# 2021 Arkansas Corn Standardized County Hybrid Trials



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#### Arkansas Corn Standardized County Hybrid Trials, 2021

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County	District	County Agent/Specialist	Cooperator
Ashley	Delta	Kevin Norton	Andrew Hartshortn
Clay	Delta	Stewart Runsick & Allison Howell	Zack Brown
Clay II	Delta	Allison Howell & Stewart Runsick	Keith & Drew Woolverton
Conway	River Valley	Kevin Van Pelt	3 Brothers Farm
Cross	Delta	Rick Wimberley	Chris Vanaman
Desha	Delta	John David Farabough, Jason Kelley	Southeast Research & Ext Ctr
Desha II	Delta	John David Farabough	Jorge Vazquez
Faulkner	River Valley	Kevin Lawson	Schaefers Brothers
Greene	Delta	L. Blythe & D. Freeze	Derek and Royce Boling
Jefferson	Delta	Kurt Beaty	Chad Render
Lafayette	Southwest	Lance Rice	Brent Farm
Lawrence	Lance	B. Baldridge, C. Sisk, M. Andrews	Mitch & Jeff Worlow
Lee	Delta	Stan Baker, Jason Kelley	Lon Mann Cotton Research Stn
Lee II	Delta	Stan Baker & Robert Goodson	Bill Gerrard III
Monroe	Delta	Andrew Sayger & Robert Goodson	Shaun Bennett
Poinsett	Delta	Craig Allen & Jeffery Works	Dustin Faulkner
Prairie	Delta	Amy Tallent & Danielle Dickson	Greenwalt Company
White	Delta	Jan Yingling	Keith & Jacob Feather
Woodruff	Delta	Brett Gordon	Michael Coley
Yell	River Valley	Bob Powell	Chris Mans

#### INTRODUCTION

The 2021 growing season was the fourteenth year for the Corn Standardized County Hybrid Trial Program. The program's goal is to increase knowledge on selected hybrids that are being evaluated in the University of Arkansas Corn Hybrid testing program (<u>https://aaes.uada.edu/variety-testing/</u>). The trials were a collaborative effort between growers, County Extension agents, Extension specialists, and industry representatives. In the trials, producers followed their normal production practices they use on their farms. The cooperation of all producers mentioned in this publication is appreciated. Producers donate time, equipment and hired labor to make these trials possible.

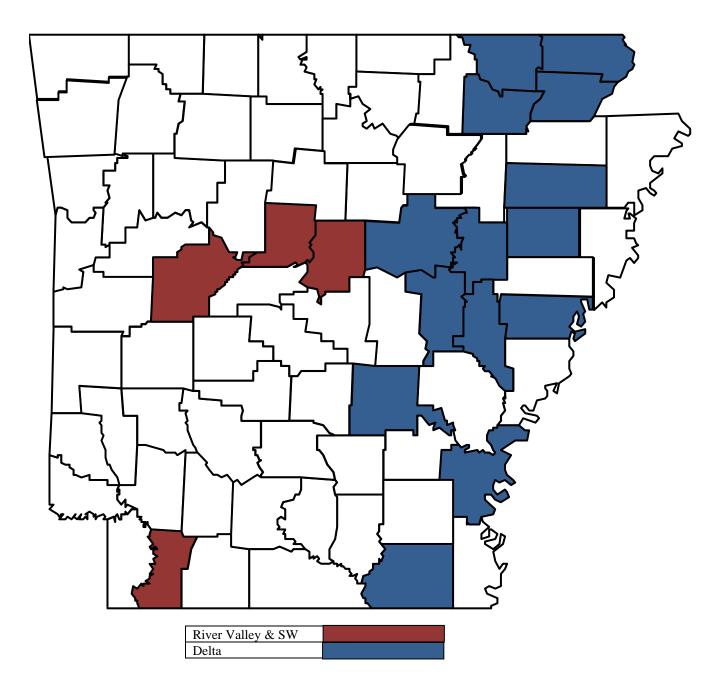
Trials were separated into two districts and within each district, hybrids entered were consistent. Districts included the Delta and River Valley/Southwest, representing the major corn producing areas of Arkansas. A map on page 4 shows the counties in each district. Industry representatives and Extension specialists choose hybrids to be entered, and hybrids were required to be commercially available and have been tested/or being tested in the University of Arkansas Corn Hybrid testing program. All hybrid trials were planted with the intention of being irrigated and all hybrids were glyphosate tolerant. Relative maturity of hybrids entered ranged from 113 to 120 days. A full list of hybrids entered along with relative maturity and traits can be found on page 27. Trials were strip trials and were not replicated, but multiple locations within a district do provide useful information on yield potential and agronomic considerations.

Information collected in each trial included soil type, planting date, agronomic production practices utilized by each producer, final plant population, test weight, grain moisture at harvest, plant lodging and yield. Plots were planted with producer equipment and typically were four to eight rows wide by the length of field (~500-1500 ft). Grain moisture and test weights were recorded by commercial or handheld grain analysis equipment. Grain yields were adjusted to 15.5% moisture. When lodging or greensnap occurred, visual ratings were taken by County Extension agents, Extension specialists and/or producers.

