CORN HYBRIDS FOR GRAIN 2025

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INTRODUCTION

Corn hybrid performance is annually evaluated in official hybrid trials (OHTs) by LSU AgCenter researchers to provide Louisiana farmers, seedsmen, county agents and consultants with unbiased performance data for commercial corn hybrids submitted for evaluation by private companies. Selection of superior hybrids that are well adapted for a given region is essential for maximizing yield and profit.

HYBRID SELECTION

Hybrid selection is one of the most important decisions for producers, and there are many different hybrids available on the market. Soil conditions, irrigation practices and cultural practices vary among growers throughout the state; consequently, hybrid performance also varies based on soil type, irrigation, planting date, environmental conditions and location.

Grain yield is the primary trait considered by producers when selecting hybrids; however, maturity, lodging, shuck cover, ear placement and disease resistance also warrant consideration. Yield data from multiple locations can offer guidance as to hybrid performance consistency.

Hybrid maturity is categorized using relative maturity (RM) or growing degree day (GDD) rating systems. These two methods are based on the number of days or degree days required to reach physiological maturity. Louisiana producers grow early, mid- and full-season hybrids, with 112-day to 121-day hybrids producing optimal yield. Full-season hybrids do not consistently out-yield mid-season hybrids, and there is more variability in yield among hybrids within a given RM category than there is between maturity groups.

Hybrids that remain green later into maturity usually retain better stalk strength and have less lodging potential. Shuck cover is important for protecting the ear and kernels from weathering and fungi. When planted late during the recommended window, hybrids will grow taller because of higher day and night temperatures and resulting internode elongation. Therefore, ear placement will be higher when compared to earlier planting dates, which may increase lodging potential. Consider planting a hybrid that has a low ear placement late during the planting season.

Corn hybrids have different insect and herbicide traits conferred by biotechnology and should be chosen based on the best fit for your production system. More information regarding available transgenic traits for insect and weed control are available in the LSU AgCenter Insect Pest Management Guide and Suggested Chemical Weed Control Guide.

To assist producers with hybrid selection, the LSU AgCenter conducts annual corn OHTs at several locations across the state, providing unbiased information on hybrid performance across different soil types and environmental conditions. In 2024, 40 hybrids were evaluated in the OHTs. Locations of these trials included the LSU AgCenter Dean Lee Research and Extension Center, Alexandria; LSU AgCenter Northeast Research Station, St. Joseph; and LSU AgCenter Macon Ridge Research Station, Winnsboro (Tables 4-7). Agronomic details for each location are included in Table 1. Selection criteria abbreviations and descriptions are defined in Table 2.

In addition to the OHTs, eight on-farm core block demonstrations were conducted throughout the corn-growing areas of Louisiana by farmers and LSU AgCenter extension agents (Tables 8-16). This information should be used to complement OHT results.

Table 1. Locations and agronomic milestones for the official corn hybrid trials, 2024.

Location	Soil Type	Previous Crop	Planting Date	Harvest Date	Row Spacing	Seeding Rate	Irrigated
Alexandria (DLRS)	Coushatta silt loam	Cotton	3/13/2024	8/12/2024	38"	36,000	No
St. Joseph (NERS SL)	Commerce silt loam	Soybean	3/13/2024	8/21/2024	38"	36,000	Yes
St. Joseph (NERS C)	Sharkey clay	Soybean	4/1/2024	8/19/2024	38"	36,000	No
Winnsboro (MRRS)	Gigger-Gilbert complex	Corn	3/12/2024	8/9/2024	40"	36,000	Yes

Abbreviations: DLRS=Dean Lee Research Station, NERS SL=Northeast Research Station – silt loam, NERS C=Northeast Research Station – Sharkey clay, MRRS=Macon Ridge Research Station

Table 2. Performance attributes measured in the corn official hybrid trials, 2024.

Trait	Abbreviation	Description
Yield	YLD	Grain yield, bushels per acre (bu/a), adjusted to 15.5% moisture
Grain moisture	GM	Grain moisture at harvest (%)
Test weight	TW	Volume weight of grain (lb/bu)
Plant population	PP	Plant population (no./a)
Mid-silking date	MS	Silking date of 50% of plants, days after planting (DAP)
Plant height	PH	Height from ground to the flag leaf (inches)
Ear height	EH	Height from ground to where primary ear attaches to the plant (inches)
Husk cover	HC	Visual rating of how well kernels are covered; 1=closed and 3=open husk
Lodging	LOD	Plants that are lodged at harvest, 0-9, where 0=none and 9=all
Harvest weight	HW	Core block harvest weight (lbs)
Plot width	PW	Core block plot width (in)
Row length	RL	Core block row/plot length (ft)
Dry weight	DW	Core block harvest weight adjusted to 15.5% moisture
Curvularia leaf spot	CURV	0-9, where 0=no disease and 9=complete destruction
Northern corn leaf blight	NCLB	0-9, where 0=no disease and 9=complete destruction
Southern corn leaf blight	SCLB	0-9, where 0=no disease and 9=complete destruction
Southern rust	SRST	0-9, where 0=no disease and 9=complete destruction

For a better understanding of how corn hybrids performed in Louisiana, please refer to the OHT data first. Choose the hybrids that performed well overall and those that performed well in the region most representative of your growing area. Finally, cross reference on-farm core block data for consistency with the OHT data for your chosen hybrids to improve your capability of choosing hybrids that will perform well on your farm.

PROCEDURES

The OHTs were conducted using a randomized complete block experimental design with four replications. Analyses of variance and least significant differences (LSD) were calculated only if differences existed at the 90% confidence level. If differences were significant, an LSD at the 10% probability level was calculated. If the LSD (0.10) for yield in a trial is 10 bushels per acre, there is a 10% chance that two hybrids with a reported yield difference of 10 bushels per 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 the number of replications for each hybrid. The letters NS are used in the 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 the test. Yield data for 2024 across locations as well as 2023 data for repeated hybrids is summarized in Table 3. Individual location summaries are in Tables 4 through 7.

Table 3. Summary of yield performance of corn hybrids in the 2024 official trials.

