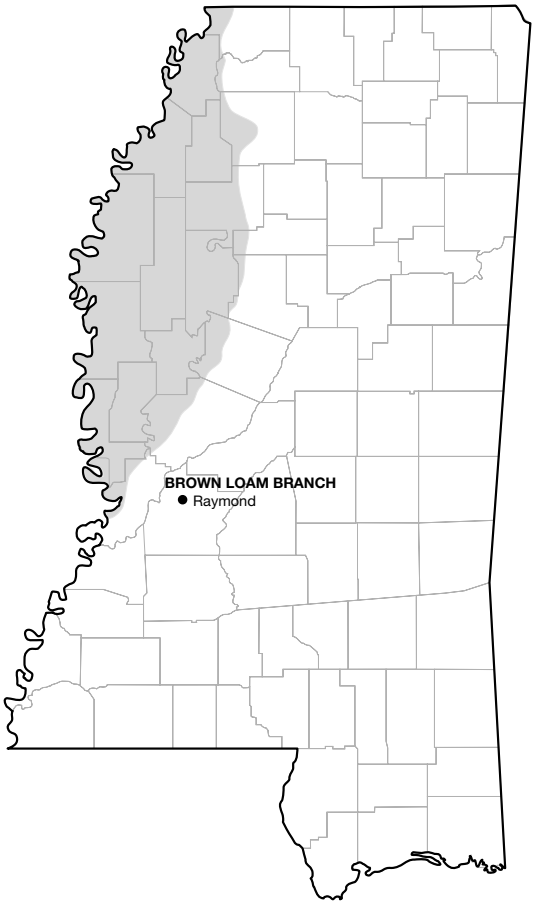
[1]Hybrid followed by an asterisk indicates an experimental entry.
[2]No 2-year average
[3]No 3-year average

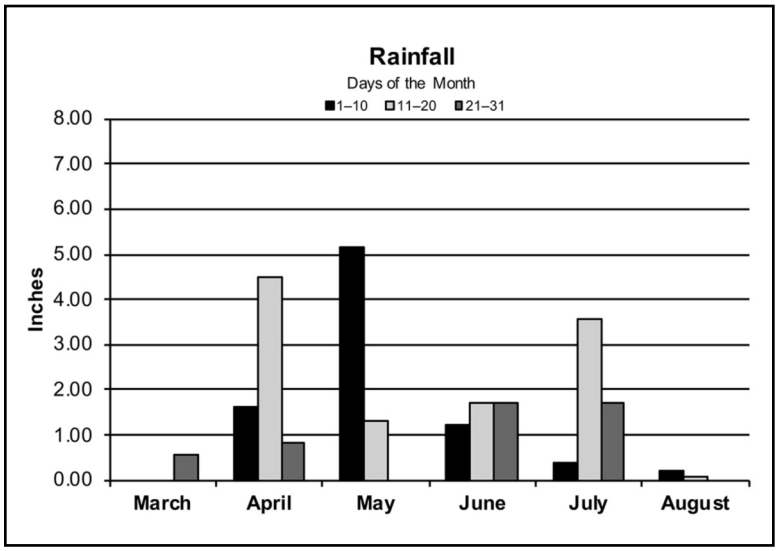
MAFES BROWN LOAM BRANCH, RAYMOND

Crop Summary

The corn plots were planted into a stale seedbed that had been prepared the winter before. Conditions at planting were favorable for germination. Excessive rainfall was recorded in the next few weeks after planting. Cooler weather accompanied the rains. The corn was slow to emerge from the ground. Rainfall throughout the summer supplied ample soil moisture during the growing season. Weather conditions were very favorable at the time of harvest, and harvest was completed in a timely manner.

Soil type . . . . . .Loring silt loam
Soil pH 6.0
Soil fertility . . . . .P=M, K=M
Fertilizer . . . . . .At planting — 46-0-0 @ 65 lb/A
Topdress — N @ 35 lb/A (46-0-0) on May 3; N @ 155 lb/A (33-0-0-12S) on May 16
Herbicide . . . . . .Preemergence — Acuron @ 2 qt/A and Gramoxone @ 1 qt/A on March 21
Postemergence — Roundup PowerMax @ 32 oz/A and Callisto @ 3 oz/A on May 16
Previous crop . . .Wheat
Planting date . . . .March 21
Harvest date . . . .August 20





Rainfall Summary

	Inches
March	0.55
April	6.93
May	6.47
June	4.64
July	5.65
August	0.31
Total	24.55

Table 13. Results from 56 corn hybrids grown without irrigation on a Loring silt loam at the MAFES Brown Loam Branch, Raymond, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Stalk lodging	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*%*	*ft*	*x1000*
Agventure	AV8614 YHB	237.3	—	—	30	0.0	16.6	8.9	27
Progeny Ag	PGY 6116VT2P	227.5	—	—	35	0.0	18.0	8.7	32
DeKalb	DKC70-27	226.6	—	—	36	0.0	19.0	8.4	31
Local Seed	AV7516 YHB	221.4	—	—	35	0.0	17.6	9.0	29
Pioneer	P1464VYHR	221.3	—	—	38	3.3	16.4	8.4	30
AgriGold	A6659VT2RIB	219.1	—	—	35	0.0	17.1	8.1	29
Progeny Ag	PGY 6119VT2P	217.1	—	—	33	0.0	16.1	8.4	28
Terral Seed	REV 24BHR99	213.7	—	—	32	14.7	16.6	9.1	27
Dyna Gro	D57VC51	212.9	—	—	30	0.0	17.1	8.3	27
AgriGold	A644-32TRCRIB	211.3	—	—	32	0.0	16.4	8.5	25
Progeny Ag	PGY 8116SS	211.0	—	—	33	0.0	18.0	8.8	27
Progeny Ag	EXP1912 *	210.0	—	—	38	6.6	15.7	8.6	30
Terral Seed	REV 28BHR18	209.9	—	—	44	8.4	18.1	9.2	24
Terral Seed	REV 25BHR89	207.2	—	—	40	0.0	16.4	8.6	26
AgriGold	A6572VT2RIB	206.9	—	—	35	0.0	17.2	8.3	29
Progeny Ag	PGY 9117VT2P	204.9	—	—	29	0.0	17.0	8.7	29
MorCorn	MC4725	204.5	—	—	31	6.9	17.1	8.3	29
DeKalb	DKC62-53	203.7	—	—	32	0.0	16.1	8.6	30
Terral Seed	REV 26BHR30	203.5	—	—	37	3.8	16.9	8.7	26
Terral Seed	REV 2858SXE	201.0	—	—	40	0.0	20.1	8.3	27
AgriGold	A647-46VT2PRO	198.2	—	—	37	0.0	17.4	8.3	28
DeKalb	DKC68-26	197.0	—	—	32	6.4	17.4	8.8	31
MorCorn	MC 4255	196.5	—	—	33	11.1	16.7	7.9	27
AgriGold	A6544VT2RIB	196.4	—	—	32	16.2	15.9	8.4	31
Local Seed	LC1776 VT2P	195.9	—	—	32	6.9	16.4	8.3	29
Progeny Ag	EXP1913 *	194.5	—	—	34	7.2	17.5	8.2	28
DeKalb	DKC68-69	193.9	—	—	31	0.0	20.0	8.5	29
DeKalb	DKC65-95	192.8	—	—	35	10.2	19.3	8.8	29
Great Heart Seed	HX-6321VT2P	192.6	—	—	32	0.0	16.1	8.0	26
DeKalb	DKC66-75	192.5	—	—	35	0.0	17.8	8.5	30
Local Seed	LCX17-98 *	192.1	—	—	32	7.5	17.4	8.2	27
Local Seed	LC1488 VT2PRIB	191.4	—	—	30	0.0	15.8	9.1	26
Local Seed	LC1577 VT2P	187.9	—	—	32	7.3	16.3	8.1	27
Dyna Gro	D54VC14	187.1	—	—	29	16.6	16.8	7.7	24
Local Seed	LCX16-91 *	186.6	—	—	29	18.0	18.7	8.4	23
Progeny Ag	PGY 9114VT2P	186.2	—	—	29	6.7	16.6	8.1	30
Great Heart Seed	HT-7381VT2P	185.6	—	—	38	0.0	17.4	8.6	23
Local Seed	LC1878 VT2P	183.2	—	—	34	0.0	18.3	8.7	24
DeKalb	DKC66-18	181.2	—	—	31	0.0	18.0	8.3	27
Dyna-Gro	D57VC17	180.5	—	—	33	0.0	18.2	8.4	25
Local Seed	LS1586TC	179.2	—	—	30	4.1	16.7	8.5	24
Dyna-Gro	D58VC65	178.8	—	—	29	0.0	16.9	8.1	26
Progeny Ag	EXP1918 *	178.1	—	—	23	17.4	17.7	7.8	26
Terral Seed	REV 24LPR70	177.4	—	—	28	0.0	16.2	7.7	26
Terral Seed	REV 25BHR80	175.4	—	—	34	18.0	16.1	8.7	22
Local Seed	LC1987 VT2P	174.9	—	—	35	0.0	18.7	8.7	22
MorCorn	MC4319	171.6	—	—	31	0.0	17.8	8.1	22
DeKalb	DKC67-44	170.9	—	—	34	13.2	18.9	8.2	23
DeKalb	DKC64-35	169.8	—	—	27	13.3	17.8	8.7	23
AgriGold	A648-54STX	165.5	—	—	35	3.9	18.2	8.0	25
Progeny Ag	EXP1915 *	162.5	—	—	33	0.0	18.3	8.2	21
Great Heart Seed	HT-7676VT2P	161.2	—	—	33	7.7	18.6	8.5	26
Local Seed	LC0877 VT2P	159.0	—	—	32	0.0	15.5	8.2	24
Local Seed	LC1289 VT2P	158.8	—	—	26	0.0	17.1	8.0	22
Mission Seeds	A1687VT2P	150.8	—	—	31	16.5	17.3	8.2	24
AgriGold	A645-16VT2PRO	150.8	—	—	27	7.8	19.0	8.4	26
Progeny Ag	PGY 5115VT2P	149.3	—	—	31	0.0	16.8	8.5	30