The authors would like to express their gratitude to the producers, County Agents, and industry representatives that made these trials possible.

An electronic copy of this publication can be found at the following web address: <u>https://www.uaex.uada.edu/farm-ranch/crops-commercial-horticulture/corn/</u>

#### Arkansas Corn Standardized County Hybrid Trials District Map



### **Delta District Summary**

					Delta Disti	rict Counties	6		
Hybrid	Ashley	Clay	Clay II	Cross	Desha	Desha II	Greene	Jefferson	Lawrence
		Yield Bu/AcreYield Bu/Acre							
AgriGold 645-16VT2	227	222	252	238	227	220	248	240	248
AgriGold 6659VT2	216	216	260	244	254	221	261	242	276
DeKalb 65-99	241	215	-	252	250	233	255	267	275
DeKalb 65-99	229	234	-	254	240	221	274	231	270
Dyna-Gro 54VC34	223	228	265	256	228	208	263	244	255
Dyna-Gro 55VC80	224	231	269	255	226	190	245	238	269
Local 1307TRE	227	217	-	242	225	203	264	258	266
Local 1898TRE	226	213	-	241	229	220	257	243	269
Pioneer 1731YHR	206	205	273	221	237	164	254	-	246
Pioneer 2042VYHR	198	222	261	241	227	181	237	-	261
Progeny 2015VT2	208	225	254	224	221	192	250	-	252
Progeny 2118VT2	233	238	260	254	235	209	259	-	266
Trial Mean	222	222	262	244	233	205	256	245	263
Row Spacing	38	30	30	30	38	38	30	38	30
Planting Date	4/20	4/2	4/6	4/22	4/6	4/5	4/21	3/12	4/5

				Delta Dis	trict Counti	es		
Hybrid	Lee	Lee II	Monroe	Poinsett	Prairie	White	Woodruff	Mean*
		Yield Bu/Acre						
AgriGold 645-16VT2	208	235	202	214	233	251	231	229
AgriGold 6659VT2	202	236	198	202	229	265	242	233
DeKalb 65-99	228	238	175	203	234	277	253	238
DeKalb 65-99	214	241	201	186	255	273	236	238
Dyna-Gro 54VC34	207	234	172	213	198	267	248	229
Dyna-Gro 55VC80	197	232	188	213	232	279	247	231
Local 1307TRE	183	223	129	192	215	272	177	217
Local 1898TRE	206	233	212	203	235	239	213	228
Pioneer 1731YHR	204	240	198	186	217	275	244	221
Pioneer 2042VYHR	191	223	180	195	196	271	244	219
Progeny 2015VT2	182	228	195	203	217	279	225	222
Progeny 2118VT2	225	231	186	215	240	259	239	235
Trial Mean	204	233	186	202	225	267	233	
Row Spacing	38	38	30	30	30	30	30	
Planting Date	4/13	4/20	4/22	4/8	4/4	5/7	4/20	

\*Mean is calculated from counties that all hybrids were evaluated.



### **Ashley County**

Grower: Andrew Hartshorn	County Agent: Kevin Norton
Location of Field:	GPS:
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 38 inches	Planting Population: 36,000
Planting Date: April 20, 2021	Harvest Date: September 15, 2021
Planting Date: April 20, 2021	Harvest Date: September 15, 2021

Irrigation Type and Frequency: Furrow, 2X

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	40	100	120	-	5
Sidedress	150	-	-	24	-
Pretassel	46	-	-	-	-
Total Fertility	236	100	120	24	5

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	227	14.9	43,500	1	59.4
AgriGold 6659VT2	216	15.4	35,500	1	61.6
DeKalb DKC 65-99	241	15.0	35,500	1	62.3
DeKalb DKC 68-69	229	15.9	36,000	1	62.2
Dyna-Gro 54VC34	223	15.1	35,500	4	59.8
Dyna-Gro 55VC80	224	14.9	40,000	1	61.1
Local 1307TRE	227	14.4	33,000	2	60.8
Local 1898TRE	226	14.7	33,500	1	62.4
Pioneer 1731YHR	206	15.5	32,000	1	60.8
Pioneer 2042VYHR	198	15.6	38,000	1	61.8
Progeny 2015VT2	208	14.7	31,500	4	61.8
Progeny 2118VT2	233	15.5	35,000	1	63.2
Trial Mean	222	15.1	35,750	1.6	61.4

<sup>1</sup> Yield is adjusted to 15.5% moisture.
 <sup>2</sup> Final Plant Population is given as plants per acre.
 <sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.