Company	Hybrid	DLRS[1]	NERS SL	NERS C	MRRS	2024 Avg.	2023 Avg.	2022 Avg.	2021 Avg.
Bayer	**DKC68-35 VT2P**	190.9	164.9	178.5	200.3	183.6	189.7	–	–
Bayer	**DKC70-45 VT2P**	186.4	139.3	171.5	212.4	177.4	179.9	–	–
Bayer	**DKC110-41 TRE**	195.5	131.8	171.0	194.6	173.2	–	–	–
Bayer	**DKC114-99 VT4P**	195.9	148.7	167.3	203.3	178.8	–	–	–
Bayer	**DKC117-78 VT2P**	194.7	127.9	169.0	197.9	172.4	–	–	–
Pioneer	**P1718VYHR**	182.8	155.1	154.6	198.7	172.8	187.8	170.6	179.2
Pioneer	**P1608YHR**	174.6	140.6	174.1	190.4	169.9	–	–	–
Bayer	**DKC66-06 TRE**	181.6	158.4	164.0	197.5	175.4	188.3	–	–
Pioneer	**P1511YHR**	188.0	146.0	164.9	199.9	174.7	189.7	–	–
Pioneer	**P13841PWUE**	193.6	139.0	172.5	199.3	176.1	–	–	–
Pioneer	**P14830VYHR**	180.3	138.6	165.1	174.8	164.7	–	–	–
Pioneer	**P0953YHR**	174.3	120.2	153.2	179.6	156.8	–	–	–
Pioneer	**P13777PWUE**	169.5	132.2	172.2	193.0	166.7	–	–	–
Revere	**1627 TC**	186.2	163.7	194.1	196.8	185.2	–	–	–
Revere	**1839 TC**	191.5	168.5	169.9	212.7	185.6	–	–	–
Progeny	**PGY 2118VT2P**	178.0	142.3	181.8	192.5	173.6	182.2	170.6	176.4
Progeny	**PGY 2215TRE**	178.7	156.9	191.0	181.5	177.0	180.1	–	–
Progeny	**PGY 2314TRE**	198.0	161.4	190.5	200.8	187.7	194.4	–	–
Progeny	**PGY 9114VT2P**	187.4	103.5	170.6	203.2	166.1	182.3	171.6	176.9
Progeny	**PGY 9117VT2P**	167.8	132.1	164.5	189.4	163.4	183.0	171.9	177.4
Pioneer	**P17677YHR**	180.4	134.4	177.8	181.7	168.6	186.4	–	–
Pioneer	**P2042 VYHR**	159.4	142.6	177.6	189.8	167.3	–	–	–
Pioneer	**P1903YHR**	169.8	154.8	180.7	203.3	177.1	–	–	–
Bayer	**DCK70-27**	181.3	173.7	175.0	190.6	180.1	–	–	–
WinField	**5208 VT2P**	175.9	101.7	171.9	189.9	159.8	185.1	–	–
WinField	**5497 VT2P**	192.3	87.8	178.9	209.1	167.0	–	–	–
WinField	**5550 VT2P**	180.5	126.8	178.2	193.1	169.7	–	–	–
WinField	**5760 TRE**	181.4	135.7	183.0	204.8	176.2	–	–	–
WinField	**5893 TRE**	186.4	163.5	173.0	197.8	180.2	188.8	–	–
Pioneer	**P1759YHR**	187.2	161.5	150.6	180.8	170.0	–	–	–
BH Genetics	**X24001TRE**	189.0	169.7	141.4	203.8	176.0	–	–	–
BH Genetics	**BH 8721VT2P**	182.9	154.1	183.4	194.0	178.6	186.0	175.3	180.6
BH Genetics	**X23048 VT2P**	176.4	155.6	184.7	197.3	178.5	–	–	–
BH Genetics	**BH8966 VT2P**	178.9	132.3	153.7	198.7	165.9	–	–	–
BH Genetics	**BH8939 TRE**	195.6	163.0	184.7	201.0	186.1	–	–	–
CNI Ag	**6915 TRE**	196.0	175.9	180.4	214.7	191.7	–	–	–
Dyna-Gro	**D56TC44**	183.6	148.3	178.3	192.2	175.6	182.7	–	–
Dyna-Gro	**D57TC29**	175.5	125.9	173.0	197.9	168.1	–	–	–
Dyna-Gro	**D58VC74**	195.8	152.5	158.9	201.8	177.3	189.9	–	–
Dyna-Gro	**D58TC94**	179.7	122.1	156.5	196.3	163.6	–	–	–
Dyna-Gro[2]	**D60TC45**	–	–	168.2	–	168.2	–	–	–
LSD (P=0.10)		14.8	30.0	26.9	8.6				
CV (%)		6.9	17.2	13.3	3.7				
Grand Mean		183.6	143.8	172.0	196.4				

[1]All yields expressed in bushels per acre and adjusted to 15.5% moisture.
[2]Some locations were planted prior to receiving this hybrid.

Table 4. Official corn variety hybrid trial, Dean Lee Research and Extension Center, Alexandria, 2024.

Company	Hybrid	PP (No./A)	LOD (0-9)	GM %	TW (lb/bu)	NLCB	SCLB	SRST	CURV	YLD (bu/A)
Progeny	PGY 2314TRE	35,898.4	1.5	13.6	58.1	0.3	1.9	0.8	1.1	198.0
CNI Ag	6915 TRE	36,757.2	1.3	13.4	57.7	0.8	1.6	0.6	1.2	196.0
Bayer	DKC114-99 VT4P	36,928.9	1.3	13.5	57.8	0.6	1.2	0.2	1.2	195.9
Dyna-Gro	D58VC74	32,978.4	2.3	14.9	60.5	2.3	0.9	0.5	1.0	195.8
BH Genetics	BH8939 TRE	36,413.7	1.0	13.2	57.1	1.3	1.3	1.4	1.0	195.6
Bayer	DKC110-41 TRE	36,585.4	1.8	12.9	56.6	0.5	1.1	1.4	1.3	195.5
Bayer	DKC117-78 VT2P	35,726.6	1.8	13.6	57.7	0.4	0.7	0.8	1.0	194.7
Pioneer	P13841PWUE	36,241.9	1.0	12.8	55.5	0.8	2.7	0.6	0.9	193.6
WinField	5497 VT2P	33,665.5	1.0	13.2	57.5	1.4	1.4	1.1	1.0	192.3
Revere	1839 TC	37,444.2	1.0	13.1	57.4	0.3	2.0	0.4	0.9	191.5
Bayer	DKC68-35 VT2P	31,776.1	1.3	13.5	57.9	0.4	1.3	0.5	1.0	190.9
BH Genetics	X24001TRE	36,413.7	1.5	14.6	59.1	0.4	1.3	0.5	1.0	189.0
Pioneer	P1511YHR	33,837.2	1.3	13.8	57.5	1.7	1.7	0.8	1.0	188.0
Progeny	PGY 9114VT2P	30,573.7	1.5	12.5	57.0	1.5	1.2	0.5	1.0	187.4
Pioneer	P1759YHR	34,352.5	1.0	12.9	55.7	0.7	1.6	0.2	1.0	187.2
WinField	5893 TRE	36,757.2	1.0	14.7	59.0	0.2	2.0	0.5	1.3	186.4
Bayer	DKC70-45 VT2P	32,634.9	1.0	13.8	58.1	0.4	1.1	0.4	1.0	186.4
Revere	1627 TC	34,696.0	1.3	14.2	59.1	0.2	2.1	0.6	1.0	186.2
Dyna-Gro	D56TC44	34,352.5	1.0	13.0	57.4	0.3	1.9	1.0	1.2	183.6
BH Genetics	BH 8721VT2P	33,493.7	1.0	14.9	59.1	0.5	1.5	0.3	1.2	182.9
Pioneer	P1718VYHR	31,776.1	1.0	12.3	54.6	2.0	1.1	0.7	1.0	182.8
Bayer	DKC66-06 TRE	35,898.4	1.0	13.4	56.6	0.8	1.3	1.1	1.2	181.6
WinField	5760 TRE	32,806.6	1.0	12.9	56.6	0.7	1.5	0.8	1.3	181.4
Bayer	DCK70-27	36,928.9	1.5	14.4	58.3	0.9	1.7	1.2	1.3	181.3
WinField	5550 VT2P	34,524.3	1.3	12.7	57.0	2.5	1.6	0.8	1.0	180.5
Pioneer	P17677YHR	35,211.3	1.5	13.8	58.9	3.7	1.2	1.4	1.3	180.4
Pioneer	P14830VYHR	31,947.8	1.3	13.4	57.4	0.5	2.2	0.7	1.3	180.3
Dyna-Gro	D58TC94	31,089.0	2.0	14.2	58.7	2.2	1.2	0.9	1.2	179.7
BH Genetics	BH8966 VT2P	33,665.5	1.3	14.5	59.1	0.9	1.5	0.8	1.0	178.9
Progeny	PGY 2215TRE	28,684.3	1.0	13.8	58.7	0.2	2.8	1.2	1.0	178.7
Progeny	PGY 2118VT2P	37,100.7	1.0	14.6	59.7	1.4	1.3	0.7	1.0	178.0
BH Genetics	X23048 VT2P	32,119.6	1.8	14.2	58.9	0.3	1.8	1.2	1.0	176.4
WinField	5208 VT2P	32,806.6	1.0	12.7	56.9	0.7	2.6	0.4	0.9	175.9
Dyna-Gro	D57TC29	34,009.0	1.0	13.2	57.7	0.3	1.4	0.4	1.0	175.5
Pioneer	P1608YHR	34,352.5	1.3	14.0	58.7	1.2	1.3	1.5	1.2	174.6
Pioneer	P0953YHR	34,352.5	1.5	12.9	57.7	0.3	2.3	0.8	1.2	174.3
Pioneer	P1903YHR	33,837.2	1.0	13.8	56.5	3.7	1.2	0.9	1.3	169.8
Pioneer	P13777PWUE	33,493.7	1.3	13.5	57.6	0.6	2.3	0.8	0.9	169.5
Progeny	PGY 9117VT2P	23,703.2	2.0	13.8	59.3	1.0	2.4	0.9	1.2	167.8
Pioneer	P2042 VYHR	34,352.5	1.0	13.6	57.4	2.0	1.4	1.2	1.2	159.4
	LSD (P=0.10)	**4,774.2**	**0.6**	**0.8**	**1.3**					**14.9**
	CV (%)	**12.3**	**41.4**	**5.1**	**2.0**					**6.9**
	Grand Mean	**32,499.4**	**2.2**	**13.6**	**57.8**	**1.0**	**1.6**	**0.8**	**1.1**	**183.6**

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 5. Official corn hybrid trial, Northeast Research Station, St. Joseph (silt loam soil), 2024.

