



Current Report

EXTENSION

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2020-2021 Small Grains Variety Performance Tests

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Wheat Crop Overview

At the time of writing this report, 2021 Oklahoma wheat production is estimated to be approximately 108 million bushels, which is about 4% higher than 2020 production and 2% lower than 2019 production (Table 1). Approximately 4.3 million acres were planted for the 2021 crop year, which was similar to the 2020 crop, but was 14% lower than the previous 10-year average. The number of harvested acres is estimated at 2.70 million, which is 4% higher than in 2020 (Table 1). The statewide average yield is projected at 40 bushels per acre. This is similar to the 2020 state average and 9 bushels per acre greater than the previous 10-year average.

Table 1. Oklahoma wheat production for 2019, 2020 and 2021 as estimated by USDA NASS, July 2021.

	2019	2020	2021
Planted area (million acres)	4.2	4.3	4.3
Harvested area (million acres)	2.75	2.60	2.70
Yield (bushels/acre)	40	40	40
Total production (million bushels)	110	104	108

For most of the state, wheat planted in the first two weeks of September (mainly for dual-purpose systems) was sown into good moisture. However, with high winds and maximum temperatures in the 80s and 90s, the soil dried quickly in many areas. Much of the wheat intended for grain-only production was either “dusted in” or planted late (late November and December). In areas where moisture was still available, wheat planted up to mid-October emerged well. However, wheat planted shortly before the ice storm (week of October 26, 2020) suffered from poor emergence due to low soil temperature. Emergence of this wheat did not occur until mid- or late November and was uneven. Some wheat fields planted in late November and in December did not emerge until the end of January.

Overall, average temperatures and low rainfall resulted in only moderate fall forage production (for more information see [CR-2141, Fall Forage Production and First Hollow Stem Date for Small Grain Varieties during the 2020-2021 Crop Year](#)). No diseases of any significance were observed in the fall.

Warmer winter temperatures and abundant soil moisture allowed the under-developed and late-planted wheat to establish and develop a canopy. In the forage trials, the very early genotypes reached first hollow stem during the first week of February. An arctic blast on February 15 and 16 slowed plant growth and development (see CR 2141). As the temperature warmed again, wheat varieties broke dormancy and reached first hollow stem between the end of February and mid-March. The February freeze did not kill the wheat in most cases, but tillering was limited, especially for late-planted wheat. Dry areas and areas lacking a good snow cover to insulate the crop suffered severe canopy and stand losses.

Good soil moisture and warm temperatures during March allowed the wheat crop to develop well. Foliar fungal diseases had a slow start in the spring. A low incidence of leaf rust was observed in some susceptible varieties in Stillwater before the February freeze, but was not observed again until late April and into May. Powdery mildew was the most prominent disease in April in susceptible varieties. In some cases, powdery mildew moved up the canopy onto flag leaves and even onto heads in some fields.

Wheat experienced about three weeks (from the end of March to mid-April) without rain across the entire state. This dry period was extended for much longer in other areas, including the Panhandle and western Oklahoma. The lack of water during this critical plant developmental stage (from jointing to flag leaf stage) resulted in short wheat in many fields. Flag leaves turned blue and curled due to lack of moisture. Weather continued to be very hot and dry and prevented the emergence of many diseases, but reports were received from different areas.

Stripe rust, which was the other foliar disease of widespread significance, was reported across Oklahoma in early to mid-April and became severe on susceptible varieties through May. Tan spot and Septoria/Stagonospora also were observed in fields planted into wheat residue but were not nearly as widespread as powdery mildew or stripe rust. Regarding virus diseases, barley yellow dwarf occurred at mostly low to moderate incidence and severity with occasional fields showing moderate to high incidence. The mite-transmitted virus diseases (wheat streak mosaic, high plains disease and Triticum mosaic) were not as widespread as in some years but did reach moderate to severe levels in certain fields in western and northwestern Oklahoma. Darkening of heads also was observed across the state at varying levels of severity. In some fields, this darkening resulted from diseases such as Septoria/stagonospora or black chaff, but freeze contributed to this symptom as well.

Wheat started to head by early April in southwest Oklahoma and mid-April in south-central Oklahoma, which made it susceptible to late-spring freezes. Such a freeze occurred on April 26. Wheat in many fields was around the boot to heading stage, and the freeze caused head trapping in the boot, damage to floral tissue and partial or completely sterile heads. Most wheat heads with freeze damage remained green up to four weeks after the freeze but were “empty” with no grain being formed. Some fields showed heads with discoloration (i.e., bleached) or chocolate color due to the freeze damage. Places where the crop was stressed due to lack of moisture suffered more from this freeze event. Overall, freeze damage varied within and across fields and was not as severe as in 2020 across the state.

May was atypically cloudy and cool, which helped the wheat suffering from drought stress, but the cooler conditions also slowed down plant development. The crop looked good in many areas of the state; it just needed rainfall to help with grain filling, test weight and to finish properly.

In summary, this year’s crop was thin due to the February freeze and short due to lack of moisture. Overall, the Oklahoma wheat crop fared well, considering all the conditions it went through during the season. The cloudy and wet weather improved yield prospects by the time producers were making fungicide decisions, and many producers chose to protect yield potential with an application. Data from fungicide treated and nontreated variety trial comparisons at Lahoma indicate the impact of foliar disease on grain yield and suggest that applying a foliar fungicide was a profitable decision for many wheat farmers planting varieties susceptible to rust diseases in places where disease pressure was high.