### **Clay County**

<b>Location of Field:</b> Datto <b>GPS:</b> 36.420626, -90.672546	
Soil Type: Bosket Fine Sandy Loam Previous Crop: Corn	
Row Width: 30 inchesPlanting Population: 33,500	
Planting Date: April 2, 2021Harvest Date: September 26, 2021	

Irrigation Type and Frequency: Furrow irrigated

Fertility (lb/ac)	N	Р	K	S	Zn
Preplant	40	80	120	20	2
Sidedress	135	-	-	20	-
Pretassel	45	-	-	-	-
Total Fertility	220	80	120	20	2

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	222	14.1	34,000	1	-
AgriGold 6659VT2	216	14.2	34,000	1	-
DeKalb DKC 65-99	215	14.7	34,000	1	-
DeKalb DKC 68-69	234	13.8	34,000	1	-
Dyna-Gro 54VC34	228	13.4	34,000	1	-
Dyna-Gro 55VC80	231	13.9	34,000	1	-
Local 1307TRE	217	14.0	34,000	1	-
Local 1898TRE	213	15.2	33,000	1	-
Pioneer 1731YHR	205	13.2	33,000	1	-
Pioneer 2042VYHR	222	13.8	33,000	1	-
Progeny 2015VT2	225	13.7	33,000	2	-
Progeny 2118VT2	238	13.5	33,000	1	-
Trial Mean	222	14.0	33,500	1	-

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



### **Clay County II**

Grower: Keith & Drew Woolverton	County Agent: Allison Howell & Stewart Runsick
Location of Field: Pollard	GPS:
Soil Type: Falaya Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 34,000
Planting Date: April 6, 2021	Harvest Date: September 11, 2021

Irrigation Type and Frequency: Furrow Irrigated

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	40	80	80	10	10
Sidedress	185	-	-	-	-
Pretassel	-	-	-	-	-
Total Fertility	235	80	80	10	10

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	252	15.6	-	1	-
AgriGold 6659VT2	260	17.7	-	1	-
DeKalb DKC 65-99	-	-	-	1	-
DeKalb DKC 68-69	-	-	-	1	-
Dyna-Gro 54VC34	265	16.8	-	1	-
Dyna-Gro 55VC80	269	16.0	-	1	-
Local 1307TRE	-	-	-	1	-
Local 1898TRE	-	-	-	1	-
Pioneer 1731YHR	273	18.0	-	1	-
Pioneer 2042VYHR	261	18.1	-	1	-
Progeny 2015VT2	254	15.9	-	1	-
Progeny 2118VT2	260	17.6	-	1	-
Trial Mean	262	17.0	-	1	-

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.
<sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.



# **Cross County**

Grower: Chris Vanaman	County Agent: Rick Wimberley
Location of Field:	GPS:
Soil Type: Henry Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 35,000
Planting Date: April 22, 2021	Harvest Date: October 7, 2021

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	40	80	80	20	10
Sidedress	138	-	-	-	-
Pretassel	46	-	-	-	-
Total Fertility	224	80	80	20	10

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	238	13.7	36,000	1	-
AgriGold 6659VT2	244	13.4	35,000	1	-
DeKalb DKC 65-99	252	14.5	36,000	1	-
DeKalb DKC 68-69	254	14.2	36,000	1	-
Dyna-Gro 54VC34	256	14.3	34,000	1	-
Dyna-Gro 55VC80	255	13.5	35,500	1	-
Local 1307TRE	242	13.8	34,500	1	-
Local 1898TRE	241	13.6	33,500	1	-
Pioneer 1731YHR	221	14.0	36,000	3	-
Pioneer 2042VYHR	241	14.2	35,000	1	-
Progeny 2015VT2	224	14.0	33,500	1	-
Progeny 2118VT2	254	14.7	36,000	1	-
Trial Mean	244	14.0	35,083	1.2	-

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



#### **Desha County**

#### Grower: Southeast Research and Extension Center

Location of Field: Kelso, AR	GPS:
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 38 inches	Planting Population: 34,000
Planting Date: April 6, 2021	Harvest Date: September 2, 2021

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	0	0	90	0	10
Sidedress	225	-	-	-	-
Pretassel	46	-	-	-	-
Total Fertility	271	0	90	0	10

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Greensnap Score <sup>3</sup>	Test Wt Ib/bu	Plant Ht Inches
AgriGold 645-16VT2	227	16.0	32,900	2.3	57.8	103
AgriGold 6659VT2	254	17.3	33,200	2.0	57.4	101
DeKalb DKC 65-99	250	16.1	33,900	0.5	57.8	97
DeKalb DKC 68-69	240	18.1	33,200	1.5	57.4	103
Dyna-Gro 54VC34	228	15.7	33,900	1.3	57.8	104
Dyna-Gro 55VC80	226	16.5	32,200	3.0	57.6	103
Local 1307TRE	225	13.6	32000	1.0	58.4	98
Local 1898TRE	229	15.1	32,300	0.5	58.1	102
Pioneer 1731YHR	237	18.2	33,200	0.5	57.3	115
Pioneer 2042VYHR	227	17.8	32,900	0.3	57.4	106
Progeny 2015VT2	221	14.1	29,800	3.8	58.2	102
Progeny 2118VT2	235	17.8	34,200	1.3	56.9	100
Trial Mean	233	16.4	32,800	1.5	57.7	103

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.