Mean	191.5
CV	10.9
LSD (0.05)	29.3
R^2	64.0
Error DF	168

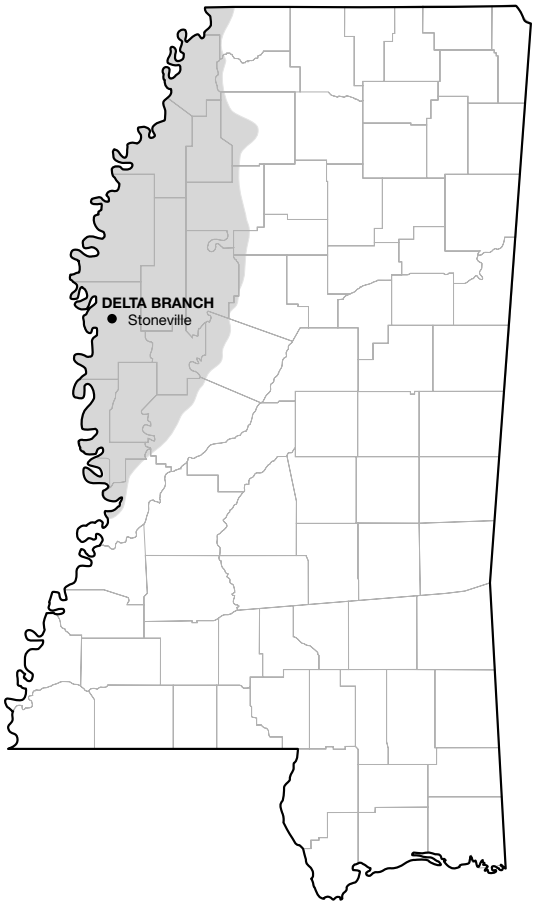
[1]Hybrid followed by an asterisk indicates an experimental entry.
[2]No 2-year average.
[3]No 3-year average.

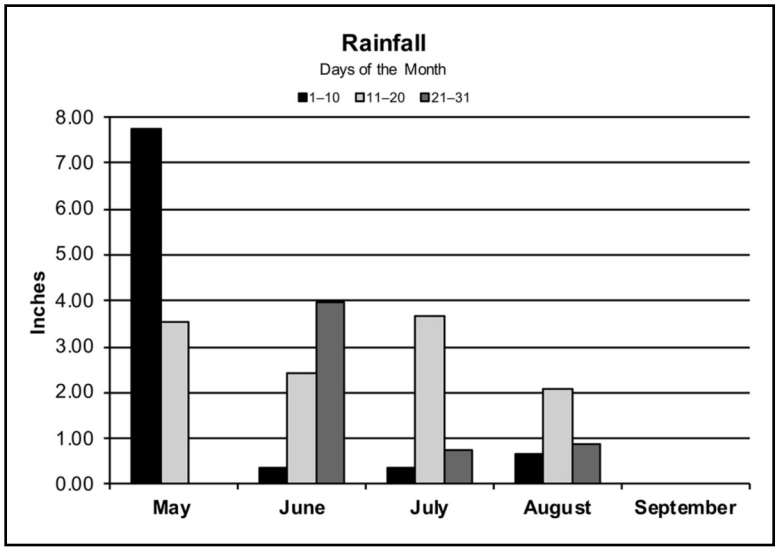
MAFES DELTA BRANCH, STONEVILLE (CLAY)

Crop Summary

A very wet spring delayed planting at this location until the first of May. This location received over 7 inches of rainfall within 1 week of planting and an additional 3.5 inches as the crop was trying to emerge. Portions of this test were submerged under water for several days, which made it necessary to abandon the fourth rep of the test in order to only utilize the plots with adequate stands. This plot area experienced several large rainfalls throughout the remainder of the summer, resulting in waterlogged soil conditions at times. Above-normal rain likely promoted nitrogen loss. Harvest was completed in a timely manner.

Soil type . . . . . .Sharkey clay
Soil pH 7.0
Soil fertility . . . . . .P=H, K=H
Fertilizer . . . . . .Preplant — 0-20-32 @ 100 lb/A
At planting — 46-0-0 @ 65 lb/A on May 1
Sidedress — N @ 240 lb/A (32% UAN) on May 30
Herbicide . . . . . .Preemergence — Corvus @ 5 oz/A and Gramoxone @ 32 oz/A on May 1
Postemergence — Roundup PowerMax @ 1 qt/A and Acuron @ 1.5 qt/A on June 3
Previous crop . . .Soybeans
Planting date . . . .May 1
Harvest date . . . .September 5
Irrigation . . . . . .Furrow irrigation as needed on June 5, July 29, and August 8