Company	Hybrid	PP (No./A)	PH (in)	EH (in)	HC (1-3)	LOD (0-9)	GM%	TW (lb/bu)	YLD (bu/A)
CNI Ag	**6915 TRE**	21,126.8	72.7	35.9	1.8	0.0	14.1	58.9	175.9
Bayer	**DCK70-27**	27,825.5	72.9	29.9	2.8	0.0	14.8	60.3	173.7
BH Genetics	**X24001TRE**	26,966.7	70.1	32.2	3.0	0.0	14.9	60.6	169.7
Revere	**1839 TC**	20,955.0	72.4	34.1	2.0	0.0	13.8	58.5	168.5
Bayer	**DKC68-35 VT2P**	24,562.0	70.0	29.9	2.3	0.0	15.1	60.2	164.9
Revere	**1627 TC**	23,703.2	73.2	34.2	2.5	0.0	13.8	59.8	163.7
WinField	**5893 TRE**	24,390.3	73.1	32.7	1.8	0.0	15.2	60.7	163.5
BH Genetics	**BH8939 TRE**	24,218.5	71.1	34.0	2.0	0.0	13.9	58.6	163.0
Pioneer	**P1759YHR**	26,451.4	78.9	32.6	1.3	0.0	14.3	60.4	161.5
Progeny	**PGY 2314TRE**	25,249.1	71.5	31.4	2.5	0.0	14.7	59.4	161.4
Bayer	**DKC66-06 TRE**	22,844.4	74.4	31.3	3.0	0.0	15.3	59.4	158.4
Progeny	**PGY 2215TRE**	23,703.2	75.4	31.9	2.3	0.0	14.3	59.8	156.9
BH Genetics	**X23048 VT2P**	23,359.7	66.8	27.1	3.0	0.0	14.7	60.5	155.6
Pioneer	**P1718VYHR**	20,096.2	79.2	32.3	1.0	0.0	14.6	59.7	155.1
Pioneer	**P1903YHR**	20,439.7	79.1	32.5	1.5	0.0	13.8	58.9	154.8
BH Genetics	**BH 8721VT2P**	22,329.1	70.8	29.7	2.8	0.0	14.3	60.4	154.1
Dyna-Gro	**D58VC74**	25,249.1	73.8	32.3	1.8	0.0	15.1	61.1	152.5
Bayer	**DKC114-99 VT4P**	25,592.6	72.0	32.7	2.5	0.0	14.2	59.2	148.7
Dyna-Gro	**D56TC44**	25,077.3	71.1	28.7	1.3	0.0	14.2	59.3	148.3
Pioneer	**P1511YHR**	21,642.1	71.9	31.2	1.5	0.0	15.6	59.9	146.0
Pioneer	**P2042 VYHR**	24,733.8	71.0	25.6	1.0	0.0	15.0	60.0	142.6
Progeny	**PGY 2118VT2P**	22,844.4	71.2	31.4	2.0	0.0	15.1	61.7	142.3
Pioneer	**P1608YHR**	18,035.1	72.4	28.4	1.5	0.0	14.9	61.4	140.6
Bayer	**DKC70-45 VT2P**	21,642.1	71.1	30.2	1.8	0.0	15.0	60.5	139.3
Pioneer	**P13841PWUE**	25,936.1	69.4	28.6	1.0	0.0	14.0	58.5	139.0
Pioneer	**P14830VYHR**	18,378.6	72.3	30.4	2.3	0.0	14.1	58.7	138.6
WinField	**5760 TRE**	24,905.6	69.5	28.5	2.3	0.0	13.7	58.3	135.7
Pioneer	**P17677YHR**	17,348.0	76.6	35.2	2.0	0.0	14.7	60.0	134.4
BH Genetics	**BH8966 VT2P**	19,580.9	71.6	30.8	2.3	0.0	14.9	61.5	132.3
Pioneer	**P13777PWUE**	22,500.9	70.4	26.4	2.3	0.0	13.4	58.4	132.2
Progeny	**PGY 9117VT2P**	17,004.5	70.4	29.4	2.8	0.0	14.7	59.2	132.1
Bayer	**DKC110-41 TRE**	23,703.2	72.9	27.0	2.0	0.0	13.6	57.5	131.8
Bayer	**DKC117-78 VT2P**	24,733.8	68.8	28.0	1.5	0.0	15.3	60.6	127.9
WinField	**5550 VT2P**	19,924.5	70.7	29.3	2.8	0.0	13.5	59.0	126.8
Dyna-Gro	**D57TC29**	18,206.8	72.7	29.8	1.5	0.0	14.0	57.5	125.9
Dyna-Gro	**D58TC94**	20,439.7	67.6	27.8	3.0	0.0	15.1	60.3	122.1
Pioneer	**P0953YHR**	21,813.8	70.9	28.1	2.3	0.0	13.9	58.6	120.2
Progeny	**PGY 9114VT2P**	20,439.7	63.8	27.0	2.3	0.0	14.4	58.3	103.5
WinField	**5208 VT2P**	18,893.9	68.2	28.3	1.8	0.0	14.5	59.0	101.7
WinField	**5497 VT2P**	15,286.9	69.3	30.2	2.3	0.0	14.0	59.5	87.8
	LSD (P=0.10)	**6,231.1**	**4.1**	**3.6**	**0.8**		**1.1**	**1.0**	**29.0**
	CV (%)	**23.8**	**4.9**	**10.2**	**33.8**	**0.0**	**6.3**	**1.4**	**17.2**
	Grand Mean	**22,303.4**	**71.8**	**30.4**	**2.1**	**0.0**	**14.4**	**59.6**	**143.8**

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 6. Official corn hybrid trial, Northeast Research Station, St. Joseph (clay soil), 2024.