<sup>3</sup> Greensnap Score – 0 is no greensnap, 9 is complete greensnap.



### Desha County II

Grower: Jorge Vazquez	County Agent: John D. Farabough
Location of Field: Halley	GPS:
Soil Type:	Previous Crop: Soybean
Row Width: 38 inches	Planting Population: 35,000
Planting Date: April 5, 2021	Harvest Date: August 28, 2021

Irrigation Type and Frequency: Furrow irrigated

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility					

	Adjusted Yield	Harvest	Final Plant	Lodging	Test Wt
Hybrid	bu/ac <sup>1</sup>	Moisture %	Population <sup>2</sup>	Score <sup>3</sup>	lb/bu
AgriGold 645-16VT2	220	16.0	35,500	1	-
AgriGold 6659VT2	221	16.3	38,000	1	-
DeKalb DKC 65-99	233	16.2	38,000	1	-
DeKalb DKC 68-69	221	18.5	35,000	1	-
Dyna-Gro 54VC34	208	15.6	39,000	1	-
Dyna-Gro 55VC80	190	15.8	38,000	1	-
Local 1307TRE	203	14.8	35,000	1	-
Local 1898TRE	220	15.7	37,000	1	-
Pioneer 1731YHR	164	17.0	34,000	3	-
Pioneer 2042YHR	181	16.3	36,500	3	-
Progeny 2015VT2	192	15.9	30,500	3	-
Progeny 2118VT2	209	16.4	41,000	3	-
Trial Mean	205	16.2	36,458	1.7	-

<sup>1</sup> Yield is adjusted to 15.5% moisture. <sup>2</sup> Final Plant Population is given as plants per acre.



#### **Greene County**

Grower: Derek & Royce Boling	County Agent: Lance Blythe, Dave Freeze
Location of Field: Paragould	GPS:
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 36,000
Planting Date: April 21, 2021	Harvest Date: September 27, 2021

#### Irrigation Type and Frequency: Furrow irrigated

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	40	100	120	0	5
Sidedress	150	0	0	24	0
Pretassel	46	0	0	0	0
Total Fertility	236	100	120	24	5

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	248	14.4	34,500	1	64.6
AgriGold 6659VT2	261	15.6	32,000	1	61.2
DeKalb DKC 65-99	255	15.0	33,500	1	65.7
DeKalb DKC 68-69	274	15.4	32,000	1	64.8
Dyna-Gro 54VC34	263	15.1	34,000	1	62.4
Dyna-Gro 55VC80	245	15.1	33,500	1	64.5
Local 1307TRE	264	15.2	32,000	1	64.8
Local 1898TRE	257	14.8	31,500	1	64.9
Pioneer 1731YHR	254	16.9	31,000	1	62.1
Pioneer 2042VYHR	237	16.3	34,500	1	63.2
Progeny 2015VT2	250	14.3	31,500	1	63.3
Progeny 2118VT2	259	16.2	31,500	1	65.3
Trial Mean	256	15.4	32,625	1	63.9

<sup>1</sup> Yield is adjusted to 15.5% moisture.
 <sup>2</sup> Final Plant Population is given as plants per acre.
 <sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.



#### Jefferson County

Grower: Chad Render	County Agent: Kurt Beaty
Location of Field: Pine Bluff	GPS:
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 38 inches	Planting Population: 35,000
Planting Date: March 12, 2021	Harvest Date: August 13, 2021

Irrigation Type and Frequency: Furrow irrigated 3 times

Fertility (lb/ac)	N	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility	250	120	100	20	0

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	240	17.5	35,000	1	-
AgriGold 6659VT2	242	18.3	35,000	1	-
DeKalb DKC 65-99	267	20.2	35,000	1	-
DeKalb DKC 68-69	231	22.4	34,000	1	-
Dyna-Gro 54VC34	244	21.1	36,000	1	-
Dyna-Gro 55VC80	238	19.6	37,000	1	-
Local 1307TRE	258	17.3	36,000	1	-
Local 1898TRE	243	18.2	35,000	1	-
Trial Mean	245	19.3	35,375	1	-

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



#### Lawrence County

Grower: Mitch & Jeff Worlow	County Agent: Baldridge, Sisk, Andrews		
Location of Field: Sedgewick	<b>GPS:</b> 35 56'15.91" N 90 54'56.55" W		
Soil Type: Dundee Silt Loam	Previous Crop: Soybean		
Row Width: 30 inches	Planting Population: 34,000		
Planting Date: April 5, 2021	Harvest Date: September 27, 2021		

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	Κ	S	Zn
Preplant	21	90	90	24	-
Sidedress	169	-	-	-	-
Pretassel	60	-	-	-	-
Total Fertility	250	90	90	24	-