Rainfall Summary

	Inches
May	11.28
June	6.77
July	4.77
August	3.62
September	0.00
Total	26.44

Table 14. Results from 72 corn hybrids grown with furrow irrigation on a Sharkey clay soil at MAFES Delta Branch, Stoneville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
AgriGold	A6659VT2RIB	211.6	226.6	234.4	37	17.3	7.9	34
Augusta Seed	A1367	206.2	227.2	—	35	18.5	9.2	36
Agventure	AV8614 YHB	204.9	234.7	—	33	17.8	8.7	35
Mission Seeds	A1687VT2P	200.3	—	—	34	17.0	8.0	35
Dyna Gro	D57VC51	198.8	207.0	—	29	17.9	7.7	37
Armor	A1688T	197.2	—	—	30	17.5	7.6	37
LG Seeds	LG5701VT2RIB	195.0	—	—	30	17.4	7.6	38
B-H Genetics	BH 8721VT2P	194.5	—	—	28	17.3	7.8	26
Augusta Seed	A4565	192.0	—	—	30	17.8	8.4	37
Dekalb	DKC67-44	190.6	214.6	224.7	29	18.8	7.9	32
Dekalb	DKC68-69	190.5	222.1	—	33	19.8	8.2	36
Pioneer	P1870YHR	190.5	—	—	29	19.3	8.2	37
AgriGold	A6572VT2RIB	189.6	211.9	213.1	35	17.5	8.0	33
Terral Seed	REV 26BHR30	189.1	—	—	32	17.9	8.4	32
BH Genetics	XP 8509TRE	187.4	—	—	31	17.1	7.8	31
Dekalb	DKC65-95	186.6	226.4	236.7	30	17.8	7.8	36
Progeny Ag	PGY 6116VT2P	186.4	208.4	215.5	30	17.6	7.5	37
AgriGold	A6544VT2RIB	184.9	204.6	213.0	33	16.1	7.4	34
Dyna-Gro	D58VC65	184.7	209.3	218.8	28	16.3	7.6	36
Dyna-Gro	D55VC80	184.2	—	—	30	18.4	8.2	35
Terral Seed	REV 24BHR99	182.7	214.9	—	30	16.8	8.1	36
MorCorn	MC4725	182.5	181.9	199.7	32	18.2	7.4	30
Local Seed	LC1987VT2P	182.4	194.7	—	33	20.3	8.3	28
LG Seeds	LG5650VT2RIB	182.2	—	—	35	17.3	8.0	36
AgriGold	A644-32TRCRIB	180.1	—	—	36	18.4	7.9	32
Progeny Ag	EXP1915 *	179.0	—	—	32	18.2	7.7	38
Local Seed	LC1776VT2P	178.9	203.0	—	30	17.7	8.1	32
Dekalb	DKC62-53	178.7	—	—	32	16.5	7.9	38
Dekalb	DKC66-75	178.2	216.9	227.0	37	17.6	7.9	36
Local Seed	LC1878VT2P	177.5	211.4	—	35	18.4	7.6	27
Terral Seed	REV 28BHR18	177.4	212.9	220.9	32	19.1	8.5	26
Dyna-Gro	D57VC17	177.3	—	—	32	17.7	8.1	34
Terral Seed	REV 25BHR80	177.1	—	—	32	18.4	8.4	35
Great Heart Seed	HT-7425DGVT2P	176.6	222.4	—	34	17.3	8.2	36
Armor	X9115B *	175.9	—	—	30	16.8	7.3	34
Progeny Ag	PGY 6119VT2P	175.4	204.0	—	31	17.9	7.4	29
Terral Seed	REV 25BHR89	174.7	195.1	—	32	18.0	8.3	34
LG Seeds	LG64C30TRCRIB	174.5	—	—	33	17.3	7.9	29
Progeny Ag	PGY 5115VT2P	174.1	209.8	219.9	30	16.6	7.8	27
Great Heart Seed	HT-7676VT2P	174.1	199.0	—	32	17.9	8.3	36
Dekalb	DKC64-35	174.0	208.0	216.0	29	17.6	7.7	35
Local Seed	LCX17-98 *	173.5	—	—	30	18.2	7.4	31
Armor	X9115 *	173.4	—	—	32	18.1	7.9	37
Dekalb	DKC70-27	173.1	211.7	227.9	35	19.5	7.6	32
AgriGold	A647-46VT2PRO	173.0	—	—	32	18.3	8.2	32
Progeny Ag	PGY 8116SS	173.0	209.1	224.4	34	19.0	8.1	34
Local Seed	LC1488 VT2P	171.9	—	—	33	16.0	7.6	36
Armor	1778 VT2P	171.4	199.5	—	32	17.4	7.3	36
Great Heart Seed	HT-7302VT2P	171.1	198.8	209.8	30	16.5	7.6	35
Progeny Ag	EXP1913 *	169.6	—	—	32	17.4	7.6	36
Agventure	AV7516 YHB	169.1	—	—	34	17.8	8.5	33
Local Seed	LS1586TC	169.0	204.3	—	34	17.4	7.8	28
Dekalb	DKC66-18	168.2	—	—	33	17.5	7.8	36
LG Seeds	LG5643VT2RIB	168.1	—	—	32	16.4	7.4	36
BH Genetics	XP 8511VT2P	167.7	—	—	30	17.8	7.4	27
Terral Seed	REV 24LPR70	167.4	—	—	32	16.6	7.3	35
Local Seed	LC1577 VT2P	166.8	201.8	—	31	16.7	7.3	32
Progeny Ag	EXP1912 *	165.7	—	—	31	15.7	7.6	37
Dyna Gro	D54VC14	165.6	203.5	—	31	16.3	7.5	31
Local Seed	LCX16-91 *	163.3	—	—	32	18.0	7.2	30
Augusta Seed	A1065	163.1	—	—	30	17.4	7.3	27
LG Seeds	LG68C22VT2RIB	162.0	—	—	31	19.3	8.2	35
Dekalb	DKC68-26	161.6	186.3	196.7	29	17.7	7.8	31
AgriGold	A645-16VT2PRO	161.6	—	—	32	17.7	8.1	35

Continued.

Table 14 (cont.). Results from 72 corn hybrids grown with furrow irrigation on a Sharkey clay soil at MAFES Delta Branch, Stoneville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Local Seed	LC0877 VT2P	160.1	190.1	—	30	15.1	7.3	30
Croplan	C5678	159.3	198.1	211.7	30	17.0	7.6	35
MorCorn	MC4319	158.9	181.6	194.9	35	18.6	7.6	26
Progeny Ag	PGY 9117VT2P	157.5	185.3	—	32	17.3	7.5	29
Armor	A1810	156.2	—	—	33	19.5	7.3	34
AgriGold	A648-54STX	155.0	—	—	31	17.8	7.6	29
LG Seeds	LG66C32VT2RIB	154.9	—	—	32	16.7	7.5	33
Great Heart Seed	HT-7381VT2P	153.1	193.6	206.6	32	17.6	7.7	30
Progeny Ag	PGY 9114VT2P	151.3	193.1	—	29	16.8	7.2	36
MorCorn	MC 4255	151.2	—	—	28	17.3	7.7	32
Local Seed	LC1289 VT2P	148.7	—	—	31	16.8	7.5	29
Mean		175.6						
CV		8.4						
LSD (0.05)		23.9						
R^2		59.0						
Error DF		148						

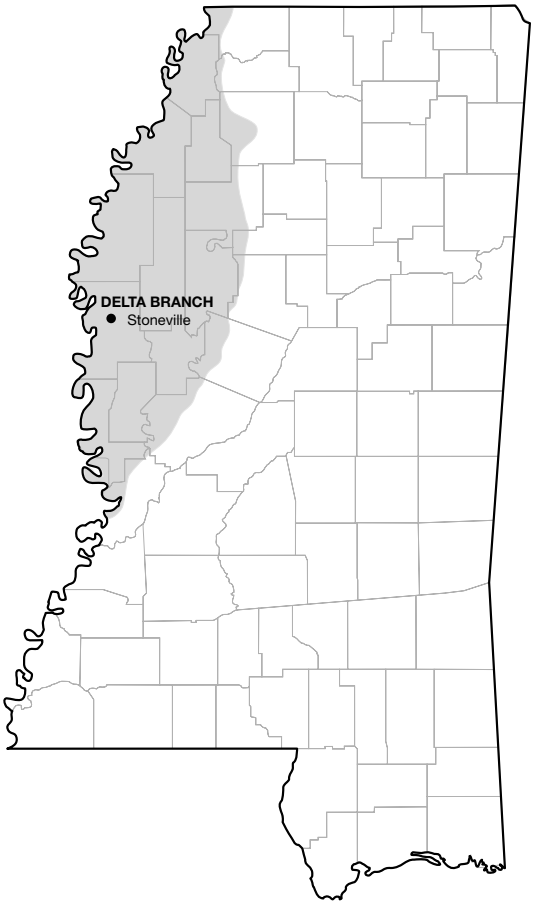
[1]Hybrid followed by an asterisk indicates an experimental entry.