Most of the rain in the state came in the last two weeks of May. Consequently, harvest was delayed by a couple of weeks. According to the Oklahoma Wheat Commission report, grain yields ranged from extremely low yields (10 bushels per acre) in drought-stressed fields in the Panhandle to high (80 bushels per acre) in intensively managed fields in north-central Oklahoma. Test weight was good to exceptional as harvest began with most values ranging from 60 pounds per bushel to 64 pounds per bushel. However, the continuing rainfall events during late June caused a decline in test weight and sprout damage in some areas. Wheat protein ranged from 10% to 12.5% across the state, with a state average of 11.1%.

Testing Methods and Data Interpretation

Testing Methods

Seed was packaged and planted in the same condition as it was delivered from the respective seed companies. Most seed was treated with an insecticide plus a fungicide, but the formulation and rate of seed treatment used was not confirmed or reported in this document.

Plots were seven rows wide with 7.5-inch row spacing and were sown with a Great Plains no-till drill modified for cone-seeded, small-plot research. Except for dryland locations in the Panhandle, plots were planted 25 feet long and trimmed to 19 feet at harvest with the plot combine. Panhandle dryland locations were 35 feet long at planting and trimmed to 29 feet at harvest. Wheel tracks were included in the plot area for yield calculation, for a total plot width of 60 inches. The experimental design for all sites other than Apache and Lahoma was a randomized complete block with four replicates. Trials at Apache and Lahoma featured a split-plot design, in which two treatments of plus or minus fungicide were assigned to whole plots and varieties were assigned at random to subplots. The whole-plot design was a randomized complete block with four replicates. Fungicide was applied at Feekes 9 (flag leaf completely emerged). Additional information on product rate and date of application is included in the tables for the respective sites.

Plots received 5 gallons per acre of 10-34-0 at planting. The dual-purpose trials at El Reno and Walters, and forage trials were sown at 120 pounds per acre. The Goodwell irrigated trial was sown at 90 pounds per acre and the other locations in the Panhandle (Balko, Hooker and Keys) were sown at 45 pounds per acre. All other locations were sown at 60 pounds per acre. Grazing intensity, nitrogen fertilization, and insect and weed control decisions were made on a location-by-location basis and reflect standard management practices for the area.

Plots were harvested with a Wintersteiger Delta small plot combine. Grain weight, test weight, protein and moisture content were collected from each plot, and grain yields and protein concentration were corrected to 12% moisture content. Grain moisture at all sites was generally below 12%, and maximum and minimum grain moisture for all plots at a location typically ranged no more than 2%. The Homestead trial was not harvested due to volunteer wheat infestation. The Lamont trial was not harvested due to a reduced and irregular stand reflective of variable soil pH, and due to excessive late-season rainfall and subsequent weed infestation.

Data Interpretation

Yield, test weight and protein data for each location and regional summary were analyzed using the appropriate statistical methods. At the bottom of each table, the mean and least significant difference (LSD) values are reported. The LSD is a test statistic that aids in determining whether there is a true difference in yield, test weight and protein. In this report, one can be 95% confident that the difference between two varieties is real if the difference is greater than the LSD value. Data not significantly different is indicated by “NS.” For example, if the LSD value is 4 bushels per acre in a trial where Variety A yielded 30 bushels per acre and Variety B yielded 25, then Variety A would be considered to have a statistically higher yield. However, if Variety C yielded 27 bushels per acre, then Variety A and Variety C would be considered to have a similar

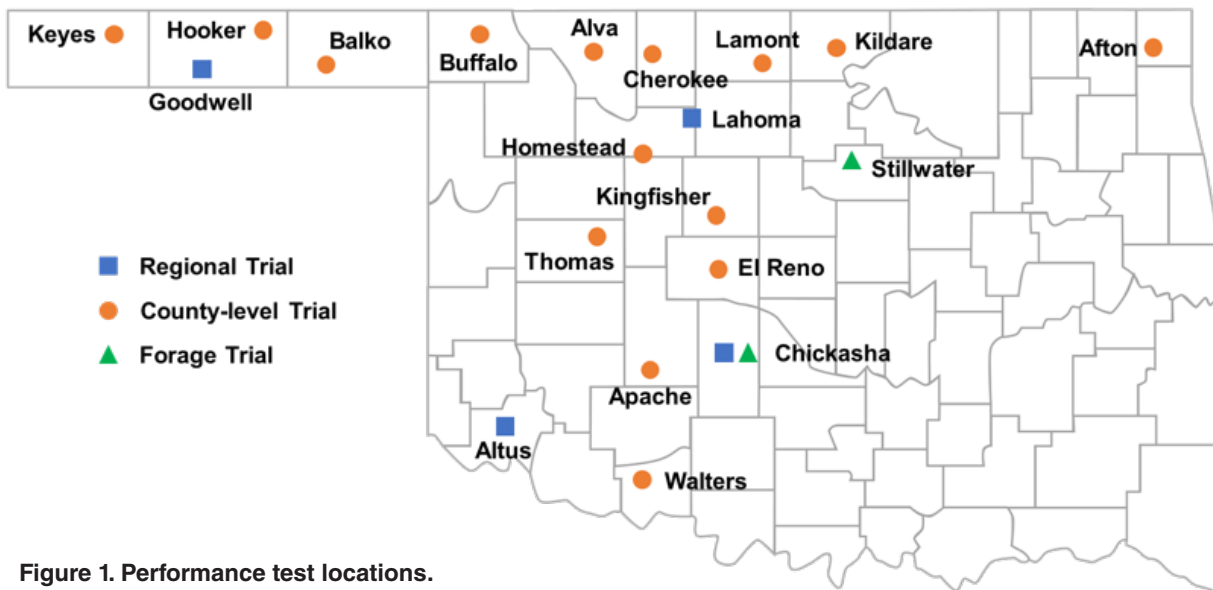


Figure 1. Performance test locations.