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	248	15.2	35,000	1	-
AgriGold 6659VT2	276	16.1	33,000	1	-
DeKalb DKC 65-99	275	16.1	33,000	1	-
DeKalb DKC 68-69	270	16.5	34,000	1	-
Dyna-Gro 54VC34	255	16.2	35,000	1	-
Dyna-Gro 55VC80	269	16.2	34,000	1	-
Local 1307TRE	266	14.7	31,000	1	-
Local 1898TRE	269	15.2	34,000	1	-
Pioneer 1731YHR	246	16.8	33,000	1	-
Pioneer 2042VYHR	261	18.2	36,000	1	-
Progeny 2015VT2	252	14.7	28,000	1	-
Progeny 2118VT2	266	17.0	34,000	1	-
Trial Mean	263	16.1	33,333	1	-

<sup>1</sup> Yield is adjusted to 15.5% moisture. -

<sup>2</sup> Final Plant Population is given as plants per acre.



#### Lee County

Grower: Lon Mann Cotton Research Station	County Agent:
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Location of Field: MariannaGPS:Soil Type: Silt LoamPrevious Crop: Soybean

Row Width: 38 inches

Planting Date: April 13, 2021

Harvest Date: September 2, 2021

Planting Population: 34,000

Irrigation Type and Frequency: Furrow irrigated 4 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	39	80	120	24	10
Sidedress	207	0	0	0	0
Pretassel	0	0	0	0	0
Total Fertility	246	80	120	24	10

	Adjusted	Harvest	Final Plant	Greensnap	Test Wt	Plant Ht
Hybrid	Yield bu/ac <sup>1</sup>	Moisture %	Population <sup>2</sup>	Score <sup>3</sup>	lb/bu	Inches
AgriGold 645-16VT2	208	17.8	33,400	2.0	57.2	113
AgriGold 6659VT2	202	19.6	34,000	3.5	56.9	106
DeKalb DKC 65-99	228	18.9	32,900	1.0	57.2	108
DeKalb DKC 68-69	214	19.2	33,200	2.8	58.8	114
Dyna-Gro 54VC34	207	17.4	32,500	2.8	57.5	110
Dyna-Gro 55VC80	197	17.5	33,600	4.3	56.9	112
Local 1307TRE	183	14.8	32,500	6.3	56.2	105
Local 1898TRE	206	17.1	33,300	1.3	58.4	112
Pioneer 1731YHR	204	19.3	32,600	2.5	57.4	123
Pioneer 2042VYHR	191	19.7	34,000	1.3	58.2	116
Progeny 2015VT2	182	16.5	32,700	7.0	59.7	107
Progeny 2118VT2	225	19.6	34,100	0.8	60.4	109
Trial Mean	204	18.1	33,200	3.0	57.9	111

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.

<sup>3</sup> Greensap Score – 0 is no greensap, 9 is complete greensap.



# Lee County II

Grower: Bill Gerrard III	County Agent: Stan Baker & Robert Goodson
Location of Field: Turkey Scratch	GPS: 34 38.415N 90 54.367W
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 38 inches	Planting Population: 34,000
Planting Date: April 20, 2021	Harvest Date: September 23, 2021

Irrigation Type and Frequency: Furrow irrigated 3 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility					

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	235	14.2	35,000	1	60.2
AgriGold 6659VT2	236	14.4	33,750	1	60.8
DeKalb DKC 65-99	238	13.9	33,500	1	61.2
DeKalb DKC 68-69	241	14.3	31,500	1	61.1
Dyna-Gro 54VC34	234	14.0	30,750	1	60.3
Dyna-Gro 55VC80	232	14.2	32,750	1	59.5
Local 1307TRE	223	14.0	31,500	1	60.2
Local 1898TRE	233	13.7	35,500	1	61.0
Pioneer 1731YHR	240	14.3	29,750	1	60.8
Pioneer 2042VYHR	223	14.2	32,000	1	60.9
Progeny 2015VT2	228	13.8	30,750	1	61.4
Progeny 2118VT2	231	14.4	30,000	1	61.9
Trial Mean	233	14.1	32,229	1	60.8

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.
<sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.



# **Monroe County**

Grower: Shaun Bennett	County Agent: Andrew Sayger, Robert Goodson
Location of Field: Palmer	GPS: N 34.6018510, W -91.0802959
Soil Type: Grenada Silt Loam	Previous Crops: Soybean
Row Width: 30 inches	Planting Population: 36,000
Planting Date: April 22, 2021	Harvest Date: September 3, 2021

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	151	115	120	27	0.25
Sidedress	36	0	0	0	0
Pretassel	70	0	0	0	0
Total Fertility	257	115	120	27	0.25