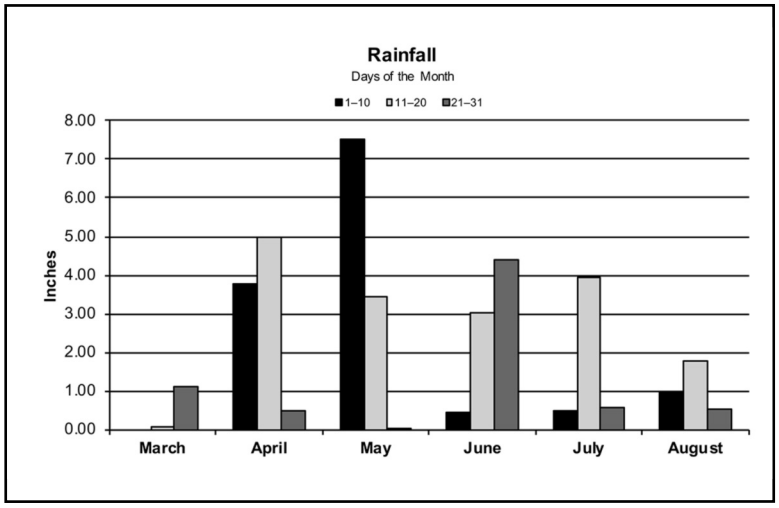
MAFES DELTA BRANCH, STONEVILLE (LOAM)

Crop Summary

The corn plots were planted in late March into a seedbed that had been hipped and rolled during the early spring before planting. Soil moisture was adequate for seed germination at the time of planting. The weeks after planting consisted of cool, very wet weather, which delayed germination and emergence of the plots. After emergence, the plots appeared to struggle until warmer weather and better growing conditions occurred. Rainfall and irrigation supplied plenty of soil moisture throughout the growing season. Harvest was completed in a timely manner without difficulties.

Soil type . . . . . .Bosket very fine sandy loam
Soil pH 6.7
Soil fertility . . . . .P=H, K=H
Fertilizer . . . . . .Preplant — 0-20-32 @ 100 lb/A
At planting — 46-0-0 @ 65 lb/A on March 20
Sidedress — N @ 120 lb/A (32% UAN) on April 22 and on May 7
Herbicide . . . . . .Preemergence — Acuron @ 2 qt/A and Gramoxone @ 1 qt/A on March 20
Postemergence — Roundup PowerMax @ 32 oz/A and Callisto @ 3 oz/A on May 8
Previous crop . . .Soybeans
Planting date . . . .March 20
Harvest date . . . .August 30
Irrigation . . . . . .Furrow irrigated as needed on June 3, June 14, July 29, and August 5





Rainfall Summary

	Inches
March	1.18
April	9.27
May	10.94
June	7.87
July	4.99
August	3.33
Total	37.58

Table 15. Results from 74 corn hybrids grown with furrow irrigation on a Bosket very fine sandy loam soil at the MAFES Delta Branch, Stoneville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Pioneer	P1870YHR	282.5	—	—	37	17.2	8.5	36
LG Seeds	LG5701VT2RIB	268.5	—	—	34	15.7	8.5	33
Terral Seed	REV 25BHR89	267.1	244.4	—	40	16.1	8.5	30
Dekalb	DKC62-53	266.5	—	—	32	15.4	8.4	34
Terral Seed	REV 28BHR18	264.8	264.8	259.9	43	16.8	9.0	32
Local Seed	LC1776VT2P	261.8	244.3	—	28	15.8	8.2	30
LG Seeds	LG5650VT2RIB	260.5	—	—	32	16.0	8.6	34
Local Seed	LC1577 VT2P	255.5	239.4	—	29	15.5	7.7	34
Dyna-Gro	D58VC65	253.2	222.1	231.2	32	16.1	8.0	30
Dekalb	DKC70-27	252.4	246.6	241.2	30	17.7	8.2	33
Terral Seed	REV 24BHR99	252.1	253.2	—	32	16.2	8.6	34
Dekalb	DKC65-95	249.9	239.0	235.3	30	16.9	8.2	31
MorCorn	MC4725	248.1	226.2	239.5	31	16.7	8.1	28
Terral Seed	REV 26BHR30	247.0	—	—	30	16.6	8.4	30
Dekalb	DKC66-18	246.6	—	—	29	15.7	7.8	36
B-H Genetics	BH 8721VT2P	246.0	—	—	30	16.6	8.1	33
Agventure	AV8614 YHB	244.6	261.3	—	32	15.6	9.0	29
Progeny Ag	EXP1912 *	244.6	—	—	30	15.0	8.3	32
LG Seeds	LG5643VT2RIB	243.5	—	—	28	15.2	7.7	31
Progeny Ag	PGY 9117VT2P	238.6	227.4	—	32	16.8	8.2	33
AgriGold	A6659VT2RIB	237.2	237.5	247.7	36	16.5	8.5	33
AgriGold	A645-16VT2PRO	233.2	—	—	33	16.2	8.0	28
AgriGold	A6572VT2RIB	232.1	237.6	235.1	33	16.3	8.4	28
Dyna Gro	D57VC51	231.9	219.9	—	32	15.9	8.2	28
Dekalb	DKC66-75	231.9	220.5	233.8	35	15.9	8.0	33
Armor	1778 VT2P	231.3	227.3	—	28	16.7	7.7	33
Terral Seed	REV 25BHR80	229.9	—	—	38	16.5	8.1	32
Armor	X9115 *	229.3	—	—	39	16.3	8.3	35
AgriGold	A6544VT2RIB	229.3	223.6	231.7	35	15.5	7.9	33
Dekalb	DKC68-69	228.2	214.1	—	33	17.6	8.3	32
Progeny Ag	PGY 5115VT2P	228.0	232.3	237.5	26	15.6	8.1	35
MorCorn	MC 4255	227.6	—	—	32	16.0	7.7	29
Great Heart Seed	HT-7302VT2P	226.7	218.5	214.6	30	15.2	7.8	32
Augusta Seed	A4565	226.3	—	—	39	15.8	8.6	33
Agventure	AV7516 YHB	225.9	—	—	29	17.3	7.8	32
Dyna-Gro	D57VC17	224.3	—	—	35	16.8	8.2	31
LG Seeds	LG66C32VT2RIB	224.0	—	—	27	15.8	8.1	30
Armor	A1810	221.7	—	—	33	17.7	7.9	33
Augusta Seed	A1367	220.0	227.4	—	37	16.8	8.8	31
Progeny Ag	PGY 9114VT2P	219.9	223.0	—	28	16.2	7.8	29
LG Seeds	LG68C22VT2RIB	219.7	—	—	38	18.3	8.5	34
Progeny Ag	PGY 8116SS	219.7	224.0	239.4	32	17.1	8.4	34
Dyna-Gro	D55VC80	218.0	—	—	32	16.4	8.1	32
Great Heart Seed	HT-7425DGVT2P	217.9	223.1	—	32	16.3	8.7	30
Dyna Gro	D54VC14	217.7	208.6	—	26	15.3	8.1	32
Local Seed	LC1488 VT2P	217.1	—	—	30	15.5	8.3	31
Dekalb	DKC68-26	216.8	212.5	226.2	35	15.9	8.1	29
Croplan	C5678	214.1	208.9	225.1	30	15.9	7.7	33
Progeny Ag	PGY 6116VT2P	212.3	214.0	224.9	30	16.1	8.1	30
AgriGold	A648-54STX	211.7	—	—	33	16.5	8.1	33
Mission Seeds	A1687VT2P	209.6	—	—	36	16.2	8.7	33
Terral Seed	REV 24LPR70	209.2	—	—	30	16.0	7.6	29
Local Seed	LC1987VT2P	208.8	210.0	—	30	17.1	8.4	29
Progeny Ag	EXP1913 *	208.6	—	—	36	15.2	8.2	34
Local Seed	LS1586TC	207.6	215.5	—	26	16.5	8.0	28
Local Seed	LCX17-98 *	207.1	—	—	28	16.6	7.6	27
Dekalb	DKC64-35	206.6	214.2	227.5	28	15.7	8.4	32
MorCorn	MC4319	206.2	205.8	209.9	25	17.9	8.1	32
BH Genetics	XP 8511VT2P	204.8	—	—	27	16.0	8.0	29
AgriGold	A647-46VT2PRO	203.7	—	—	35	17.5	8.2	32
Great Heart Seed	HT-7381VT2P	202.5	212.1	223.6	33	17.2	7.7	29
Progeny Ag	EXP1915 *	200.4	—	—	29	17.2	8.0	31
Progeny Ag	PGY 6119VT2P	200.3	224.7	—	32	17.5	8.2	33