yield. In that same example trial, there is a 5% chance that the 4 bushels per acre difference between Variety A and Variety B does not truly exist, but random chance caused the 5-bushel difference. These chance factors may include differences in fertility, moisture availability and diseases, for example. To aid in visualizing the varieties with the highest yields, test weights and proteins, values highlighted in gray do not differ statistically from the highest value within a column. The performance of a variety may vary from year to year, even at the same location. Tests over two or more years and over multiple locations more accurately predict the performance of a variety.

Additional Information on the Web

A copy of this publication as well as additional information about wheat management can be found at:

Website: www.wheat.okstate.edu

Blog: www.osuwheat.com

 [@OSU_smallgrains](https://twitter.com/OSU_smallgrains)

 [OSU Small Grains](https://www.facebook.com/OSU_Small_Grains)

 [OSU Small Grains](https://www.youtube.com/OSU_Small_Grains)

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- Brook Strader, Homestead, Oklahoma
- Kirby Brothers, Lamont, Oklahoma

2020-2021 Summary of All Regions.

Licensee	Variety	Regional Trials	Central	North Central	Northwest	Panhandle	Southwest
-----grain yield (bu/ac)-----							
AgriMaXX	AM Cartwright	63	--	--	--	--	--
AgriPro	AP Bigfoot	58	--	--	--	--	--
AgriPro	AP EverRock	--	--	--	--	--	48
AgriPro	AP Roadrunner	77	--	--	--	--	--
AgriPro	AP18 AX	60	--	--	--	--	--
AgriPro	Bob Dole	62	58	57	63	57	52
AgriPro	SY Achieve CL2	56	--	57	60	58	--
AgriPro	SY Rugged	60	53	59	64	59	52
AGSECO	AG Icon	63	57	--	--	63	--
AGSECO	AG Radical	63	--	--	--	--	--
CHS	Allegiant 3063	62	--	--	--	--	--
CROPLAN	CP7017AX	69	--	--	--	--	--
CROPLAN	CP7050AX	59	--	--	--	--	--
CROPLAN	CP7909	65	--	59	63	63	58
Dyna-Gro	Buckhorn AX	60	--	--	--	--	--
KWA	KS Dallas	63	51	--	61	62	56
KWA	KS Hamilton	71	--	--	--	--	--
KWA	KS Hatchett	58	--	--	--	--	--
KWA	KS Silverado	61	46	50	58	--	53
KWA	KS Western Star	66	57	50	62	64	63
KWA	Zenda	62	--	--	--	--	--
LCS	LCS Atomic AX	65	--	--	--	--	--
LCS	LCS Chrome	72	59	58	65	61	58
LCS	LCS Fusion AX	55	--	--	--	--	--
LCS	LCS Helix AX	63	--	--	--	--	--
LCS	LCS Julep	62	--	--	--	--	--
LCS	LCS Photon AX	59	52	56	54	--	55
LCS	LCS Revere	57	--	--	--	--	--
LCS	LCS Valiant	65	--	--	--	--	--
OGI	Baker's Ann	--	50	60	62	58	--
OGI	Bentley	61	--	55	--	64	--
OGI	Big Country	67	65	56	63	57	54
OGI	Breakthrough	--	--	--	60	55	--
OGI	Doublestop CL+	62	61	54	53	60	55
OGI	Duster	62	--	--	--	--	--
OGI	Gallagher	58	53	49	60	54	54
OGI	Green Hammer	--	53	62	--	--	51
OGI	Iba	--	--	--	64	55	--
OGI	Lonerider	--	--	--	63	59	--
OGI	OK Corral	64	58	54	61	61	54
OGI	Showdown	67	60	58	73	63	66
OGI	Skydance	--	--	60	--	--	50
OGI	Smith's Gold	60	54	54	59	55	52
OGI	Strad CL+	--	60	58	--	--	--
OGI	Uncharted	--	59	57	--	--	46
PlainsGold	Canvas	69	--	--	--	65	68
PlainsGold	Crescent AX	59	--	--	63	61	--
PlainsGold	Guardian	67	--	--	--	60	--
Westbred	WB4269	71	56	58	58	--	63
Westbred	WB4401	60	54	--	--	--	--
Westbred	WB4699	70	--	58	62	59	61
Westbred	WB4792	66	57	58	67	58	63
Experimentals							
KSU	KS12DH0156-88	60	--	--	--	--	--
OSU	OCW03S580S-8WF	--	52	54	--	--	49
OSU	OK12716W	71	65	55	73	61	67
OSU	OK15DMASBx7 ARS 6-8	--	--	--	--	--	--
OSU	OK15MASBx7 ARS 8-29	--	--	--	--	--	--
Mean		63	56	56	62	60	56
LSD (0.05)		6	5	7	6	6	5

Notes: Grain yield was adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available.

2020-2021 Summary of Individual Locations.