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	202	11.2	32,000	2	59.2
AgriGold 6659VT2	198	11.3	32,000	3	60.5
DeKalb DKC 65-99	175	11.2	34,000	2	59.4
DeKalb DKC 68-69	201	11.4	31,000	2	61.0
Dyna-Gro 54VC34	172	11.1	31,000	4	59.2
Dyna-Gro 55VC80	188	11.3	33,000	2	59.4
Local 1307TRE	129	11.1	32,000	6	58.5
Local 1898TRE	212	10.9	34,000	1	59.9
Pioneer 1731YHR	198	11.0	31,000	2	60.3
Pioneer 2042VYHR	180	11.3	33,000	2	59.8
Progeny 2015VT2	195	11.5	31,000	2	58.1
Progeny 2118VT2	186	11.0	33,000	2	60.7
Trial Mean	186	11.2	32,250	2.5	59.7

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



### **Poinsett County**

Grower: Dustin Faulkner	County Agent: Craig Allen & Jeffery Works
Location of Field: Bay Village	<b>GPS:</b> 35.5109151, -90.6160692
Soil Type: Falaya Silt Loam	Previous Crop: Corn
Row Width: 30 inches	Planting Population: 33,000
Planting Date: April 8, 2021	Harvest Date: September 12, 2021

#### Irrigation Type and Frequency: Furrow irrigated 6 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	30	90	120	-	-
Sidedress	159	-	-	24	-
Pretassel	46	-	-	-	-
Total Fertility	235	90	120	24	-

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	214	15.4	22,500	1	59.3
AgriGold 6659VT2	202	14.7	21,500	1	62.4
DeKalb DKC 65-99	203	15.3	21,000	1	62.3
DeKalb DKC 68-69	186	15.7	23,500	1	63.4
Dyna-Gro 54VC34	213	15.9	21,000	1	60.1
Dyna-Gro 55VC80	213	16.2	23,500	1	54.2
Local 1307TRE	192	14.8	22,500	1	61.1
Local 1898TRE	203	15.3	21,500	1	63.2
Pioneer 1731YHR	186	15.9	21,000	1	62.6
Pioneer 2042VYHR	195	17.7	22,500	1	59.7
Progeny 2015VT2	203	15.1	21,500	1	62.8
Progeny 2118VT2	215	16.0	23,500	1	62.3
Trial Mean	202	15.7	22,125	1	61.1

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



#### **Prairie County**

Grower: Greenwalt Company	County Agent: Amy Tallent, Danielle Dickson
Location of Field: Hazen	GPS:
Soil Type: Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 35,500
Planting Date: April 4, 2021	Harvest Date: September 3, 2021

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility					

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	233	14.9	-	1	58.3
AgriGold 6659VT2	229	15.8	-	1	59.0
DeKalb DKC 65-99	234	14.9	-	1	59.0
DeKalb DKC 68-69	255	16.3	-	1	61.1
Dyna-Gro 54VC34	198	14.3	-	1	58.8
Dyna-Gro 55VC80	232	14.8	-	1	59.1
Local 1307TRE	215	14.2	-	2	59.0
Local 1898TRE	235	14.2	-	2	60.5
Pioneer 1731YHR	217	16.1	-	6	59.6
Pioneer 2042VYHR	196	15.3	-	7	59.9
Progeny 2015VT2	217	14.7	-	2	60.9
Progeny 2118VT2	240	15.5	-	6	61.3
Trial Mean	225	15.1	-	2.6	59.7

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



### White County

Grower: Keith & Jacob Feather County Agent: Jan Yingli	
Location of Field: Griffithville	GPS:
Soil Type: Calhoun Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 35,000
Planting Date: May 7, 2021	Harvest Date: September 21, 2021

Irrigation Type and Frequency: Furrow irrigated 5 times

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	25	90	127	15	4
Sidedress	145	0	0	27	0
Pretassel	46	0	0	0	0
Total Fertility	216	90	127	42	4

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	251	20.7	31,500	1	57.6
AgriGold 6659VT2	265	20.5	34,500	1	55.7
DeKalb DKC 65-99	277	21.9	33,000	1	58.0
DeKalb DKC 68-69	273	22.2	32,500	1	57.2
Dyna-Gro 54VC34	267	20.6	32,000	1	56.9
Dyna-Gro 55VC80	279	21.4	34,000	1	56.0
Local 1307TRE	272	19.4	33,000	1	56.6
Local 1898TRE	239	21.1	33,500	1	56.6
Pioneer 1731YHR	275	22.2	33,000	1	56.6
Pioneer 2042VYHR	271	23.9	34,000	1	55.3
Progeny 2015VT2	279	19.6	33,500	1	59.0
Progeny 2118VT2	259	21.1	32,500	1	59.2
Trial Mean	267	21.2	33,083	1.0	57.1

Yield is adjusted to 15.5% moisture.
 <sup>2</sup> Final Plant Population is given as plants per acre.