Company	Hybrid	PP (No./A)	PH (in)	EH (in)	HC (1-3)	LOD (0-9)	GM%	TW (lb/bu)	YLD (bu/A)
Revere	**1627 TC**	19,831.3	83.2	39.1	3.0	0.0	13.8	59.6	194.1
Progeny	**PGY 2215TRE**	23,958.0	85.2	38.1	2.3	0.0	14.0	61.0	191.0
Progeny	**PGY 2314TRE**	26,709.2	78.4	36.6	2.5	0.0	14.3	60.7	190.5
BH Genetics	**X23048 VT2P**	26,709.2	82.5	39.0	3.0	0.0	14.6	62.2	184.7
BH Genetics	**BH8939 TRE**	30,835.9	82.5	41.2	1.8	0.0	13.5	59.7	184.7
BH Genetics	**BH 8721VT2P**	26,021.4	82.8	36.9	1.5	0.0	13.4	60.6	183.4
WinField	**5760 TRE**	24,645.8	82.0	35.2	1.5	0.0	13.5	60.1	183.0
Progeny	**PGY 2118VT2P**	28,772.6	79.6	39.8	1.3	0.0	15.3	61.7	181.8
Pioneer	**P1903YHR**	13,641.2	84.5	42.0	2.3	0.0	13.9	59.9	180.7
CNI Ag	**6915 TRE**	26,709.2	81.8	41.6	2.0	0.0	14.0	59.9	180.4
WinField	**5497 VT2P**	19,831.3	79.2	36.4	2.5	0.0	14.0	59.9	178.9
Bayer	**DKC68-35 VT2P**	28,772.6	79.4	35.0	1.5	0.0	14.3	61.5	178.5
Dyna-Gro	**D56TC44**	28,772.6	79.2	37.3	1.0	0.0	13.6	59.9	178.3
Winfield	**5550 VT2P**	21,894.7	81.1	35.0	1.0	0.0	14.3	60.0	178.2
Pioneer	**P17677YHR**	19,831.3	84.8	41.0	1.3	0.0	13.9	61.1	177.8
Pioneer	**P2042 VYHR**	23,270.2	83.5	34.1	1.0	0.0	13.9	60.9	177.6
Bayer	**DCK70-27**	21,894.7	80.7	37.3	2.0	0.0	14.0	61.1	175.0
Pioneer	**P1608YHR**	26,021.4	82.0	36.9	1.3	0.0	14.4	60.9	174.1
Revere	**1839 TC**	30,148.1	81.0	40.7	1.5	0.0	14.0	59.8	173.9
Dyna-Gro	**D57TC29**	23,958.0	82.1	34.4	1.3	0.0	13.2	58.6	173.0
WinField	**5893 TRE**	27,397.0	81.8	38.1	1.3	0.0	15.5	61.6	173.0
Pioneer	**P13841PWUE**	19,143.5	77.3	38.1	1.3	0.0	13.5	60.1	172.5
Pioneer	**P13777PWUE**	31,982.2	79.7	35.6	1.5	0.0	13.5	60.3	172.2
WinField	**5208 VT2P**	27,855.5	78.5	35.0	1.5	0.0	13.7	60.1	171.9
Bayer	**DKC70-45 VT2P**	22,582.4	81.4	38.2	1.3	0.0	13.4	59.7	171.5
Bayer	**DKC110-41 TRE**	23,958.0	79.4	39.5	1.5	0.0	13.6	59.2	171.0
Progeny	**PGY 9114VT2P**	20,519.1	76.1	34.2	2.5	0.0	14.2	60.9	170.6
Bayer	**DKC117-78 VT2P**	27,397.0	80.1	35.9	1.8	0.0	14.6	61.4	169.0
Dyna Gro	**D60TC45**	28,084.8	0.0	0.0	–	0.0	13.8	59.6	168.2
Bayer	**DKC114-99 VT4P**	29,460.3	82.0	38.0	2.0	0.0	15.1	61.3	167.3
Pioneer	**P14830VYHR**	26,021.4	78.4	34.3	1.5	0.0	13.7	60.1	165.1
Pioneer	**P1511YHR**	28,772.6	79.0	38.3	1.3	0.0	13.7	61.2	164.9
Progeny	**PGY 9117VT2P**	31,523.7	79.1	34.7	2.8	0.0	13.9	60.3	164.5
Bayer	**DKC66-06 TRE**	27,397.0	83.1	37.9	2.3	0.0	14.1	59.9	164.0
Dyna-Gro	**D58VC74**	17,080.1	79.9	36.2	1.8	0.0	14.9	62.0	158.9
Dyna-Gro	**D58TC94**	23,270.2	77.7	34.0	2.3	0.0	14.6	61.6	156.5
Pioneer	**P1718VYHR**	17,767.9	87.3	37.7	1.0	0.0	13.8	59.7	154.6
BH Genetics	**BH8966 VT2P**	22,353.2	79.2	37.4	1.0	0.0	14.6	61.3	153.7
Pioneer	**P0953YHR**	28,772.6	76.8	32.1	2.0	0.0	13.7	59.9	153.2
Pioneer	**P1759YHR**	11,577.8	84.5	39.5	1.3	0.0	13.4	60.2	150.6
BH Genetics	**X24001TRE**	20,519.1	84.2	39.1	2.8	0.0	14.9	62.1	141.4
	LSD (P=0.10)	**6,559.2**	**3.3**	**3.6**	**0.9**		**1.0**	**1.1**	**27.0**
	CV (%)	**8.6**	**8.1**	**8.1**	**41.9**	**0.0**	**5.2**	**1.5**	**13.4**
	Grand Mean	**24,439.5**	**81.0**	**37.3**	**1.8**	**0.0**	**14.1**	**60.5**	**172.1**

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 7. Official corn hybrid trial, Macon Ridge Research Station, Winnsboro, 2024.

Company	Hybrid	PP (No./A)	PH (in)	EH (in)	HC (1-3)	LOD (0-9)	GM (%)	TW (lb/bu)	YLD (bu/A)
CNI Ag	**6915 TRE**	30,740.5	75.9	38.4	1.5	0.0	16.3	59.8	214.7
Revere	**1839 TC**	24,854.1	74.7	39.3	2.0	0.0	16.2	59.8	212.7
Bayer	**DKC70-45 VT2P**	30,250.0	74.9	35.1	1.8	0.0	16.4	61.6	212.4
WinField	**5497 VT2P**	30,413.5	70.6	34.7	1.8	0.0	16.0	59.8	209.1
WinField	**5760 TRE**	27,797.3	69.6	30.3	1.3	0.0	15.9	59.7	204.8
BH Genetics	**X24001TRE**	31,721.6	75.3	36.2	2.3	0.0	16.2	60.2	203.8
Bayer	**DKC114-99 VT4P**	31,231.1	74.0	35.5	2.3	0.0	16.0	60.5	203.3
Pioneer	**P1903YHR**	30,577.0	78.3	36.5	1.8	0.0	15.8	58.5	203.3
Progeny	**PGY 9114VT2P**	28,778.4	68.0	33.1	2.3	0.0	16.0	60.5	203.2
Dyna-Gro	**D58VC74**	30,577.0	74.5	34.2	1.5	0.0	16.3	62.5	201.8
BH Genetics	**BH8939 TRE**	29,759.5	74.5	39.5	1.0	0.0	16.2	67.7	201.0
Progeny	**PGY 2314TRE**	30,086.5	72.9	35.8	2.8	0.0	15.9	60.8	200.8
Bayer	**DKC68-35 VT2P**	23,218.9	69.7	33.4	2.5	0.0	16.3	60.8	200.3
Pioneer	**P1511YHR**	28,124.3	71.3	34.3	2.3	0.0	15.8	60.0	199.9
Pioneer	**P13841PWUE**	31,394.6	68.8	31.4	1.0	0.0	15.7	58.6	199.3
BH Genetics	**BH8966 VT2P**	27,960.8	71.8	35.5	1.0	0.0	16.4	61.7	198.7
Pioneer	**P1718VYHR**	32,539.2	79.7	37.9	1.5	0.0	16.1	60.6	198.7
Dyna-Gro	**D57TC29**	31,721.6	73.3	32.9	1.0	0.0	15.8	58.9	197.9
Bayer	**DKC117-78 VT2P**	33,193.2	72.5	34.1	1.5	0.0	16.2	61.2	197.9
WinField	**5893 TRE**	31,394.6	74.6	37.7	2.0	0.0	16.3	61.3	197.8
Bayer	**DKC66-06 TRE**	28,778.4	75.2	32.7	2.0	0.0	15.8	60.1	197.5
BH Genetics	**X23048 VT2P**	29,595.9	70.1	32.1	2.5	0.0	16.2	59.6	197.3
Revere	**1627 TC**	25,508.1	72.0	32.6	2.8	0.0	16.0	60.7	196.8
Dyna-Gro	**D58TC94**	27,797.3	72.4	36.3	2.8	0.0	15.8	60.2	196.3
Bayer	**DKC110-41 TRE**	29,595.9	69.1	30.4	2.8	0.0	15.9	58.6	194.6
BH Genetics	**BH 8721VT2P**	30,904.1	69.9	34.5	2.0	0.0	15.7	61.2	194.0
WinField	**5550 VT2P**	29,105.4	69.6	34.1	1.8	0.0	15.8	58.7	193.1
Pioneer	**P13777PWUE**	29,595.9	71.4	30.2	2.0	0.0	16.0	60.1	193.0
Progeny	**PGY 2118VT2P**	28,778.4	73.1	34.0	1.5	0.0	16.3	62.6	192.5
Dyna-Gro	**D56TC44**	29,105.4	69.1	34.1	1.0	0.0	16.0	60.6	192.2
Bayer	**DCK70-27**	29,105.4	75.1	35.4	2.8	0.0	16.6	61.3	190.6
Pioneer	**P1608YHR**	28,778.4	71.2	33.8	1.3	0.0	15.6	49.4	190.4
WinField	**5208 VT2P**	32,702.7	68.0	31.9	1.5	0.0	16.1	59.8	189.9
Pioneer	**P2042 VYHR**	29,268.9	71.4	32.1	1.0	0.0	16.6	61.3	189.8
Progeny	**PGY 9117VT2P**	25,835.1	70.8	35.0	2.5	0.0	15.7	61.9	189.4
Pioneer	**P17677YHR**	29,923.0	77.0	37.1	1.3	0.0	15.7	60.9	181.7
Progeny	**PGY 2215TRE**	28,124.3	72.5	33.2	2.5	0.0	15.8	59.7	181.5
Pioneer	**P1759YHR**	28,614.9	76.5	36.2	1.0	0.0	15.7	59.8	180.8
Pioneer	**P0953YHR**	27,470.3	68.1	30.1	3.0	0.0	15.4	58.9	179.6
Pioneer	**P14830VYHR**	26,816.2	67.4	30.8	1.5	0.0	15.9	59.6	174.8
	LSD (P=0.10)	**4,071.7**	**3.6**	**2.5**	**0.8**		**0.3**	**5.6**	**8.6**
	CV (%)	**11.9**	**4.2**	**6.1**	**37.1**	**0.0**	**1.8**	**7.9**	**3.7**
	Grand Mean	**29,293.4**	**72.3**	**34.3**	**1.9**	**0.0**	**16.0**	**60.2**	**196.4**

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 8. 2024 core block demonstration summary at eight parish locations.