Licensee	Variety	Apache								Chickasha	El Reno	El Reno	
		Afton	Altus	Alva	Apache	Fungicide	Balko	Buffalo	Cherokee	Chickasha	IM	DP	GO
-----grain yield (bu/ac)-----													
AgriMaXX	AM Cartwright	58	56	47	--	--	--	--	54	40	60	58	64
AgriPro	AP Bigfoot	--	63	--	--	--	--	--	--	17	46	--	--
AgriPro	AP EverRock	--	57	--	50	54	--	--	--	--	28	--	--
AgriPro	AP Roadrunner	--	68	--	--	--	--	--	--	58	80	--	--
AgriPro	AP18 AX	--	64	--	--	--	--	--	--	29	41	--	--
AgriPro	Bob Dole	67	65	57	50	50	58	70	64	31	50	61	69
AgriPro	SY Achieve CL2	53	60	56	40	43	52	60	64	15	33	--	--
AgriPro	SY Rugged	--	66	59	49	48	55	64	68	19	37	62	65
AGSECO	AG Icon	50	65	58	--	--	60	--	--	36	61	58	62
AGSECO	AG Radical	--	76	--	--	--	--	--	--	22	59	--	--
CHS	Allegiant 3063	--	68	--	--	--	--	--	--	19	46	--	--
CROPLAN	CP7017AX	--	66	--	--	--	--	--	--	33	62	--	--
CROPLAN	CP7050AX	--	69	--	--	--	--	--	--	28	38	--	--
CROPLAN	CP7909	56	69	63	57	69	47	58	67	20	49	--	--
Dyna-Gro	Buckhorn AX	--	61	--	--	--	--	--	--	24	42	--	--
KWA	Everest	53	--	--	--	--	--	--	--	--	--	--	--
KWA	KS Dallas	--	63	59	52	70	60	60	64	24	50	62	58
KWA	KS Hamilton	--	75	--	--	--	--	--	--	38	72	--	--
KWA	KS Hatchett	--	62	--	--	--	--	--	--	15	37	--	--
KWA	KS Silverado	--	61	57	55	62	--	57	60	21	52	57	51
KWA	KS Western Star	--	59	59	75	73	58	64	64	46	68	59	58
KWA	Zenda	56	61	--	--	--	--	--	--	31	51	--	--
LCS	LCS Atomic AX	--	70	--	--	--	--	--	--	26	32	--	--
LCS	LCS Chrome	33	68	58	62	64	56	70	69	52	76	57	62
LCS	LCS Fusion AX	--	41	--	--	--	--	--	--	24	56	--	--
LCS	LCS Helix AX	--	67	--	--	--	--	--	--	34	46	--	--
LCS	LCS Julep	--	57	--	--	--	--	--	--	31	70	--	--
LCS	LCS Photon AX	70	70	56	58	59	--	44	60	25	38	54	63
LCS	LCS Revere	--	67	--	--	--	--	--	--	24	34	--	--
LCS	LCS Valiant	--	65	--	--	--	--	--	--	36	52	--	--
OGI	Baker's Ann	--	--	54	--	--	51	72	63	25	32	60	58
OGI	Bentley	53	66	62	--	--	59	--	73	21	42	--	--
OGI	Big Country	57	54	61	54	58	54	65	64	59	63	63	67
OGI	Breakthrough	--	--	61	--	--	55	55	63	--	--	--	--
OGI	Doublestop CL+	42	58	46	55	60	59	57	57	55	62	62	66
OGI	Duster	--	60	--	--	--	--	--	--	42	58	--	--
OGI	Gallagher	39	60	56	56	60	46	60	65	28	49	50	64
OGI	Green Hammer	--	65	--	46	51	--	--	--	31	45	52	66
OGI	Iba	--	--	58	--	--	48	62	72	--	--	--	--
OGI	Lonerider	--	--	62	--	--	57	59	67	--	--	--	--
OGI	OK Corral	65	61	63	51	56	57	61	61	35	53	63	66
OGI	Showdown	53	78	65	61	66	59	74	81	34	42	75	78
OGI	Skydance	65	55	50	53	53	--	--	52	28	34	--	--
OGI	Smith's Gold	49	63	55	49	53	52	56	65	33	48	59	60
OGI	Strad CL+	--	--	--	--	--	--	--	--	45	60	54	67
OGI	Uncharted	--	62	--	35	39	--	--	--	39	53	64	61
PlainsGold	Canvas	--	75	--	75	78	60	54	71	42	73	--	--
PlainsGold	Crescent AX	--	66	64	--	--	55	51	71	22	43	--	--
PlainsGold	Guardian	--	64	65	--	--	65	--	68	52	64	--	--
Watley	TAM112	--	--	--	--	--	--	--	--	--	--	--	--
Watley	TAM115	--	--	--	--	--	--	--	--	--	--	--	--
Watley	TAM204	--	--	--	--	--	--	--	--	--	--	--	--
Westbred	WB4269	56	70	51	66	67	--	65	61	46	69	53	55
Westbred	WB4401	63	52	56	--	--	--	--	62	27	48	50	67
Westbred	WB4699	--	70	63	61	70	65	58	64	31	71	--	--
Westbred	WB4792	27	70	61	66	70	59	71	72	32	61	62	64
Experimentals													
KSU	KS12DH0156-88	--	58	--	--	--	--	--	--	28	52	--	--
OSU	OCW03S580S-8WF	--	63	--	46	50	--	--	--	35	52	43	59
OSU	OK12716W	48	75	73	67	74	63	64	80	45	66	76	75
OSU	OK15DMASBx7 ARS 6-8	--	--	--	--	--	--	--	--	--	--	66	65
OSU	OK15MASBx7 ARS 8-29	--	--	--	--	--	--	--	--	--	--	55	69
Mean		53	64	58	55	60	56	61	65	32	52	59	63
LSD (0.05)		9	6	5	6	7	5	NS	5	7	9	5	4