[1]Continued.

Table 15. Results from 74 corn hybrids grown with furrow irrigation on a Bosket very fine sandy loam soil at the MAFES Delta Branch, Stoneville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Armor	A1688T	198.6	—	—	42	15.6	7.8	27
Dekalb	DKC67-44	198.2	222.6	229.8	34	16.3	8.3	30
Augusta Seed	A1065	197.3	—	—	41	15.9	8.2	30
Local Seed	LC1878VT2P	197.0	211.9	—	30	17.8	8.0	30
AgriGold	A644-32TRCRIB	195.1	—	—	35	15.6	8.3	26
Local Seed	LCX16-91 *	194.5	—	—	30	16.6	8.1	28
Great Heart Seed	HT-7676VT2P	194.2	198.1	—	36	17.5	8.5	29
BH Genetics	XP 8509TRE	192.4	—	—	38	16.7	7.9	29
Armor	X9115B *	192.0	—	—	34	15.7	8.3	32
Local Seed	LC0877 VT2P	191.7	206.5	—	31	14.6	7.8	29
LG Seeds	LG64C30TRCRIB	176.6	—	—	30	17.6	8.1	26
Local Seed	LC1289 VT2P	165.8	—	—	26	16.5	7.6	22
Mean		223.8						
CV		9.6						
LSD (0.05)		34.6						
R^2		65.0						
Error DF		148						

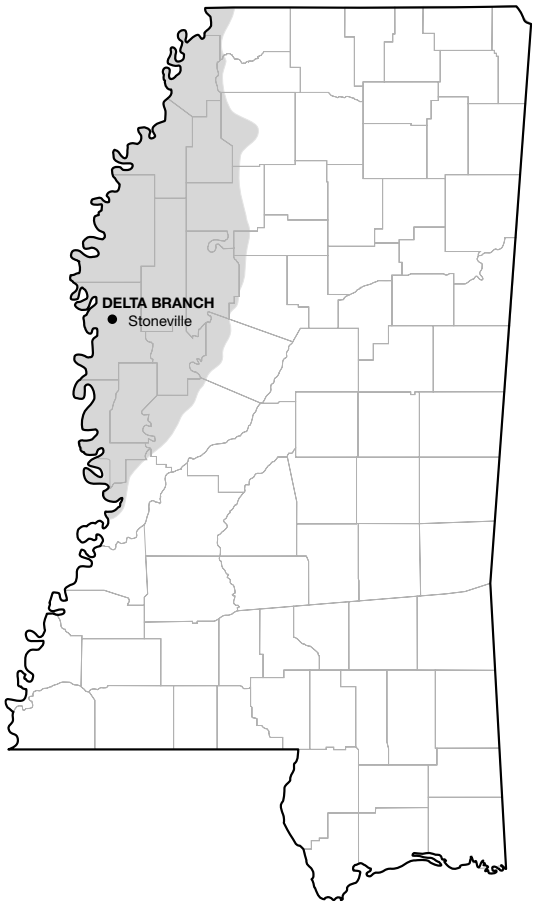
[1]Hybrid followed by an asterisk indicates an experimental entry.

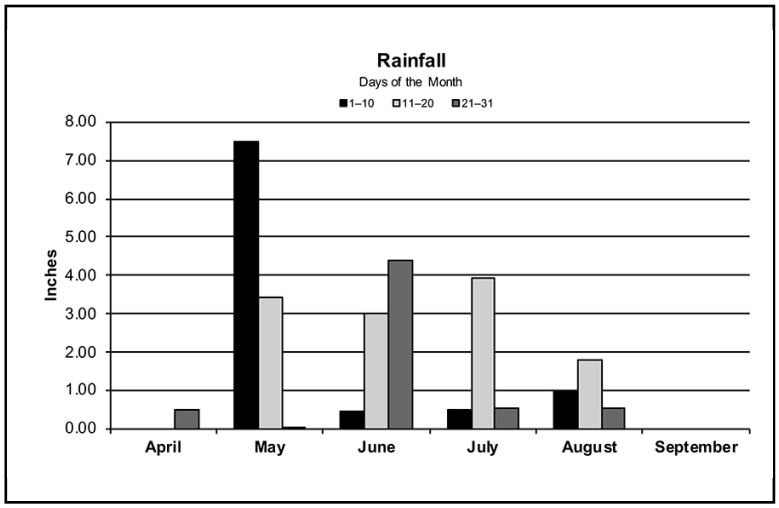
DELTA BRANCH, STONEVILLE (LOAM) NONIRRIGATED

Crop Summary

The plots were planted into a seedbed that had been hipped and rolled during the spring before planting. Soil moisture at planting was adequate for germination. All plots quickly emerged to a good stand. Timely rainfall occurred throughout the growing season, which allowed for good soil moisture throughout. This resulted in good yields at this dryland location. Harvest was completed in a timely manner.

Soil type . . . . . .Bosket very fine sandy loam
Soil pH 6.7
Soil fertility . . . . .P=H, K=H
Fertilizer . . . . . .Preplant — 0-20-32 @ 100 lb/A
At planting — 46-0-0 @ 65 lb/A on April 24
Sidedress — N @ 120 lb/A (32% UAN) on May 7 and May 22
Herbicide . . . . . .Preemergence — Corvus @ 5 oz/A and Gramoxone @ 32 oz/A on April 24
Postemergence — Roundup PowerMax @ 1 qt/A and Callisto @ 3.2 oz/A on June 3
Previous crop . . .Soybeans
Planting date . . .April 24
Harvest date . . . .September 5





Rainfall Summary

	Inches
April	0.51
May	10.94
June	7.87
July	4.99
August	3.33
September	0.00
Total	27.64