Hybrid	Avoyelles	Franklin	Ouachita	Pointe-Coupee	Rapides	St. Landry	Tensas	West Carrol
CP 5682 TRE[1]	–	–	197.8	–	–	–	217.4	–
CP 5893 TRE[1]	–	–	171.7	–	–	–	184.3	–
D588TC94	185.3	221.4	177.0	222.9	191.8	209.7	179.5	212.4
D58VC74	170.1	212.3	185.9	184.8	179.0	185.6	181.9	220.2
DKC 117-78 VT2P	179.6	213.5	162.7	200.5	200.4	180.4	185.4	215.0
DKC 68-35 VT2P	188.2	233.4	185.3	–	221.8	207.0	164.6	223.2
P1511YHR	176.8	228.2	182.8	197.9	197.0	201.4	156.1	205.1
P1759VYHR	170.0	211.1	160.8	175.3	197.0	182.4	176.6	190.8
PGY 2118 VT2P	163.9	213.3	157.2	202.2	191.2	173.5	157.6	225.5
PGY 9114 VT2P	177.2	207.0	183.5	199.3	196.8	187.9	166.2	210.6
Location Average	**176.4**	**217.5**	**176.5**	**197.5**	**196.9**	**191.0**	**177.0**	**212.9**
Soil Type	Silt Loam/Silty Clay Loam	Gilbert-Gigger	Silt Loam	Sandy Loam	Silt Loam	Silty Clay Loam	Silt Loam	Dundee-Dubbs Complex
Planting Date	3/30/24	3/14/24	3/12/24	3/12/24	3/20/24	4/3/24	4/1/24	4/3/24

[1]*Trial was already planted prior to receiving seed for this hybrid.*

Table 9. Avoyelles Parish

Community: Bordelonville
County agent: Justin Dufour
Cooperators: Jeffry Bordelon
GPS coordinates: 31.075105, -91.937527
Previous crop: Soybean
Planted plant population: 32,000
Row spacing (inches): 36
Soil type: Coushatta silt loam/silty clay loam
N rate (lbs/acre): 200
Irrigation: No
Tillage type: Conventional
Date planted: 3/30/24
Date harvested: 8/14/24
Weigh wagon or yield monitor: Weigh wagon

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	TW	Rank[1]
Dekalb	**DKC 68-35 VT2P**	8,040	11.3	180	2,325	0.80	8,439.62	179.33	188.24	58.3	1
Dyna-Gro	**D58TC94**	7,660	11.3	180	2,250	0.77	8,040.73	176.54	185.32	59.3	2
Dekalb	**DKC 117-78 VT2P**	6,800	10.8	180	2,073	0.71	7,178.22	170.11	179.57	59.2	3
Progeny	**PGY 9114 VT2P**	7,920	10.3	180	2,460	0.85	8,407.38	166.95	177.23	59.4	4
Pioneer	**P1511YHR**	7,500	10.7	180	2,325	0.80	7,926.04	167.28	176.78	59.3	5
Dyna-Gro	**D58VC74**	7,660	11	180	2,460	0.85	8,067.93	161.47	170.07	58.8	6
Pioneer	**P1759VYHR**	6,460	11.1	180	2,073	0.71	6,796.38	161.60	170.01	56.7	7
Progeny	**PGY 2118 VT2P**	6,790	11.5	180	2,250	0.77	7,111.42	156.49	163.90	59.2	8

[1]*Rank is based on Bu/A (adj).*

Table 10. Franklin Parish

Community: Winnsboro
County agent: Carol Pinnell-Alison
Cooperators: Campbell Farms
Planted plant population: 33,000
Row spacing (inches): 38
Soil type: Gilbert-Gigger-Egypt
N rate (lbs/acre): 12 gal/acre starter 20-6-10-3, 200 pounds side-dress

Irrigation: Yes
Irrigation type: Furrow
Tillage type: Minimum/stale seed bed
Date planted: 3/14/24
Date harvested: 8/22/24
Weigh wagon or yield monitor: Weigh wagon
Notes: Dry 0-60-100 P & K

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	TW	Rank[1]
Bayer	**DKC 68-35 VT2P**	4,790	13.9	304	642	0.4	4,880.7	229.1	233.4	59.4	1
Pioneer	**P1511YHR**	4,680	13.7	304	643	0.4	4,779.7	223.5	228.2	59.5	2
Dyna-Gro	**D58TC94**	4,605	13.6	304	653	0.4	4,708.5	216.5	221.4	60.9	3
Bayer	**DKC 117-78 VT2P**	4,465	13.8	304	655	0.4	4,554.8	209.3	213.5	60.3	4
Progeny	**PGY 2118 VT2P**	4,365	13.8	304	641	0.4	4,452.8	209.1	213.3	61.2	5
Dyna-Gro	**D58VC74**	4,375	14.0	304	644	0.4	4,452.7	208.6	212.3	60.8	6
Pioneer	**P1759VYHR**	4,400	13.5	304	655	0.4	4,504.1	206.3	211.1	59.6	7
Progeny	**PGY 9114 VT2P**	4,300	14.4	304	646	0.4	4,356.0	204.4	207.0	58.4	8

[1]Rank is based on Bu/A (adj).

Table 11. Ouachita Parish

Community: Monroe
County agent: Carol Pinnell-Alison
Cooperators: Tripp Faulk
Previous crop: Corn
Planted plant population: 32,000
Row spacing (inches): 38
Soil type: Rilla silt loam
N rate (lbs/acre): 90 pounds urea, side-dress 29-0-0-4 120 pounds additional N

Irrigation: Yes
Irrigation type: Furrow
Tillage type: Minimum/stale seed bed
Date planted: 4/1/24
Date harvested: 8/20/24
Weigh wagon or yield monitor: Yield monitor
Notes: Dry 0-60-60 P & K

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	Rank[1]
WinField	**CP 5682 TRE**	6,812.3	14.0	304	1,076	0.6	6,930.9	194.4	197.8	1
Dyna-Gro	**D58VC74**	6,301.6	12.6	304	1,076	0.6	6,515.6	179.8	185.9	2
Bayer	**DKC 68-35 VT2P**	6,307.9	13.0	304	1,076	0.6	6,495.2	180.0	185.3	3
Progeny	**PGY 9114 VT2P**	6,220.5	12.7	304	1,076	0.6	6,429.6	177.5	183.5	4
Pioneer	**P1511YHR**	6,280.1	13.8	304	1,076	0.6	6,405.7	179.2	182.8	5
Dyna-Gro	**D58TC94**	6,044.5	13.3	304	1,076	0.6	6,201.1	172.5	177.0	6
WinField	**CP 5893 TRE**	5,871.0	13.4	304	1,076	0.6	6,016.2	167.5	171.7	7
Bayer	**DKC 117-78 VT2P**	5,663.0	14.9	304	1,076	0.6	5,703.2	161.6	162.7	8
Pioneer	**P1759YHR**	5,444.2	12.6	304	1,076	0.6	5,634.3	155.4	160.8	9
Progeny	**PGY 2118 VT2P**	5,419.6	14.1	304	1,076	0.6	5,509.4	154.7	157.2	10

[1]Rank is based on Bu/A (adj).