2020-2021 Summary of Individual Locations. (cont'd)

Licensee	Variety	Goodwell					Lahoma			
		Irrigated	Hooker	Keyes	Kildare	Kingfisher	Lahoma	Fungicide	Thomas	Walters
-----grain yield (bu/ac)-----										
AgriMaXX	AM Cartwright	89	--	--	--	69	58	75	--	--
AgriPro	AP Bigfoot	82	--	--	--	--	61	81	--	--
AgriPro	AP EverRock	96	--	--	--	--	57	82	--	32
AgriPro	AP Roadrunner	90	--	--	--	--	80	84	--	--
AgriPro	AP18 AX	94	--	--	--	--	55	81	--	--
AgriPro	Bob Dole	95	55	23	38	71	58	74	64	44
AgriPro	SY Achieve CL2	88	71	23	34	54	59	79	61	--
AgriPro	SY Rugged	93	61	26	31	70	60	87	68	44
AGSECO	AG Icon	87	80	24	--	60	56	74	63	--
AGSECO	AG Radical	94	--	--	--	--	57	71	--	--
CHS	Allegiant 3063	103	--	--	--	--	62	75	--	--
CROPLAN	CP7017AX	94	--	--	--	--	79	80	--	--
CROPLAN	CP7050AX	91	--	--	--	--	54	75	--	--
CROPLAN	CP7909	104	73	29	27	--	68	81	--	38
Dyna-Gro	Buckhorn AX	92	--	--	--	--	62	78	--	--
KWA	Everest	--	--	--	--	--	--	--	--	--
KWA	KS Dallas	91	69	29	--	53	63	89	59	39
KWA	KS Hamilton	89	--	--	--	--	68	83	--	--
KWA	KS Hatchett	99	--	--	--	--	60	74	--	--
KWA	KS Silverado	99	--	--	15	39	56	78	58	35
KWA	KS Western Star	94	75	31	20	51	56	73	59	46
KWA	Zenda	78	--	--	--	--	66	83	--	--
LCS	LCS Atomic AX	110	--	--	--	--	68	84	--	--
LCS	LCS Chrome	91	71	27	30	52	64	80	55	40
LCS	LCS Fusion AX	73	--	--	--	--	58	75	--	--
LCS	LCS Helix AX	98	--	--	--	--	60	76	--	--
LCS	LCS Julep	86	--	--	--	--	57	74	--	--
LCS	LCS Photon AX	89	--	--	38	71	58	74	61	35
LCS	LCS Revere	90	--	--	--	--	54	76	--	--
LCS	LCS Valiant	101	--	--	--	--	59	79	--	--
OGI	Baker's Ann	89	69	25	40	64	63	78	59	--
OGI	Bentley	94	74	30	19	--	68	78	--	40
OGI	Big Country	86	65	24	25	75	61	82	63	49
OGI	Breakthrough	84	57	26	--	--	62	79	--	--
OGI	Doublestop CL+	76	79	27	41	70	53	67	49	48
OGI	Duster	85	--	--	--	--	56	71	--	--
OGI	Gallagher	78	64	28	16	69	61	71	61	42
OGI	Green Hammer	--	--	--	39	73	66	82	50	41
OGI	Iba	82	67	25	--	--	--	--	--	--
OGI	Lonerider	87	66	26	--	--	61	80	--	--
OGI	OK Corral	95	68	26	23	67	60	78	65	46
OGI	Showdown	101	63	28	30	72	60	85	62	59
OGI	Skydance	--	--	--	41	72	60	80	54	41
OGI	Smith's Gold	78	67	24	21	68	66	75	57	45
OGI	Strad CL+	--	--	--	35	80	61	79	55	--
OGI	Uncharted	--	--	--	27	75	68	76	62	46
PlainsGold	Canvas	96	70	33	--	--	52	73	--	44
PlainsGold	Crescent AX	90	73	27	--	--	55	75	--	--
PlainsGold	Guardian	82	61	33	--	--	58	81	--	--
Watley	TAM112	--	56	24	--	--	--	--	--	--
Watley	TAM115	--	60	30	--	--	--	--	--	--
Watley	TAM204	--	68	20	--	--	--	--	--	--
Westbred	WB4269	95	--	--	27	57	67	80	55	49
Westbred	WB4401	97	--	--	--	71	59	77	59	--
Westbred	WB4699	90	58	23	17	--	70	88	--	44
Westbred	WB4792	84	60	29	28	61	64	82	59	44
Experimentals										
KSU	KS12DH0156-88	88	--	--	--	--	61	75	--	--
OSU	OCW03S580S-8WF	--	--	--	22	66	58	83	57	39
OSU	OK12716W	99	55	28	20	66	63	81	60	53
OSU	OK15DMASBx7 ARS 6-8	--	--	--	--	--	--	--	60	--
OSU	OK15MASBx7 ARS 8-29	--	--	--	--	--	57	81	66	--
Mean		91	66	27	28	65	61	78	59	43
LSD (0.05)		12	NS	7	9	6	NS	NS	11	5

Notes: Grain yield was adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. NS = not significant. Double-dashes "--" = data not available.