Table 16. Results from 56 corn hybrids grown without irrigation on a Bosket very fine sandy loam soil at the MAFES Delta Branch, Stoneville, 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average [2]	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
DeKalb	DKC65-95	250.3	240.4	—	42	16.4	8.7	34
Terral Seed	REV 24BHR99	246.6	237.8	—	35	14.7	8.4	33
Terral Seed	REV 28BHR18	243.4	244.2	—	41	16.2	9.0	28
Pioneer	P1464VYHR	241.5	—	—	48	14.8	8.3	31
Local Seed	AV7516 YHB	239.9	—	—	40	16.1	8.8	30
AgriGold	A6572VT2RIB	239.4	221.2	—	38	15.5	8.6	34
DeKalb	DKC66-75	238.9	—	—	40	15.3	8.5	34
DeKalb	DKC68-69	236.6	231.3	—	37	17.4	8.5	34
Terral Seed	REV 25BHR89	236.6	224.7	—	45	15.1	8.7	29
Progeny Ag	PGY 9114VT2P	235.9	233.1	—	43	14.6	8.3	32
Agventure	AV8614 YHB	235.4	228.5	—	40	15.4	9.0	30
DeKalb	DKC62-53	235.0	—	—	40	14.7	8.2	35
AgriGold	A6544VT2RIB	234.4	238.0	—	41	14.0	8.1	35
Progeny Ag	PGY 6116VT2P	232.4	225.7	—	39	15.8	8.4	34
Local Seed	LC1776 VT2P	231.9	219.6	—	37	15.4	8.3	31
AgriGold	A644-32TRCRIB	231.3	—	—	41	15.0	8.4	32
DeKalb	DKC66-18	231.2	—	—	37	15.4	8.3	35
Local Seed	LC1488 VT2PRIB	230.0	—	—	39	14.5	8.5	33
MorCorn	MC4725	230.0	217.2	—	45	15.4	8.3	32
DeKalb	DKC70-27	229.2	234.2	—	43	16.3	8.2	34
AgriGold	A645-16VT2PRO	229.0	—	—	35	15.7	8.1	34
Local Seed	LCX16-91 *	226.5	—	—	38	16.1	8.3	31
Great Heart Seed	HT-7676VT2P	226.2	—	—	36	16.6	8.6	33
DeKalb	DKC64-35	226.2	226.6	—	36	15.4	8.4	34
Terral Seed	REV 26BHR30	225.1	—	—	34	16.2	8.4	29
Progeny Ag	PGY 5115VT2P	222.3	236.0	—	39	15.1	8.4	34
AgriGold	A648-54STX	222.0	—	—	38	16.0	7.9	34
Terral Seed	REV 25BHR80	221.9	—	—	42	15.1	8.6	29
Local Seed	LC1878 VT2P	221.6	217.3	—	47	16.4	8.1	31
Local Seed	LC1577 VT2P	221.1	202.9	—	35	14.9	8.1	31
Mission Seeds	A1687VT2P	219.6	—	—	42	15.7	8.3	34
AgriGold	A6659VT2RIB	219.4	227.3	—	33	15.2	8.3	34
Progeny Ag	PGY 9117VT2P	219.4	228.9	—	33	15.4	8.4	30
DeKalb	DKC67-44	219.2	227.3	—	40	16.4	8.3	34
Local Seed	LC1987 VT2P	218.8	209.0	—	40	17.3	8.6	31
Progeny Ag	EXP1912 *	216.4	—	—	38	14.5	8.3	33
Dyna Gro	D57VC51	215.5	220.3	—	38	15.0	8.3	31
Progeny Ag	PGY 6119VT2P	214.5	216.9	—	34	16.0	8.1	33
Progeny Ag	PGY 8116SS	213.0	223.3	—	41	16.7	8.4	33
MorCorn	MC 4255	212.9	—	—	38	15.6	8.1	32
Dyna-Gro	D58VC65	211.9	212.2	—	38	15.4	7.8	29
Local Seed	LS1586TC	211.0	224.8	—	44	14.9	8.2	29
DeKalb	DKC68-26	210.3	223.5	—	37	14.2	8.1	32
Progeny Ag	EXP1918 *	209.3	—	—	35	15.6	7.6	29
Great Heart Seed	HT-7381VT2P	207.7	—	—	35	15.6	8.0	33
Progeny Ag	EXP1913 *	207.5	—	—	40	15.3	8.3	34
AgriGold	A647-46VT2PRO	205.7	—	—	34	16.1	8.1	32
Terral Seed	REV 2858SXE	205.1	—	—	35	18.0	7.9	29
Progeny Ag	EXP1915 *	204.3	—	—	35	16.0	8.0	33
Local Seed	LCX17-98 *	204.2	—	—	33	15.8	7.8	31
Local Seed	LC1289 VT2P	202.6	—	—	45	15.3	8.3	31
Dyna Gro	D54VC14	199.5	203.4	—	35	14.7	8.4	27
Dyna-Gro	D57VC17	197.7	—	—	46	17.0	8.1	28
Local Seed	LC0877 VT2P	197.4	203.8	—	41	14.0	8.2	31
MorCorn	MC4319	193.7	203.3	—	42	15.1	8.3	32
Great Heart Seed	HX-6321VT2P	190.4	—	—	38	13.7	8.0	30
Terral Seed	REV 24LPR70	181.3	—	—	37	14.8	7.8	28

Mean	220.7
CV	8.1
LSD (0.05)	53.6
R^2	25.0
Error DF	168

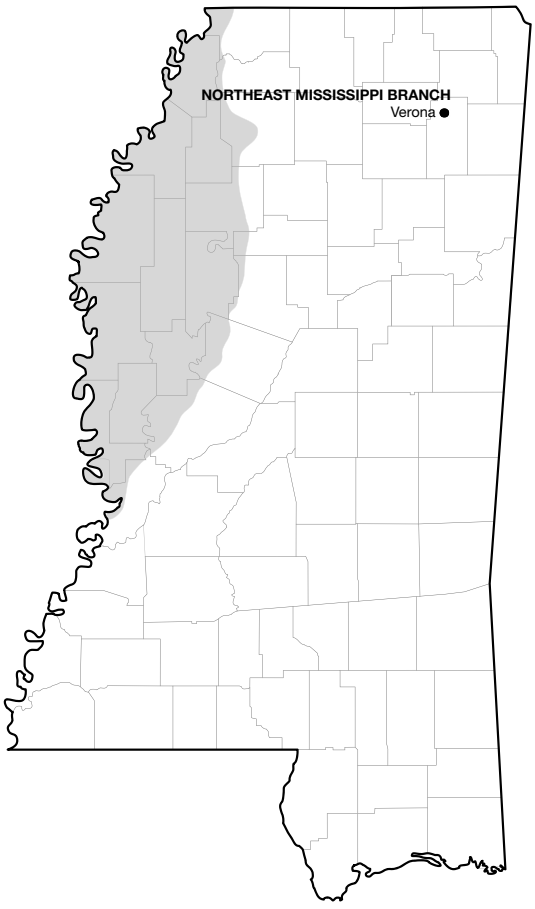
[1]Hybrid followed by an asterisk indicates an experimental entry.
[2]No 2-year average

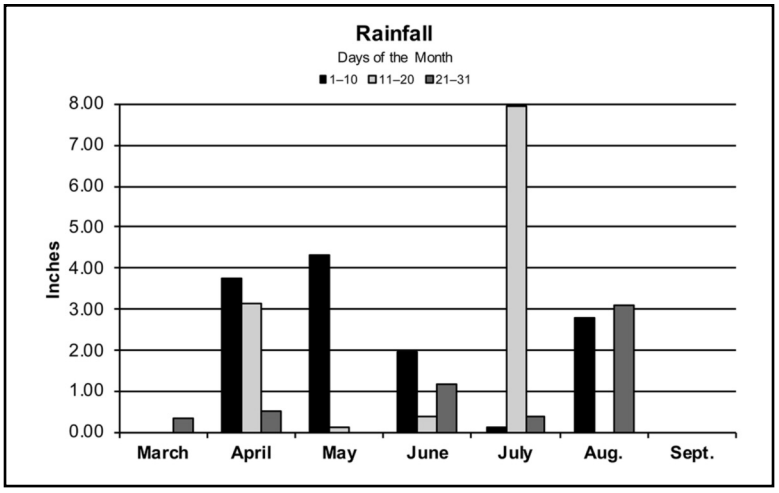
MAFES NORTHEAST MISSISSIPPI BRANCH, VERONA

Crop Summary

The corn plots were planted in late March into a field that had been hipped and the beds rolled a few days before planting. Soil moisture at the time of planting was ideal for germination. All plots emerged to a stand. This location experienced several large rainfalls in the 3–4 weeks after planting. Rainfall throughout the remainder of the growing season allowed for adequate soil moisture to achieve good yields at this dryland location. Weather conditions at the time of harvest were excellent, and harvest was completed in a timely manner.