Table 12. Pointe Coupee Parish

Community: Batchelor
County agent: Mark Carrierre
Cooperator: Brandon Lacour
Previous crop: Cotton
Planted plant population: 34,000
Row spacing (inches): 38
Soil type: Bruin very fine sandy loam
N rate (lbs/acre): 220
Tillage type: Minimal tillage
Date planted: 3/12/24
Date harvested: 8/1/2024
Weigh wagon or yield monitor: Weigh wagon

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	TW	Rank[1]
Dyna-Gro	**D58TC94**	12,780	16.5	304	1,740	1	12,628.8	225.5	222.9	60.7	1
Progeny	**PGY 2118 VT2P**	11,720	17.4	304	1,740	1	11,456.5	206.8	202.2	59.5	2
Bayer	**DKC 117-78 VT2P**	11,510	16.6	304	1,740	1	11,360.2	203.1	200.5	59.1	3
Progeny	**PGY 9114 VT2P**	11,320	15.7	304	1,740	1	11,293.2	199.8	199.3	58.2	4
Pioneer	**P1511YHR**	11,320	16.3	304	1,740	1	11,212.8	199.8	197.9	59.2	5
Dyna-Gro	**D58VC74**	10,500	15.7	304	1,740	1	10,475.1	185.3	184.8	61.4	6
Pioneer	**P1759VYHR**	10,090	16.8	304	1,740	1	9,934.8	178.1	175.3	58.2	7

[1]Rank is based on Bu/A (adj).

Table 13. Rapides Parish

Community: Boyce
County agent: Justin Dufour
Cooperator: Trevor Verzwyvelt
Previous crop: Fallow
Planted plant population: 34,000
Row spacing (inches): 38
Soil type: Coushatta silt loam
N rate (lbs/acre): 200
Irrigation: No
Tillage type: Conventional
Date planted: 3/20/24
Date harvested: 8/22/24
Weigh wagon or yield monitor: Weigh wagon

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	TW	Rank[1]
Bayer	**DKC 68-35 VT2P**	6,410	11.1	228	1,245	0.5	6,743.8	210.8	221.8	58.1	1
Bayer	**DKC 117-78 VT2P**	5,880	12.4	228	1,245	0.5	6,095.7	193.4	200.4	57.3	2
Pioneer	**P1759VYHR**	5,760	12.1	228	1,245	0.5	5,991.8	189.4	197.0	57.3	3
Pioneer	**P1511YHR**	5,740	11.8	228	1,245	0.5	5,991.3	188.8	197.0	58.7	4
Progeny	**PGY 9114 VT2P**	5,760	12.2	228	1,245	0.5	5,984.9	189.4	196.8	58.7	5
Dyna-Gro	**D58TC94**	5,550	11.2	228	1,245	0.5	5,832.4	182.5	191.8	60.4	6
Progeny	**PGY 2118 VT2P**	5,610	12.4	228	1,245	0.5	5,815.8	184.5	191.2	60.6	7
Dyna-Gro	**D58VC74**	5,180	11.2	228	1,245	0.5	5,443.6	170.3	179.0	58.0	8

[1]Rank is based on Bu/A (adj).

Table 14. St. Landry Parish

Community: Palmetto
County agent: Vince Deshotel
Cooperator: Charlie Fontenot
GPS coordinates: 30.76514 N, 91.87955 W
Previous crop: Soybean
Planted plant population: 32,000
Row spacing (inches): 38
Soil type: Silt clay loam
N rate (lbs/acre): 220
Irrigation: Yes
Irrigation type: Furrow
Tillage type: Minimum/stale seed bed
Date planted: 4/3/24
Date harvested: 8/5/24
Weigh wagon or yield monitor: Yield monitor

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	Rank[1]
Dyna-Gro	**D58TC94**	13,003.2	17.6	456	1,238.0	1.1	12,680.0	215	209.7	1
Bayer	**DKC 68-35 VT2P**	12,757.4	16.3	456	1,249.5	1.1	12,636.6	209	207.0	2
Pioneer	**P1511YHR**	12,696.3	18.2	456	1,249.5	1.1	12,290.6	208	201.4	3
Progeny	**PGY 9114 VT2P**	11,536.6	16.0	456	1,249.5	1.1	11,468.3	189	187.9	4
Dyna-Gro	**D58VC74**	11,475.5	16.6	456	1,249.5	1.1	11,326.1	188	185.6	5
Pioneer	**P1759VYHR**	11,396.0	16.7	456	1,260.9	1.1	11,234.2	185	182.4	6
Bayer	**DKC 117-78 VT2P**	11,170.3	16.7	456	1,249.5	1.1	11,011.7	183	180.4	7
Progeny	**PGY 2118 VT2P**	11,026.4	18.1	456	1,260.9	1.1	10,687.1	179	173.5	8

[1]Rank is based on Bu/A (adj).

Table 15. Tensas Parish

Community: St. Joseph
County agent: Dennis Burns
Cooperator: Northeast Research Station
Previous crop: Cotton after cereal rye cover
Planted plant population: 35,000
Row spacing (inches): 38
Soil type: Commerce silt loam
N rate (lbs/acre): 210
Irrigation: No
Date planted: 4/1/24
Date harvested: 8/20/24
Weigh wagon or yield monitor: Weigh wagon

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	Rank[1]
WinField	**CP 5682 TRE**	2,510	14.7	303	359	0.2	2,533.8	215	217.4	1
Bayer	**DKC 117-78 VT2P**	2,120	13.9	303	359	0.2	2,160.1	182	185.4	2
WinField	**CP 5893 TRE**	2,125	14.6	303	359	0.2	2,147.6	182	184.3	3
Dyna-Gro	**D58VC74**	1,045	14.0	152	359	0.1	1,063.6	179	181.9	4
Dyna-Gro	**D58TC94**	2,060	14.2	303	359	0.2	2,091.7	176	179.5	5
Pioneer	**P1759VYHR**	2,015	13.7	303	359	0.2	2,057.9	173	176.6	6
Progeny	**PGY 9114 VT2P**	1,890	13.4	303	359	0.2	1,937.0	162	166.2	7
Bayer	**DKC 68-35 VT2P**	1,880	13.8	303	359	0.2	1,917.8	161	164.6	8
Progeny	**PGY 2118 VT2P**	1,815	14.5	303	359	0.2	1,836.5	155	157.6	9
Pioneer	**P1511YHR**	1,790	14.1	303	359	0.2	1,819.7	153	156.1	10

[1]Rank is based on Bu/A (adj).

Table 16. West Carroll Parish

Community: Goodwill
County agent: Bruce Garner
Cooperator: Ty Rogers
GPS coordinates: Lat. 32°47'28.87"N, Lon. 91°33'43.93"W
Previous crop: Soybean
Planted plant population: 34,000
Row spacing (inches): 30
Soil type: Dundee-Dubbs Complex
N rate (lbs/acre): 220
Irrigation: Yes
Irrigation type: Furrow
Tillage type: Minimun
Date planted: 4/3/24
Date harvested: 8/15/24
Weigh wagon or yield monitor: Yield monitor

Company	Hybrid	HW (lbs)	GM (%)	PW (in)	RL (ft)	Acres	DW (lbs)	Bu/A (raw)	Bu/A (adj)	Rank[1]
Progeny	**PGY 2118 VT2P**	9,294.7	17.3	360	1,046	0.7	9,097.8	230.4	225.5	1
Bayer	**DKC68-35 VT2P**	9,512.5	16.9	360	1,086	0.7	9,350.4	227.1	223.2	2
WinField	**CP 5893 TRE**	9,518.6	17.2	360	1,091	0.8	9,330.5	226.2	221.7	3
Dyna-Gro	**D58VC74**	9,495.1	16.9	360	1,100	0.8	9,343.4	223.8	220.2	4
Bayer	**DKC117-78 VT2P**	8,836.6	16.2	360	1,057	0.7	8,765.5	216.8	215.0	5
Dyna-Gro	**D58TC94**	8,892.7	16.7	360	1,070	0.7	8,766.4	215.5	212.4	6
Progeny	**PGY 9114 VT2P**	8,416.4	14.3	360	1,051	0.7	8,537.9	207.6	210.6	7
Pioneer	**P1511YHR**	8,689.4	17.3	360	1,076	0.7	8,509.4	209.4	205.1	8
WinField	**CP 5682 TRE**	9,085.3	19.1	360	1,107	0.8	8,703.6	212.8	203.9	9
Pioneer	**P1759VYHR**	7,839.1	15.9	360	1,061	0.7	7,805.7	191.6	190.8	10

[1]Rank is based on Bu/A (adj).