Summary of Regional Trial Locations

Locations: Altus, Chickasha, Goodwell Irrigated, and Lahoma

Licensee	Variety	Grain Yield 2020-21	Test Weight 2020-21	Protein 2020-21
		-----bu/ac-----	-----lb/bu-----	-----%-----
AgriPro	AP Roadrunner	77	60.8	12.6
LCS	LCS Chrome	72	60.3	13.0
Westbred	WB4269	71	61.6	12.3
KWA	KS Hamilton	71	60.7	13.2
Westbred	WB4699	70	60.5	11.6
CROPLAN	CP7017AX	69	61.1	12.1
PlainsGold	Canvas	69	61.1	12.5
OGI	Big Country	67	60.6	13.8
PlainsGold	Guardian	67	61.9	13.5
OGI	Showdown	67	61.1	12.7
KWA	KS Western Star	66	60.7	12.4
Westbred	WB4792	66	61.8	12.6
LCS	LCS Valiant	65	61.5	13.5
CROPLAN	CP7909	65	60.4	12.9
LCS	LCS Atomic AX	65	61.4	13.4
OGI	OK Corral	64	59.9	13.4
KWA	KS Dallas	63	60.0	13.5
LCS	LCS Helix AX	63	61.7	13.1
AGSECO	AG Radical	63	59.9	13.2
AGSECO	AG Icon	63	60.9	13.7
AgriMaXX	AM Cartwright	63	60.0	13.1
LCS	LCS Julep	62	60.2	13.1
AgriPro	Bob Dole	62	60.8	13.5
OGI	Duster	62	61.0	13.4
CHS	Allegiant 3063	62	60.2	12.8
OGI	Doublestop CL+	62	62.6	14.0
KWA	Zenda	62	62.1	12.9
OGI	Bentley	61	61.2	13.3
KWA	KS Silverado	61	60.4	13.2
AgriPro	AP18 AX	60	60.7	13.1
OGI	Smith's Gold	60	61.7	13.1
AgriPro	SY Rugged	60	59.8	13.3
Dyna-Gro	Buckhorn AX	60	61.9	14.4
Westbred	WB4401	60	61.3	13.0
CROPLAN	CP7050AX	59	61.4	14.4
LCS	LCS Photon AX	59	61.4	14.3
PlainsGold	Crescent AX	59	60.8	13.2
AgriPro	AP Bigfoot	58	59.3	13.3
OGI	Gallagher	58	60.9	13.3
KWA	KS Hatchett	58	57.4	13.8
LCS	LCS Revere	57	60.9	12.8
AgriPro	SY Achieve CL2	56	59.4	14.0
LCS	LCS Fusion AX	55	59.0	12.4
Experimentals				
OSU	OK12716W	71	61.1	12.4
KSU	KS12DH0156-88	60	60.9	13.5
Mean		63	60.8	13.2
LSD (0.05)		6	1.5	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Altus, Chickasha and Chickasha Intensive Wheat Management, Goodwell Irrigated, Lahoma and Lahoma Fungicide trials are included in this analysis due to freeze damage during heading.

Afton Wheat Variety Trial

Cooperator: Greg Leonard

Extension Educator: Brooke Downing

Planting & harvest dates: 10/1/20 & 6/15/21

Previous crop: Corn

Management: Grain-only

Soil Type: Taloka silt loam

Tillage: conventional

Soil test: pH= 7.5, N= 59, P= 261, K= 315

Licensee	Variety	Grain Yield		Test Weight	Protein
		2020-21	2-year	2020-21	2020-21
		-----bu/ac-----		---lb/bu---	-----%----
LCS	LCS Photon AX	70	--	61.6	12.5
AgriPro	Bob Dole	67	68	59.8	11.3
OGI	OK Corral	65	67	57.1	10.8
OGI	Skydance	65	63	60.5	12.2
Westbred	WB4401	63	--	60.8	10.0
AgriMaXX	AM Cartwright	58	--	59.0	11.4
OGI	Big Country	57	--	54.7	10.7
KWA	Zenda	56	50	60.3	10.7
Westbred	WB4269	56	58	60.7	10.7
CROPLAN	CP7909	56	--	58.8	9.9
OGI	Bentley	53	55	56.9	10.3
OGI	Showdown	53	53	57.2	9.9
AgriPro	SY Achieve CL2	53	59	59.5	11.7
KWA	Everest	53	48	61.9	12.1
AGSECO	AG Icon	50	--	57.3	11.8
OGI	Smith's Gold	49	59	57.0	11.2
OGI	Doublestop CL+	42	51	59.8	12.1
OGI	Gallagher	39	43	56.2	10.9
LCS	LCS Chrome	33	40	51.7	11.9
Westbred	WB4792	27	41	51.3	11.2
	Experimental				
	OK12716W	48	--	54.9	11.0
Mean		53	54	57.9	11.1
LSD (0.05)		9	8	2.0	0.7

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. There was no lodging across the trial. Severe pressure from Fusarium head blight (scab) disease. Double-dashes "--" = data not available

Altus Regional Wheat Variety Trial

Cooperator: OSU Southwest Res. & Ext. Center
Planting & harvest dates: 9/29/20 & 6/9/21
Management: Grain-only
Tillage: Conventional

Extension Educator: Gary Strickland
Previous crop: Wheat
Soil Type: Hollister silt clay loam
Soil test: pH= 7.1, N= 9, P= 60, K= 827

