



K-STATE
Research and Extension

South-Central Kansas Replicated Wheat Variety Tests 2022

Andale, Clearwater, Caldwell, Newton, Harper, Ark City
(Belle Plaine – WSMV)

Special thanks to our Sedgwick County harvest sponsors:



SC KS Wheat Plots - Yield

(bushels/acre)

Variety	Source	All	Andale	Clearwater	Caldwell	Newton	Ark City	Harper
AM Cartwright	AgriMaxx	41.0	53.9	31.2	31.8	47.6	41.5	40.2
AP Bigfoot	AgriPro	45.8	58.1	33.7	39.4	45.2	50.4	41.8
AP EverRock	AgriPro	45.8	63.7	33.7	46.7	50.1	49.0	31.7
AP18 AX	AgriPro	50.6	65.6	41.9	54.7	43.1	56.6	41.4
Bob Dole	AgriPro	47.5	62.9	39.9	53.2	51.0	50.0	27.8
SY Monument	AgriPro	49.6	63.6	41.8	51.4	47.7	62.9	30.2
SY Wolverine	AgriPro	47.4	62.9	37.7	46.1	52.8	51.8	32.9
AG Icon	AGSECO	47.9	60.3	39.3	49.7	43.9	59.8	34.1
AG Radical	AGSECO	48.7	67.6	35.8	45.2	50.7	60.2	39.1
KS Ahearn	KWA	47.1	69.4	44.9	46.1	49.6	40.6	39.3
KS Hatchett	KWA	47.2	59.8	36.8	44.8	48.8	49.3	43.7
KS Providence	KWA	51.7	68.4	38.8	X	54.4	51.5	45.3
Zenda	KWA	44.4	62.0	36.3	45.0	51.2	44.6	33.3
LCS Atomic AX	LCS	50.4	64.5	40.3	48.8	51.1	55.2	42.5
LCS Helix AX	LCS	51.5	65.3	47.7	55.1	52.6	55.0	33.7
LCS Julep	LCS	45.6	58.6	36.0	38.3	50.7	45.5	44.2
LCS Photon AX	LCS	47.1	55.3	37.1	49.6	45.4	54.8	40.4
LCS Valiant	LCS	50.2	66.6	35.8	57.4	56.3	52.0	35.3
Butler's Gold	OGI	39.9	54.2	31.6	42.8	35.0	40.0	35.9
Doublestop CL+	OGI	47.6	56.2	34.8	48.6	51.3	52.4	39.5
Smith's Gold	OGI	46.9	57.9	38.9	46.6	49.3	49.5	39.3
Strad CL+	OGI	45.1	53.8	33.6	49.5	41.0	50.5	35.1
Uncharted	OGI	42.4	55.2	34.2	44.3	42.1	46.6	26.9
Paradise	Polansky	47.0	58.8	39.2	47.2	44.0	52.9	40.0
Rock Star	Polansky	49.3	68.2	38.4	48.5	46.0	52.9	41.8
WB4269	WestBred	47.4	61.8	42.2	54.1	50.9	52.3	28.1
WB4401	WestBred	52.7	70.5	41.9	50.1	52.4	56.0	36.2
WB4699	WestBred	48.4	68.9	39.7	42.0	51.7	54.3	26.2
Average		47.4	61.9	38.0	47.3	48.4	51.3	36.6
Min		39.9	53.8	31.2	31.8	35.0	40.0	26.2
Max		52.7	70.5	47.7	57.4	56.3	62.9	45.3

*Values, highlighted in gray and bold, belong statistically to the highest yielding group. We cannot say values within the group are different from each other

X - Plots lost to planting or harvest errors. Not enough data to post

SC KS Wheat Plots - Test Weight

(bushels/pound)