PLANTING DATE

Corn growth and development responds to temperature and is not controlled by day length. Thus, the calendar date is not as important as soil and air temperature when considering optimum timing to plant corn. Good germination and emergence are expected when the soil temperature at a 2-inch depth is 55 F by 9 a.m. for three consecutive days. This normally occurs in late February and March in Louisiana. In most years, the optimal planting window for south Louisiana is Feb. 23 to March 23, and for north Louisiana March 10 to April 10. Extending planting past the last optimal planting date can result in losses of half of a bushel to 1 bushel per day.

Frost may occur after these planting dates in some years; however, corn typically withstands frost with little economic injury. Corn younger than V6 (six-leaf stage) usually can withstand a light frost if the temperature does not drop below 30 F. A moderate freeze will burn any existing leaves and cause them to drop, but new leaves can emerge in four to five days with warm temperatures. However, as the growing point moves upward near the soil surface, the possibility of injury increases.

PLANTING RATE AND DEPTH

The optimal plant population for corn ranges from 27,000 to 30,000 live plants per acre. At 80% field emergence this would equate to planting 33,750 to 37,500 seeds per acre. The lower end of the recommended range should be used when lower yields are expected because of soil type, late planting date, drought-prone areas or low fertility. Higher populations should be used on highly productive deep alluvial soils or irrigated fields where moisture will not be a limiting factor.

Also, seeding densities can be affected by “ear flex.” Full-flex hybrids can compensate for fewer plants per acre because the ear grows both in length and girth. These hybrids usually produce only one ear per stalk. Individual semi-flex hybrid ears will not compensate to the extent that full-flex hybrids will, but with low stand density and excellent growing conditions they may set two or more ears. Fixed-ear hybrids must obtain the desired population for maximum yield.

Seed size and shape are not critical for a good stand but be sure to use the correct plate and planter for the size purchased. Corn should be planted 2 inches deep. It is vitally important to establish seed contact with moist soil, but planting seeds greater than 2 inches deep can increase the probability of an uneven plant stand, which can affect growth and yield.

CORN GROWTH AND DEVELOPMENT

Corn growth and development are closely related to temperature. Warmer temperatures result in rapid corn growth, and cooler temperatures result in slower corn development. Temperatures are used to calculate growing degree days (GDD) or heat units (HU). Several formulas exist to calculate these GDD, but the one used most often is the modified 86/50 cutoff method (MGDD). MGDD for any given day are calculated by subtracting 50 from the average daily temperature. The average daily temperature is calculated by adding the daily high and the daily low temperatures and then dividing by two.

$$GDD = \frac{\text{Max. Temp} + \text{Min. Temp.}}{2} - 50F$$

Two criteria exist when calculating MGDD. First, if the daily high was greater than 86 F, then 86 F is used to calculate the average. Second, if the daily low was less than 50 F, then 50

F is used to calculate the average. These upper and lower temperature thresholds or limits define the boundaries beyond which corn develops very slowly, if at all. Throughout the years, we have talked about the number of MGDD accumulated when silking or physiological maturity (black layer) occurs. For example, a particular hybrid will silk at 1,365 MGDD or reach physiological maturity at 2,800 MGDD. Another useful purpose for following MGDD accumulation is to track the rate of leaf development prior to pollination. From V1 to V10, new leaves, which are defined by the appearance of leaf collars, emerge at a rate of about 85 MGDD per leaf. This is equivalent to about one leaf every five to six days in early April. From V10 to the final leaf, leaves emerge at a rate of about 50 MGDD per leaf.

Practical uses of this information include estimating how far along the corn crop should be for any given location if we know the planting date and the MGDD accumulations since the planting date. It is especially important to know the emergence date, but if this is not available, we can use 125 MGDD from planting to emergence. For instance, corn should reach the V6 growth stage by the time 635 MGDD have accumulated since planting. This is calculated by using 125 MGDD from planting to emergence, then figuring 510 MGDD (6 multiplied by 85) from emergence to V6. It is very important to remember that a shortage of MGDD resulting from early season cool temperatures can never be recovered. Midsummer days in the 90s do not necessarily accelerate MGDD accumulations because rate of growth is minimal when temperatures are above 86 F. Also, plant stress (soil compaction, excessive soil moisture, pest injury, hail damage) can interfere with this relationship and retard leaf development. Comparisons of predicted leaf development stages with actual leaf stages can, therefore, be used as an indicator of plant stress.

FERTILITY

Soil testing is the foundation of a sound fertility program and is necessary for maximum efficiency in applying correct rates of lime and fertilizer. Proper fertility is critical for optimizing crop yields, particularly in corn. Seldom is there a field that does not require the addition of fertilizer. The estimated uptake of nitrogen (N), phosphorus (P), potassium (K) and sulfur (S) by a 200-bushel-per-acre corn crop is presented in Table 17. Be aware that the values presented are not the amount of nutrients that need to be applied, but rather the total uptake by the corn crop from soil, fertilizer, and other sources.

Table 17. Approximate amount of nutrients in a 200-bushel-per-acre corn crop.

	Quantity in pounds	
Element	Grain	Stover
Nitrogen (N)	134	90
Phosphorus (P_2O_5)	70	32
Potassium (K_2O)	50	220
Sulfur (S)	16	14

International Plant Nutrition Institute, May 2014.

SOIL PH

Soil pH affects the availability of nutrients to plant roots. The desirable soil pH for corn ranges from 5.8 to 7.0. Continued cultivation and the use of chemical fertilizers, especially those containing ammonium and sulfur, tend to decrease soil pH over time. Irrigation with water high in calcium carbonate, on the other hand, tends to increase soil pH.

Soil samples should be collected and checked for the degree of acidity or alkalinity. Lime is generally recommended to raise pH values below 6.1 (Table 18). Soil texture and the buffer capacity of the soil are required for a more accurate estimate of the amount of lime that is needed. If lime is needed, it is recommended to apply it during the fall to provide enough time for it to react with the soil. The relative neutralizing material (RNV) of lime impacts the amount that needs to be applied. The RNV of a material is based on its fineness and calcium carbonate equivalent (CCE), or the amount of pure calcium carbonate to which the selected material corresponds, with finer materials reacting more quickly than coarse materials. An ag lime material with a CCE of 100 is “stronger” than an ag lime material with a CCE of 90. Consequently, less volume would be needed to increase the pH of a given soil.

Table 18. Lime recommendations for corn, Mehlich 3 extraction.

Soil pH	Lime (tons/acre)[1]
Above 6.1	0
5.8-6.1	1
5.0-5.8	2
Below 5	3

[1]Amount of limestone needed to adjust soil pH to a desired level for corn depends on the initial soil pH, soil clay content, and soil buffer capacity (resistance to pH change). Testing soil pH is an excellent indicator of the need for lime and in combination with soil texture is sometimes used to estimate the lime requirement. However, most soil testing laboratories offer a buffer lime-requirement test that provides a more accurate estimate of the quantity of lime that should be applied.

NITROGEN

Nitrogen is necessary for chlorophyll synthesis and is part of the chlorophyll molecule involved in photosynthesis. Lack of N and chlorophyll means the crop will not utilize sunlight as an energy source to carry on essential functions, such as nutrient uptake. It is an essential component of amino acids, which form plant proteins. Therefore, N is directly responsible for increasing protein content. A rough rule of thumb is to apply 1 to 1.2 pounds of actual N for each bushel of corn produced. Nitrogen should be applied according to whether the field is an alluvial plain, such as the Delta, or an upland soil and whether it is irrigated or dryland (Table 19). Apply nitrogen in a split application with 50% to 75% applied before or at planting and the balance when corn is 3 to 12 inches tall. All the nitrogen can be applied pre-plant or at planting, but this increases the risk of fertilizer burn on seedlings and nitrogen loss from leaching or volatilization. An application of 20 to 50 pounds of nitrogen at tassel may be beneficial if environmental conditions result in leaching or volatilization of nitrogen.

Table 19. Nitrogen rates for corn in Louisiana based on field conditions.