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Showdown	78	71	72	60.0	10.5
AGSECO	AG Radical	76	--	--	60.5	10.7
PlainsGold	Canvas	75	71	71	61.6	10.3
KWA	KS Hamilton	75	--	--	61.6	10.3
LCS	LCS Photon AX	70	49	--	62.7	11.7
Westbred	WB4699	70	68	65	60.4	10.8
Westbred	WB4792	70	67	67	63.0	10.0
LCS	LCS Atomic AX	70	--	--	60.4	11.3
Westbred	WB4269	70	44	51	60.1	11.5
CROPLAN	CP7050AX	69	--	--	62.6	11.6
CROPLAN	CP7909	69	61	60	61.1	11.4
CHS	Allegiant 3063	68	--	--	60.6	10.5
AgriPro	AP Roadrunner	68	--	--	60.6	10.8
LCS	LCS Chrome	68	63	60	60.8	11.6
LCS	LCS Revere	67	--	--	61.5	10.8
LCS	LCS Helix AX	67	--	--	61.9	10.9
PlainsGold	Crescent AX	66	44	44	60.4	9.8
AgriPro	SY Rugged	66	53	54	59.9	10.7
CROPLAN	CP7017AX	66	--	--	60.6	9.8
OGI	Bentley	66	47	51	58.8	10.7
AGSECO	AG Icon	65	55	59	60.4	11.8
OGI	Green Hammer	65	47	55	61.6	12.2
LCS	LCS Valiant	65	--	--	61.5	11.3
AgriPro	Bob Dole	65	50	49	60.4	11.3
PlainsGold	Guardian	64	64	--	62.2	10.6
AgriPro	AP18 AX	64	--	--	59.2	10.7
AgriPro	AP Bigfoot	63	--	--	61.2	11.1
KWA	KS Dallas	63	50	--	61.5	10.4
OGI	Smith's Gold	63	55	57	61.0	10.7
KWA	KS Hatchett	62	--	--	59.4	12.4
OGI	Uncharted	62	45	51	60.3	10.1
Dyna-Gro	Buckhorn AX	61	--	--	61.8	11.5
OGI	OK Corral	61	61	--	59.4	11.6
KWA	KS Silverado	61	51	--	61.6	9.4
KWA	Zenda	61	53	54	61.2	11.2
OGI	Duster	60	47	53	60.7	11.2
AgriPro	SY Achieve CL2	60	48	47	60.6	11.7
OGI	Gallagher	60	51	53	61.0	10.7
KWA	KS Western Star	59	54	--	61.4	11.0
OGI	Doublestop CL+	58	61	58	62.2	12.6
LCS	LCS Julep	57	--	--	61.2	12.1
AgriPro	AP EverRock	57	46	--	59.4	11.8
AgriMaXX	AM Cartwright	56	--	--	60.6	11.1
OGI	Skydance	55	39	43	61.8	11.5
OGI	Big Country	54	46	--	61.1	12.2
Westbred	WB4401	52	39	--	60.1	11.3
LCS	LCS Fusion AX	41	--	--	54.8	11.4
Experimentals						
OSU	OK12716W	75	--	--	60.0	11.6
OSU	OCW03S580S-8WF	63	--	--	58.8	10.9
KSU	KS12DH0156-88	58	--	--	59.8	11.7
Mean		64	53	56	60.7	11.1
LSD (0.05)		6	8	7	1.0	1.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. There was no lodging nor foliar diseases across the trial. Double-dashes "--" = data not available

Alva Wheat Variety Trial

Cooperator: Joe Shirley
 Planting & harvest dates: 9/23/20 & 6/17/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Greg Highfill
 Previous crop: Wheat
 Soil Type: Bethany silt loam
 Soil test: pH= 6.3, N= 16, P= 137, K= 790

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
PlainsGold	Guardian	65	--	--	65.3	9.7
OGI	Showdown	65	69	49	65.5	10.3
PlainsGold	Crescent AX	64	--	--	65.4	9.9
CROPLAN	CP7909	63	--	--	62.7	10.5
OGI	OK Corral	63	--	--	61.6	9.7
Westbred	WB4699	63	--	--	62.5	10.3
OGI	Bentley	62	68	51	64.6	10.4
OGI	Lonerider	62	61	44	64.9	10.6
OGI	Big Country	61	--	--	60.4	10.7
OGI	Breakthrough	61	63	--	65.1	10.2
Westbred	WB4792	61	--	--	64.6	10.8
KWA	KS Western Star	59	--	--	64.0	10.1
AgriPro	SY Rugged	59	66	50	64.9	10.2
KWA	KS Dallas	59	--	--	63.9	10.4
LCS	LCS Chrome	58	69	51	64.4	10.7
OGI	Iba	58	62	45	65.0	11.1
AGSECO	AG Icon	58	66	--	64.2	10.3
AgriPro	Bob Dole	57	73	54	64.2	11.9
KWA	KS Silverado	57	--	--	66.1	11.0
AgriPro	SY Achieve CL2	56	--	--	64.4	11.4
Westbred	WB4401	56	--	--	65.0	10.4
OGI	Gallagher	56	65	47	64.0	10.3
LCS	LCS Photon AX	56	63	--	62.5	12.6
OGI	Smith's Gold	55	61	45	64.4	10.6
OGI	Baker's Ann	54	--	--	65.7	11.1
Westbred	WB4269	51	61	--	64.0	11.7
OGI	Skydance	50	60	--	64.8	12.5
AgriMaXX	AM Cartwright	47	--	--	63.8	11.6
OGI	Doublestop CL+	46	64	48	65.2	13.2
	Experimental					
	OK12716W	73	--	--	64.5	9.8
Mean		58	64	48	64.2	10.8
LSD (0.05)		5	7	5	1.5	0.7