<sup>3</sup> Visual Lodging Score, 1 is no lodging, 10 is nearly completely lodged



### Woodruff County

Grower: Michael Coley	County Agent: Brett Gordon
Location of Field: McCrory	<b>GPS:</b> N 35.152537, W -91.166682
Soil Type: Dubbs Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 34,000
Planting Date: April 20, 2021	Harvest Date: September 14, 2021

Irrigation Type and Frequency: Pivot irrigated 12 times

Fertility (lb/ac)	Ν	Р	K	S	Z1n
Preplant	70	70	70	15	1
Sidedress	80	-	-	12	-
Pretassel	58	-	-	-	-
Total Fertility	208	70	70	27	1

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
AgriGold 645-16VT2	231	14.9	31,500	1	59.7
AgriGold 6659VT2	242	14.8	31,500	1	60.4
DeKalb DKC 65-99	253	15.2	32,500	1	60.5
DeKalb DKC 68-69	236	15.9	29,500	2	62.5
Dyna-Gro 54VC34	248	15.1	31,500	1	59.9
Dyna-Gro 55VC80	247	15.2	34,000	1	60.5
Local 1307TRE	177	14.6	28,500	5	59.9
Local 1898TRE	213	15.2	30,000	1	61.3
Pioneer 1731YHR	244	15.4	30,500	3	62.1
Pioneer 2042VYHR	244	16.2	34,000	1	62.2
Progeny 2015VT2	225	14.5	30,500	2	61.8
Progeny 2118VT2	239	16.9	33,500	1	61.7
Trial Mean	233	15.3	31,458	1.7	61.0

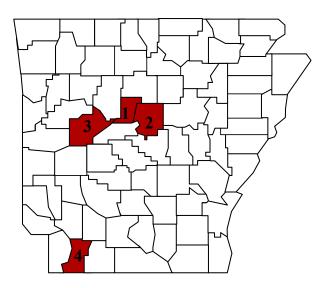
<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.

# **River Valley and Southwest District Summary**

The River Valley District had three trials and the Southwest had one trial. The following table is a summary of the hybrids across these districts.

	River Valley & Southwest District Counties				
Hybrid	Conway	Faulkner	Yell	Lafayette	Mean
			Yield Bu/Acre-		
DeKalb DKC 65-99	230	166	223	164	196
DeKalb DKC 68-69	224	164	204	182	194
Dyna-Gro 54VC34	206	147	206	129	172
Dyna-Gro 55VC80	217	180	198	170	191
Local 1307TRE	215	165	216	195	198
Local 1898TRE	210	161	214	181	192
Pioneer 1731YHR	207	173	202	207	197
Pioneer 2042VYHR	206	149	201	170	182
Progeny 2015VT2	207	153	204	173	184
Progeny 2118VT2	216	180	207	180	198
Trial Mean	214	164	208	175	190
Row Spacing (inches)	30	30	30	30	-
Planting Date	4/12	4/22	4/13	4/5	4/13



1 - Conway 2 - Faulkner 3 - Yell 4 - Lafayette



### Faulkner County

Grower: Schaefers Brothers	County Agent: Kevin Lawson
Location of Field: Lollie Bottoms	<b>GPS:</b> N 34.9919, W -92.5834
Soil Type: Gallion Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 33,000
Planting Date: April 22, 2021	Harvest Date: September 11, 2021

Irrigation Type and Frequency: Furrow 5

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	44	23	60	24	-
Sidedress	70	-	-	12	-
Pretassel	46	-	-	-	-
Total Fertility	160	23	60	36	-

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
DeKalb DKC 65-99	166	14.0	35,000	1	58.7
DeKalb DKC 68-69	164	15.3	34,000	1	62.5
Dyna-Gro 54VC34	147	13.1	34,500	7	56.3
Dyna-Gro 55VC80	180	14.0	34,000	1	58.9
Local 1307TRE	165	13.7	34,500	1	58.2
Local 1898TRE	161	12.9	34,000	1	59.8
Pioneer 1731YHR	173	14.5	33,000	1	60.7
Pioneer 2042VYHR	149	14.5	33,500	1	58.5
Progeny 2015VT2	153	13.1	34,000	1	60.8
Progeny 2118VT2	180	14.4	35,000	1	61.3
Trial Mean	164	14.0	34,150	1.6	59.6

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.
<sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.



### **Conway County**

Grower: 3 Brothers Farm	County Agent: Kevin VanPelt
Location of Field: Plummerville	GPS:
Soil Type: Roxana Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 32,000
Planting Date: April 12, 2021	Harvest Date: September 16, 2021

#### Irrigation Type and Frequency: Center Pivot 8

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant	83	69	69	12	-
Sidedress	101	-	-	12	-
Pretassel	46	-	-	-	-
Total Fertility	230	69	69	24	0