Soil	Irrigation	Nitrogen Rate (lbs/acre)
Alluvial	Yes	180-270
Alluvial	No	140-210
Upland	Yes	160-230
Upland	No	120-190

PHOSPHORUS

Phosphorus plays a role in photosynthesis, respiration, energy storage and transfer, cell division and cell enlargement in the plant. It promotes early root formation and growth, increases water use efficiency and hastens maturity. Corn uses phosphorus early in its growth cycle, and it should be applied preplant or at planting (Table 20). Banding phosphorus will increase its efficiency when the soil pH is very acidic or alkaline or when soil test phosphorus levels are low. Also, starter fertilizers can be beneficial for soils that have a high pH or have very low to low phosphorus levels. Soil testing is recommended to apply appropriate levels for each field, but in many soils 40 to 60 pounds of P_2O_5 per acre will be needed.

Table 20. Phosphorus recommendations for corn based on soil test (ppm) and pounds of P_2O_5 to apply per acre.

	Very low	Low	Medium	High	Very high
	<10 ppm	10-19 ppm	20-34 ppm	35-50 ppm	>50 ppm
Alluvial-Irrigated	120	90	60	0	0
Alluvial-Dryland	100	80	60	0	0
Upland-Irrigated	100	80	60	0	0
Upland-Dryland	80	60	40	0	0

POTASSIUM

Potassium is vital to photosynthesis. When K is deficient, photosynthesis declines and plant respiration increases, which reduces carbohydrate supply. Other functions of K include that it is essential for protein synthesis, helps control ionic balance and translocation of heavy metals, helps overcome the effects of disease, and is involved in the activation of 60 enzyme systems. Potash deficiency in corn results in reduced growth, delayed maturity, and lodging. Corn uses potassium early in its growth cycle, and it should be applied pre-plant or at planting (Tables 21-24). Soil testing is recommended to apply appropriate levels for each field, but in many soils 40 to 60 pounds of K_2O per acre will be needed.

Table 21. Potassium recommendations based on soil test (ppm) and soil type for corn on alluvial soils (irrigated).

Soil Type	VL	VL	L	L	M	M	H	H	VH	VH
	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O
Clay	<141	100	141-210	90	211-316	60	317-334	0	>334	0
Clay Loam	<123	100	123-175	90	176-263	60	264-282	0	>282	0
F. Sandy Loam	<53	100	53-87	90	88-122	60	123-141	0	>141	0
Loamy Sand	<35	100	35-52	90	53-78	60	79-123	0	>123	0
Silty Clay	<141	100	141-210	90	211-316	60	317-334	0	>334	0
Silt Clay Loam	<123	100	123-175	90	176-263	60	264-282	0	>282	0
Silt Loam	<70	100	70-105	90	106-140	60	141-158	0	>158	0
V. F. Sandy Loam	<53	100	53-87	90	88-122	60	123-141	0	>141	0

Table 22. Potassium recommendations based on soil test (ppm) and soil type for corn on alluvial soils (nonirrigated).

Soil Type	VL	VL	L	L	M	M	H	H	VH	VH
	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O
Clay	<141	100	141-210	80	211-316	60	317-334	0	>334	0
Clay Loam	<123	100	123-175	80	176-263	60	264-282	0	>282	0
F. Sandy Loam	<53	100	53-87	80	88-122	60	123-141	0	>141	0
Loamy Sand	<35	100	35-52	80	53-78	60	79-123	0	>123	0
Silty Clay	<141	100	141-210	80	211-316	60	317-334	0	>334	0
Silt Clay Loam	<123	100	123-175	80	176-263	60	264-282	0	>282	0
Silt Loam	<70	100	70-105	80	106-140	60	141-158	0	>158	0
V. F. Sandy Loam	<53	100	53-87	80	88-122	60	123-141	0	>141	0

Table 23. Potassium recommendations based on soil test (ppm) and soil type for corn on upland soils (irrigated).

Soil Type	VL	VL	L	L	M	M	H	H	VH	VH
	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O
Clay	<88	100	88-140	80	141-175	60	176-194	0	>194	0
Clay Loam	<88	100	88-140	80	141-175	60	176-194	0	>194	0
F. Sandy Loam	<44	100	44-69	80	70-105	60	106-123	0	>123	0
Loamy Sand	<88	100	88-140	80	141-175	60	176-194	0	>194	0
Silty Clay	<88	100	88-140	80	141-175	60	176-194	0	>194	0
Silt Clay Loam	<62	100	62-96	80	97-140	60	141-158	0	>158	0
Silt Loam	<35	100	35-52	80	53-87	60	88-106	0	>106	0
V. F. Sandy Loam	<44	100	44-69	80	70-105	60	106-123	0	>123	0

Table 24. Potassium recommendations based on soil test (ppm) and soil type for corn on upland soils (nonirrigated).

Soil Type	VL	VL	L	L	M	M	H	H	VH	VH
	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O	ppm	K_2O
Clay	<88	80	88-140	60	141-175	40	176-194	0	>194	0
Clay Loam	<88	80	88-140	60	141-175	40	176-194	0	>194	0
F. Sandy Loam	<44	80	44-69	60	70-105	40	106-123	0	>123	0
Loamy Sand	<88	80	88-140	60	141-175	40	176-194	0	>194	0
Silty Clay	<88	80	88-140	60	141-175	40	176-194	0	>194	0
Silt Clay Loam	<62	80	62-96	60	97-140	40	141-158	0	>158	0
Silt Loam	<35	80	35-52	60	53-87	40	88-106	0	>106	0
V. F. Sandy Loam	<44	80	44-69	60	70-105	40	106-123	0	>123	0

SULFUR

Sulfur is part of every living cell and is a constituent of two of the 21 amino acids that form proteins. Sulfur is often overlooked in a soil fertility program. With a reduction in sulfur emissions from industrial and transportation sources, atmospheric sulfur depositions are much lower; therefore, sulfur deficiencies in corn are becoming more common. A typical 200-bushel-per-acre corn crop takes up about 30 pounds per acre with about 16 pounds per acre removed in the grain at harvest. When a soil test is utilized to determine if sulfur is needed, values of less than 12 ppm (Mehlich 3) generally suggest that additional sulfur may be needed. The typical recommended rate is 20 pounds of sulfur in the sulfate form per acre.

ZINC

Zinc was one of the first micronutrients recognized as essential for plants and the one most commonly limiting yield. Although it is required in small amounts, high yields are impossible without it. Corn is one of the most responsive crops to zinc applications. If zinc is lower than 1 ppm, apply 10 pounds of zinc in a soluble form, such as zinc sulfate or zinc chelate, per acre (Table 25). Among the inorganic zinc sources on the market, the most common sources are sulfates, oxides, and oxysulfates. Zinc sulfate and zinc chelates essentially are 100% water-soluble, while zinc oxides essentially are insoluble in a single crop season and are thus unavailable to the crop to be planted. Oxysulfates are a mixture of sulfates and oxides, with varying proportions of sulfates and oxides and different solubility levels (0.7% to 98.3%). The effectiveness of these can be highly variable, depending on solubility. Low solubility materials may have some value in a long-term buildup program, but when immediate results are the goal, highly soluble fertilizers are the best choices. For acceptable in-season efficacy, a zinc-fertilizer source should be at least 50% water-soluble. If a soil test shows zinc is between 1 and 2.25 ppm, apply 5 pounds of zinc per acre when broadcasting. Less is needed if using a banded application.

Table 25. Zinc recommendations for corn based on soil test (ppm) and pounds of zinc to apply per acre.

Low	Medium	High
<1 ppm	1-2.25 ppm	>2.25 ppm
10 lbs/acre	5 lbs/acre	0 lbs/acre

SEED RELABELING

Seed selection is one of the most critical decisions that farmers make each year and is one of the largest expenses on the farm. Hybrid seed differs greatly in price and yield potential. To make seed selection even more challenging, farmers also need to consider a common practice in the seed industry where the same variety is sold under multiple brand names, which is referred to as seed relabeling. **Seed relabeling creates two significant problems for farmers:**

- **Inconsistent seed pricing:** Because different brands often sell the same hybrid for very different prices, producers may significantly overpay, perhaps not realizing that other brands sell the hybrid at a lower price.
- **Lack of genetic diversity:** When the same hybrid is sold under multiple brand names, it is easy for producers to unknowingly purchase the same genetics from multiple brands while thinking they are buying unique attributes from each brand. This can lead to a failure to establish the genetic diversity that many farmers strive for when selecting seed.

Federal and state seed labeling regulations typically require bags of seed to be labeled with the variety name. Relabeled seeds can be identified when you find the same **hybrid** marketed under multiple brand names.

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