Soil type . . . . . .Leeper fine sandy loam
Soil pH 6.2
Soil fertility . . . . .P=M, K=M
Fertilizer . . . . . .Preplant — 0-30-100 @ 100 lb/A
At planting — 46-0-0 @ 65 lb/A
Topdress — N @ 35 lb/A (46-0-0) on April 29; N @ 155 lb/A (33-0-0-12S) on May 8
Herbicide . . . . . .Preemergence — Acuron @ 2 qt/A and Gramoxone @ 1 qt/A on March 22
Postemergence — Roundup PowerMax @ 32 oz/A and Callisto @ 3 oz/A on May 8
Previous crop . . .Soybeans
Planting date . . . .March 22
Harvest date . . . .September 4





Rainfall Summary

	Inches
March	0.36
April	7.44
May	4.47
June	3.53
July	8.43
August	5.90
September	0.00
Total	30.13

Table 17. Results from 56 corn hybrids grown without irrigation on a Leeper fine sandy soil at the MAFES Northeast Mississippi Branch, Verona 2019.

Brand name	Hybrid [1]	2019 yield	2-year average	3-year average [2]	Ear height	Moisture content	Plant height	Harvested population
		bu/A	*bu/A*	*bu/A*	*in*	*%*	*ft*	*x1000*
Progeny Ag	PGY 9114VT2P	222.1	—	—	23	14.5	7.0	35
MorCorn	MC4725	221.0	—	—	27	15.0	7.5	32
Agventure	AV8614 YHB	220.8	—	—	31	15.1	8.3	32
Local Seed	LC1776 VT2P	220.1	—	—	28	14.7	7.8	31
AgriGold	A645-16VT2PRO	219.5	—	—	32	15.2	7.3	37
Progeny Ag	PGY 8116SS	219.5	—	—	34	15.4	8.0	34
AgriGold	A647-46VT2PRO	218.0	—	—	30	15.8	7.8	33
AgriGold	A6572VT2RIB	217.6	—	—	29	15.2	7.8	32
Progeny Ag	PGY 9117VT2P	217.1	—	—	29	15.1	7.8	31
AgriGold	A648-54STX	213.9	—	—	32	15.8	7.5	33
DeKalb	DKC68-26	213.8	—	—	26	14.8	7.3	34
Progeny Ag	PGY 6116VT2P	213.3	—	—	28	15.4	7.8	35
DeKalb	DKC70-27	213.0	—	—	28	16.0	7.8	36
AgriGold	A6659VT2RIB	211.9	—	—	32	15.3	8.0	33
Terral Seed	REV 25BHR80	211.6	—	—	30	14.5	7.8	30
DeKalb	DKC62-53	211.1	—	—	29	14.9	7.3	35
Pioneer	P1464VYHR	210.9	—	—	40	14.7	7.8	32
DeKalb	DKC66-18	205.0	—	—	24	15.2	7.5	35
Progeny Ag	PGY 5115VT2P	204.9	—	—	27	14.8	7.0	36
AgriGold	A644-32TRCRIB	204.9	—	—	30	15.1	8.0	30
Dyna Gro	D57VC51	204.7	—	—	27	15.3	7.8	32
Local Seed	LC1987 VT2P	204.3	—	—	34	16.0	7.8	32
AgriGold	A6544VT2RIB	204.0	—	—	32	14.8	7.3	36
Terral Seed	REV 28BHR18	203.8	—	—	30	15.4	8.0	28
Local Seed	LC1488 VT2PRIB	203.1	—	—	30	14.6	7.3	32
Progeny Ag	EXP1918 *	202.9	—	—	29	14.9	7.3	30
Progeny Ag	PGY 6119VT2P	201.9	—	—	24	15.7	7.5	34
Progeny Ag	EXP1913 *	201.7	—	—	32	15.1	7.8	32
DeKalb	DKC67-44	201.0	—	—	30	15.6	7.5	33
MorCorn	MC 4255	200.9	—	—	32	14.9	7.3	33
DeKalb	DKC66-75	200.6	—	—	29	15.1	7.0	34
DeKalb	DKC65-95	200.5	—	—	30	15.3	7.8	34
Dyna-Gro	D58VC65	199.9	—	—	27	14.8	7.5	29
Local Seed	LS1586TC	199.8	—	—	30	14.9	7.3	30
Local Seed	LC0877 VT2P	199.6	—	—	33	14.1	7.5	30
Great Heart Seed	HX-6321VT2P	199.6	—	—	29	14.7	7.5	32
DeKalb	DKC68-69	198.8	—	—	29	16.4	7.3	33
DeKalb	DKC64-35	197.5	—	—	27	15.0	7.3	35
Progeny Ag	EXP1912 *	197.5	—	—	25	14.5	7.8	32
Local Seed	LC1878 VT2P	196.5	—	—	30	15.0	7.3	32
Local Seed	LC1289 VT2P	195.8	—	—	27	14.8	7.3	31
Terral Seed	REV 25BHR89	195.8	—	—	30	14.5	7.0	28
Progeny Ag	EXP1915 *	194.9	—	—	30	15.5	7.3	33
Dyna Gro	D54VC14	194.5	—	—	27	14.7	7.0	29
Dyna-Gro	D57VC17	194.3	—	—	33	15.3	7.5	30
Great Heart Seed	HT-7676VT2P	194.0	—	—	28	15.8	7.8	33
Mission Seeds	A1687VT2P	193.3	—	—	29	15.4	7.8	35
Terral Seed	REV 2858SXE	192.0	—	—	28	16.8	8.0	29
Local Seed	LCX17-98 *	191.1	—	—	33	15.0	6.8	31
Terral Seed	REV 26BHR30	190.2	—	—	26	15.7	7.5	28
Local Seed	AV7516 YHB	189.8	—	—	31	15.4	8.0	32
Local Seed	LC1577 VT2P	188.5	—	—	27	14.5	7.0	32
MorCorn	MC4319	184.1	—	—	30	15.4	7.5	31
Terral Seed	REV 24BHR99	183.1	—	—	27	15.2	7.5	32
Great Heart Seed	HT-7381VT2P	182.5	—	—	28	15.1	7.5	32
Local Seed	LCX16-91 *	181.3	—	—	27	15.5	7.3	30
Terral Seed	REV 24LPR70	175.0	—	—	30	14.7	7.3	30

Mean	202.3
CV	7.3
LSD (0.05)	20.6
R^2	54.9
Error DF	168

[1]Hybrid followed by an asterisk indicates an experimental entry.
[2]No 2-year average
[3]No 3-year average

Table 18. Characteristics provided by sponsoring companies for corn hybrids entered in the Mississippi Corn for Grain Hybrid Trials, 2019.