11.1.2.1	Adjusted Yield	Harvest	Final Plant	Lodging	Test Wt
Hybrid	bu/ac <sup>1</sup>	Moisture %	Population <sup>2</sup>	Score <sup>3</sup>	lb/bu
DeKalb DKC 65-99	230	14.9	30,500	1	59.7
DeKalb DKC 68-69	224	15.7	31,500	1	60.9
Dyna-Gro 54VC34	206	15.0	32,000	1	59.2
Dyna-Gro 55VC80	217	14.3	32,000	1	59.1
Local 1307TRE	215	13.8	31,500	1	59.8
Local 1898TRE	210	14.9	30,000	1	61.0
Pioneer 1731YHR	207	14.9	29,500	1	59.7
Pioneer 2042VYHR	206	15.0	30,500	1	60.4
Progeny 2015VT2	207	14.9	29,000	1	61.6
Progeny 2118VT2	216	15.6	31,000	1	61.8
Trial Mean	214	14.9	30,750	1	60.3
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<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



#### Yell County

Grower: Chris Mans	County Agent: Bob Powell
Location of Field: Dardanelle Bottoms	<b>GPS:</b> N 35.159795 - 93.135252
Soil Type: Dardanelle Silt Loam	Previous Crop: Soybean
Row Width: 30 inches	Planting Population: 33,000
Planting Date: April 13, 2021	Harvest Date: September 17, 2021

Irrigation Type and Frequency: Furrow irrigated

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility					

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
DeKalb DKC 65-99	223	14.7	-	-	-
DeKalb DKC 68-69	204	14.7	-	-	-
Dyna-Gro 54VC34	206	14.2	-	-	-
Dyna-Gro 55VC80	198	14.9	-	-	-
Local 1307TRE	216	13.3	-	-	-
Local 1898TRE	214	13.5	-	-	-
Pioneer 1731YHR	202	15.3	-	-	-
Pioneer 2042VYHR	201	15.1	-	-	-
Progeny 2015VT2	204	13.8	-	-	-
Progeny 2118VT2	207	15.4	-	-	-
Trial Mean	208	14.5	-	-	-

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Final Plant Population is given as plants per acre.



# Lafayette County

Grower: Brent Farm	County Agent: Lance Rice
Location of Field: Spirit Lake	GPS:
Soil Type: Rilla Silt Loam	Previous Crop: Corn
Row Width: 30 inches	Planting Population: 32,000
Planting Date: April 5, 2021	Harvest Date: September 3, 2021

#### Irrigation Type and Frequency: Furrow 4

Fertility (lb/ac)	Ν	Р	K	S	Zn
Preplant					
Sidedress					
Pretassel					
Total Fertility					

Hybrid	Adjusted Yield bu/ac <sup>1</sup>	Harvest Moisture %	Final Plant Population <sup>2</sup>	Lodging Score <sup>3</sup>	Test Wt Ib/bu
DeKalb DKC 65-99	164	13.3	-	-	58.2
DeKalb DKC 68-69	182	13.7	-	-	59.1
Dyna-Gro 54VC34	129	13.1	-	-	57.4
Dyna-Gro 55VC80	170	13.1	-	-	57.1
Local 1307TRE	195	12.9	-	-	58.8
Local 1898TRE	181	12.9	-	-	58.7
Pioneer 1731YHR	207	13.2	-	-	58.8
Pioneer 2042VYHR	170	13.3	-	-	59.6
Progeny 2015VT2	173	13.1	-	-	60.2
Progeny 2118VT2	180	13.4	-	-	58.9
Trial Mean	175	13.2	-	-	58.7

<sup>1</sup> Yield is adjusted to 15.5% moisture.
 <sup>2</sup> Final Plant Population is given as plants per acre.
 <sup>3</sup> Lodging Score – 1 is no lodging, 10 is completely lodged.

# Appendix: Corn Hybrid Relative Maturity & Traits

Hybrid	Relative Maturity	Trait		
AgriGold 645-16VT2	115	Genuity VT Double Pro		
AgriGold 6659VT2	116	Genuity VT Double Pro		
DeKalb DKC 65-99	115	Genuity VT Double Pro		
DeKalb DKC 68-69	118	Genuity VT Double Pro		
Dyna-Gro 54VC34	114	Genuity VT Double Pro		
Dyna-Gro 55VC80	115	Genuity VT Double Pro		
Local 1307TRE	113	Genuity Trecepta		
Local 1898TRE	118	Genuity Trecepta		
Pioneer 1731YHR	117	Optimum AcreMax		
Pioneer 2042VYHR	120	Optimum Leptra		
Progeny 2015VT2	115	Genuity VT Double Pro		
Progeny 2118VT2	118	Genuity VT Double Pro		

#### 2021 Arkansas Corn Standardized Hybrid Trial Participants

#### Agrigold

AgriGold Hybrids 5381 Akin Rd. St. Francisville, IL 62460

**Dyna-Gro** Nutrien Ag Solutions 3005 Rocky Mountain Drive Loveland, CO 80538

#### Pioneer

Corteva AgriScience 7250 NW 62<sup>nd</sup> Ave Johnston, IA 50131

#### Dekalb

Bayer Crop Science 800 N. Lindbergh Blvd. St. Louis, MO 63167

Local Seed Local Seed Company 802 Rozelle Street

Memphis, TN 38104

#### Progeny

Progeny Ag Products 1529 Highway 193 Wynne, AR 72396



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