Variety	Source	All	Andale	Clearwater	Caldwell	Newton	Ark City	Harper
AM Cartwright	AgriMaxx	57.5	56.0	57.3	57.8	56.2	57.7	60.3
AP Bigfoot	AgriPro	58.4	57.2	57.3	59.3	56.7	58.9	60.9
AP EverRock	AgriPro	58.0	56.8	57.7	59.6	57.4	59.2	57.6
AP18 AX	AgriPro	57.5	56.4	56.7	57.5	55.7	58.1	60.5
Bob Dole	AgriPro	57.5	57.0	57.4	59.4	54.9	58.7	57.8
SY Monument	AgriPro	57.5	55.1	57.0	59.6	54.6	60.1	58.8
SY Wolverine	AgriPro	57.1	53.6	56.4	60.0	56.5	59.8	56.4
AG Icon	AGSECO	58.1	56.9	57.7	59.7	55.2	59.9	59.2
AG Radical	AGSECO	57.8	56.7	57.2	58.7	55.3	59.4	59.2
KS Ahearn	KWA	57.2	55.5	57.4	57.3	56.4	57.4	58.6
KS Hatchett	KWA	57.3	56.3	56.6	57.3	56.8	57.5	59.1
KS Providence	KWA	58.2	56.7	56.8	X	57.2	58.8	61.5
Zenda	KWA	59.5	58.1	58.5	60.2	57.5	60.6	61.5
LCS Atomic AX	LCS	58.0	57.6	57.0	59.3	57.0	58.4	58.9
LCS Helix AX	LCS	59.1	57.8	59.6	61.4	57.5	59.3	58.7
LCS Julep	LCS	59.9	55.6	59.3	61.6	57.3	60.8	64.9
LCS Photon AX	LCS	60.0	57.4	60.1	60.7	58.8	60.1	62.8
LCS Valiant	LCS	58.8	57.6	58.1	59.6	57.3	60.0	59.7
Butler's Gold	OGI	58.1	57.2	55.6	60.1	56.3	58.3	60.8
Doublestop CL+	OGI	59.9	58.0	57.7	60.5	59.8	61.5	62.5
Smith's Gold	OGI	59.2	56.9	59.8	60.2	57.2	59.5	61.7
Strad CL+	OGI	58.6	57.0	57.2	60.7	56.4	60.1	60.8
Uncharted	OGI	57.0	55.9	56.6	57.4	56.1	57.9	X
Paradise	Polansky	57.8	56.3	56.4	59.4	56.5	58.7	59.2
Rock Star	Polansky	58.4	57.4	57.7	59.6	55.8	59.7	60.0
WB4269	WestBred	58.2	56.2	58.1	60.7	57.1	59.0	58.3
WB4401	WestBred	57.1	54.3	56.1	58.8	55.9	58.0	60.2
WB4699	WestBred	56.0	55.5	55.3	57.6	55.4	56.7	55.4
Average		58.1	56.5	57.4	59.4	56.6	59.1	59.8
Min		56.0	53.6	55.3	57.3	54.6	56.7	55.4
Max		60.0	58.1	60.1	61.6	59.8	61.5	64.9

*Values, highlighted in gray and bold, belong statistically to the highest test weight group. We cannot say values within the group are different from each other

X - Plots lost to planting or harvest errors. Not enough data to post

Plot Information

Andale

Planted: 10/6/2021

Harvested: 7/1/2022

Planting Rate: 1.2 million seeds/ac

Tillage: Conventional

Previous Crop: Wheat

Fertilizer:

9/9/2021

- 50 lbs N/ac, 90 lbs P/ac,
25 lbs K/ac

2/10/2022

- 30 lbs N/ac

Fungicide: 5/11/2021

- Quilt Xcel

Newton

Planted: 10/7/2021

Harvested: 6/27/2022

Planting Rate: 1.2 million seeds/ac

Tillage: No-Till

Previous Crop: Corn

Fungicide: Yes

Clearwater

Planted: 10/7/2021

Harvested: 6/30/2022

Planting Rate: 1.2 million seeds/ac

Tillage: No-Till

Previous Crop: Soybeans

Fertilizer:

- 2/14/2022 - 100 lbs/ac urea
- 4/1/2022 - 100 lbs/ac UAN-
28%

Fungicide: No

Caldwell

Planted: 10/5/2021

Harvested: 6/16/2022

Planting Rate: 1.2 million seeds/ac

Tillage: Minimum

Previous Crop: Wheat

Fertilizer: 110 lbs N/ac

Fungicide: Yes

Plot Information

Ark City

Planted: 10/6/2021

Harvested: 6/16/2022

Planting Rate: 1.2 million seeds/ac

Tillage: Conventional

Previous Crop: Wheat

Fertilizer: 117.4 lbs N/ac,
47 lbs P/ac, 22 lbs K/ac,
16 lbs S/ac

Fungicide: No

Harper

Planted: 10/5/2021

Harvested: 6/16/2022

Planting Rate: 1.2 million seeds/ac

Tillage: Conventional

Previous Crop: Wheat

Fertilizer: Mid-March

- 46 lbs N/ac

Fungicide: No

Andale Wheat Plot Soil Test

 Clearwater 0-6" / 0-24"
 Sampled: 11/18/21

<i>Analysis</i>	<i>Value Found</i>	<i>Analysis</i>	<i>Value Found</i>
Soil pH (1:1, soil:water)	6.2	Buffer pH (Sikora)	6.8
Soil pH (1:1, soil:water)	1.9%	Nitrate-N sub-surface / 2nd smpl	6 ppm
Phosphorus (P) Mehlich-3	30 ppm	Potassium (K)	199 ppm
Zinc (Zn) DTPA Extraction	0.6 ppm	Sulfur (S) sub-surface / 2nd sample	3 ppm
Chloride (Cl) sub-surface / 2nd smpl	5 ppm		

Clearwater Wheat Plot Soil Test

 Clearwater 0-6" / 0-24"
 Sampled: 11/16/21

<i>Analysis</i>	<i>Value Found</i>	<i>Analysis</i>	<i>Value Found</i>
Soil pH (1:1, soil:water)	5.9	Buffer pH (Sikora)	6.6
Soil pH (1:1, soil:water)	1.8%	Nitrate-N sub-surface / 2nd smpl	3 ppm
Phosphorus (P) Mehlich-3	17 ppm	Potassium (K)	162 ppm
Zinc (Zn) DTPA Extraction	0.4 ppm	Sulfur (S) sub-surface / 2nd sample	2 ppm
Chloride (Cl) sub-surface / 2nd smpl	6 ppm		

Severe Wheat Streak Mosaic Virus

Belle Plaine

Variety	Yield (bu/ac)
AG Icon	21.7
AG Radical	23.6
AM Cartwright	21.1
Ap Bigfoot	25.0
AP EverRock	22.1
AP18 AX	24.0
Bob Dole	20.4
Butler's Gold	12.2
Doublestop CL+	27.0
KS Ahearn	18.7
KS Hatchett	9.9
KS Providence	25.0
LCS Atomic AX	21.9
LCS Helix AX	29.8
LCS Julep	32.2
LCS Photon AX	30.3
LCS Valiant	24.3
Paradise	20.7
Rock Star	25.7
Smith's Gold	25.3
Strad CL+	23.6
SY Monument	26.4
SY Wolverine	32.6
Uncharted	12.1
WB4269	23.2
WB4401	23.3
WB4699	18.0
Zenda	18.5
Average	22.8
Minimum	9.9
Maximum	32.6

The Belle Plaine Location had a severe infestation of wheat streak mosaic virus and was not included in the analysis with the other locations

Planted: 10/6/2021

Harvested: 6/18/2022

Planting Rate: 1.2 million seeds/ac

Tillage: No-Till

Previous Crop: Corn

Fungicide: No

*Values, highlighted in gray and bold, belong statistically to the highest yielding group. We cannot say values within the group are different from each other