Company	Hybrid	Trait	Planting rate (x1000)	Seed treatment	Days to maturity
AgriGold Hybrids	A6544VT2RIB	RR,VT2P	32/34	P500+Votivo	113
5381 Akin Rd.	A6572VT2RIB	RR,VT2P	32/34	P500+Votivo	114
St. Francisville, IL 62460	A644-32TRCRIB	RR,VT2P,VIP3	32/34	P500+Votivo	114
618-292-5844	A645-16VT2PRO	RR,VT2P	32/34	P500+Votivo	115
	A6659VT2RIB	RR,VT2P	32/34	P500+Votivo	116
	A647-46VT2PRO	RR,VT2P	32/34	P500+Votivo	117
	A648-54STX	RR,LL,SS	32/34	P500+Votivo	118
Armor Seed	X9115VT2P	RR,VT2P	36	A500	115
2532 Alexander Dr. Suite B	X9115B	RR,VT2P	36	A500	115
Jonesboro, AR 72401	A1688T	RR,VT2P,VIP3	36	A500	116
270-832-2133	A1778VT2P	RR,VT2P	36	A500	117
	C5678	RR,VT2P	36	A500	116
	C6027	RR,VT2P	36	A501	119
Augusta Seed	A1367		36	Cruiser 250	117
P.O. Box 899	A4565		38	Cruiser 250	115
Verona, VA 24482	A1065		32	A 500V	115
540-886-6055					
Great Heart Seed	HT-7425DGVT2P	VT2P	36	Acceleron 500 Votivo	114
220 West Washington St.	HT-7676VT2P	VT2P	32/36	Acceleron 500 Votivo	116
St. Paris, IL 61944	HT-7123VT2P	VT2P	36	Acceleron 500 Votivo	111
217-465-4132	HT-7256DGVT2P	VT2P	36	Acceleron 500 Votivo	112
	HT-7381VT2P	VT2P	32/36	Acceleron 500 Votivo	113
	HT-7302VT2P	VT2P	36	Acceleron 500 Votivo	113
	HX-6321VT2P	VT2P	34	Acceleron 500 Votivo	116
Terral Seed Inc.	24BHR99	RR,LL,HX4	32/36	P/V 1250	114
117 Ellington Dr.	24BHR70	RR,LL,HX4	28/34	P/V 1250	114
Rayville, LA 71269	25BHR80	RR,LL,HX4	28/34	P/V 1250	115
318-341-8814	25BHR89	RR,LL,HX4	28/34	P/V 1250	115
	26BHR30	RR,LL,HX4	28/34	P/V 1250	116
	28BHR18	RR,LL,HX4	28/34	P/V 1250	118
	25BSXE	RR,LL,SS	28/34	P/V 1250	118
Dupont Pioneer	P1464VYHR	RR,LL,VIP3,HX4	30	—	114
7250 NW 62nd Ave.	P1870YHR	RR,LL,VIP3,HX4	37	—	118
Johnston, IA 50131					
662-782-9958					
Progeny AG Products	PGY 9114VT2P	RR,VT2P	34/36	A500,Votivo,EDC,B300	114
1529 Hwy. 193	PGY 5115VT2P	RR,VT2P	34/38	A500,Votivo,EDC,B300	115
Wynne, AR 72396	PGY 6116VT2P	RR,VT2P	32/36	A500,Votivo,EDC,B300	116
979-587-9968	PGY 8116SS	RR,LL,SS	32/36	A500,Votivo,EDC,B300	116
	PGY 9117VT2P	RR,VT2P	30/32	A500,Votivo,EDC,B300	117
	PGY 6119VT2P	RR,VT2P	32/34	A500,Votivo,EDC,B300	119
	EXP1912	RR,VT2P	32/36	A500,Votivo,EDC,B300	112
	EXP1913	RR,VT2P	32/36	A500,Votivo,EDC,B300	113
	EXP1915	RR,LL,SS	32/36	A500,Votivo,EDC,B300	115
	EXP1918	RR,VT2P	28/32	A500,Votivo,EDC,B300	118
SeedKoz Suite 410	MC 4255	VT2P	30/35	Aceleron 250	112
1725 Windward Concourse	MC 4319	VT2P	30/35	Aceleron 250	113
Alpharetta, GA 30005	MC 4725	VT2P	30/35	Aceleron 250	117
478-957-9865					
Mission Seed Solutions	A1687VT2P	RR,VT2P	34/38	Acceleron 250	116
518 N. Sharpe Ave.					
Cleveland, MS 38732					
662-719-8685					

Table 18. Characteristics provided by sponsoring companies for corn hybrids entered in the Mississippi Corn for Grain Hybrid Trials, 2019.

Company	Hybrid	Trait	Planting rate (x1000)	Seed treatment	Days to maturity
Local Seed Company	LC0877 VT2PPRIB	VT2P	30/35	—	108
802 Rozelle St.	LC1289 VT2PRIB	VT2P	30/35	—	112
Memphis, TN 38104	AV8614 YHB	VT2P	30/35	—	114
570-419-3692	LC1488 VT2PRIB	VT2P	30/35	—	114
	LC1577 VT2PRIB	VT2P	30/35	—	115
	LC1586 TC	Other	30/35	—	115
	LCX16-91	SS	30/35	—	116
	AV7516 YHB	Other	30/35	—	116
	LC1776 VT2P	VT2P	30/35	—	117
	LCX17-98	VT2P	30/35	—	117
	LC1878 VT2P	VT2P	30/35	—	118
	LC1987 VT2P	VT2P	30/35	—	119
Bayer Crop Science	DKC70-27	RR,VT2P	34	Acceleron 1250	120
800 Lindbergh Blvd.	DKC68-69	RR,VT2P	34	Acceleron 1250	118
St. Louis, MO 63167	DKC68-26	RR,VT2P	32	Acceleron 250	118
601-317-2661	DKC67-44	RR,VT2P	32	Acceleron 1250	117
	DKC66-75	RR,VT2P	34	Acceleron 1250	116
	DKC66-18	RR,VT2P	34	Acceleron 1250	116
	DKC65-95	RR,VT2P	34	Acceleron 1250	115
	DKC64-35	RR,VT2P	34	Acceleron 1250	114
	DKC62-53	RR,VT2P	34	Acceleron 1250	112
LG Seeds	LG64C30TRCRIB	VT2P, VIP3	35	Poncho 500 + Vot	114
1122 E. 169th St.	LG5643VT2RIB	VT2P	34	Poncho 500 + Vot	114
Westfield, IN 46074	LG5650VT2RIB	VT2P	36	Poncho 500 + Vot	115
812-457-3132	LG5701VT2RIB	VT2P	36	Poncho 500 + Vot	116
	LG66C32VT2RIB	VT2P	38	Poncho 500 + Vot	116
	LG68C22VT2Pro	VT2P	36	Poncho 500 + Vot	118
Nutrien Ag Solutions	D54VC14	VT2P	28/34	Poncho 500	114
254 U.S. Hwy. 72 West	D55VC80	VT2P	34	Poncho 500	115
Collierville, TN 38017	D57VC17	VT2P	28/34	Poncho 500	117
662-401-6311	D57VC51	VT2P	30/36	Poncho 500	117
	D58VC65	VT2P	28/34	Poncho 500	118
BH Genetics	BH 8721VT2P	RR,VT2P	35	Poncho 500	117
5933 FM 1157	X18009TRE	RR	35	Poncho 500	115
Ganado, TX 77962	X18052VT2P	RR,VT2P	35	Poncho 500	115
361-771-2755					

MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

The mission of the Mississippi Agricultural and Forestry Experiment Station and the College of Agriculture and Life Sciences is to advance agriculture and natural resources through teaching and learning, research and discovery, service and engagement which will enhance economic prosperity and environmental stewardship, to build stronger communities and improve the health and well-being of families, and to serve people of the state, the region and the world.

George M. Hopper, Director **www.mafes.msstate.edu**