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. In 2020, there were no harvest results from this location. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. Double-dashes "--" = data not available

Apache Wheat Variety Trial

Cooperator: Bryan Vail
 Planting & harvest dates: 10/2/20 & 6/10/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: David Nowlin
 Previous crop: Soybean
 Soil Type: Tilman silty clay loam
 Soil test: pH=5.9, N= 23, P= 85, K= 433

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
PlainsGold	Canvas	75	--	--	62.3	10.5
KWA	KS Western Star	75	--	--	62.1	10.4
Westbred	WB4792	66	--	--	63.2	11.2
Westbred	WB4269	66	71	--	61.8	11.4
LCS	LCS Chrome	62	66	57	62.1	11.8
OGI	Showdown	61	59	51	60.8	11.9
Westbred	WB4699	61	--	--	60.7	10.7
LCS	LCS Photon AX	58	--	--	62.7	13.1
CROPLAN	CP7909	57	--	--	60.4	10.8
OGI	Gallagher	56	58	46	62.0	12.2
OGI	Doublestop CL+	55	60	52	63.5	13.3
KWA	KS Silverado	55	--	--	62.3	11.9
OGI	Big Country	54	--	--	61.5	13.8
OGI	Skydance	53	62	--	61.2	13.5
KWA	KS Dallas	52	--	--	60.5	12.0
OGI	OK Corral	51	--	--	60.7	12.6
AgriPro	Bob Dole	50	--	--	60.7	13.4
AgriPro	AP EverRock	50	--	--	61.9	12.5
AgriPro	SY Rugged	49	54	46	60.9	13.0
OGI	Smith's Gold	49	56	47	61.8	13.2
OGI	Green Hammer	46	55	48	61.5	14.2
AgriPro	SY Achieve CL2	40	--	--	61.9	14.4
OGI	Uncharted	35	--	--	61.0	13.8
Experimentals						
	OK12716W	67	--	--	61.8	11.0
	OCW03S580S-8WF	46	--	--	60.2	13.4
Mean		55	60	49	61.6	12.4
LSD (0.05)		6	6	5	0.8	0.7

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. There was no lodging across the trial. Light to moderate stripe rust pressure observed during grain-fill. Freeze injury occurred in late April and ranged from 0 to 30% depending on the variety. In 2020, plots at this location were lost due to the severe mid-April freeze. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. Double-dashes "--" = data not available

Apache Fungicide Wheat Variety Trial

Cooperator: Bryan Vail
 Planting & harvest dates: 10/2/20 & 6/10/21
 Management: Grain-only
 Tillage: Conventional
 Fungicide: 13 fl oz/ac Nexicor at complete flag leaf emergence on 04/08/21

Extension Educator: David Nowlin
 Previous crop: Soybean
 Soil Type: Tilman silty clay loam
 Soil test: pH=5.9, N= 23, P= 85, K= 433

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
PlainsGold	Canvas	78	--	--	62.2	11.0
KWA	KS Western Star	73	--	--	61.1	11.0
Westbred	WB4699	70	--	--	61.7	11.1
Westbred	WB4792	70	--	--	63.0	11.5
KWA	KS Dallas	70	--	--	60.8	12.0
CROPLAN	CP7909	69	--	--	60.6	11.5
Westbred	WB4269	67	74	--	61.7	11.8
OGI	Showdown	66	71	59	60.9	12.1
LCS	LCS Chrome	64	66	56	62.3	12.0
KWA	KS Silverado	62	--	--	62.4	12.3
OGI	Doublestop CL+	60	64	54	63.3	13.2
OGI	Gallagher	60	71	56	61.7	12.0
LCS	LCS Photon AX	59	--	--	62.6	13.5
OGI	Big Country	58	--	--	61.1	13.2
OGI	OK Corral	56	--	--	59.7	12.3
AgriPro	AP EverRock	54	--	--	61.6	13.0
OGI	Skydance	53	66	--	61.4	13.2
OGI	Smith's Gold	53	65	54	61.5	13.2
OGI	Green Hammer	51	62	52	61.3	14.4
AgriPro	Bob Dole	50	--	--	60.5	13.9
AgriPro	SY Rugged	48	58	49	60.4	12.9
AgriPro	SY Achieve CL2	43	--	--	62.1	14.8
OGI	Uncharted	39	--	--	60.5	13.6
Experimentals						
	OK12716W	74	--	--	61.8	11.1
	OCW03S580S-8WF	50	--	--	60.2	13.7
Mean		60	66	54	61.4	12.6
LSD (0.05)		7	6	5	0.8	0.8

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. There was no lodging across the trial. Light to moderate stripe rust pressure observed during grain-fill. Freeze injury occurred in late April and ranged from 0 to 30% depending on the variety. In 2020, plots at this location were lost due to the severe mid-April freeze. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. Double-dashes "--" = data not available

Apache Wheat Variety Trial — No Fungicide vs. Fungicide Comparison

Cooperator: Bryan Vail
 Planting & harvest dates: 10/2/20 & 6/10/21
 Management: Grain-only
 Tillage: Conventional
 Fungicide: 13 fl oz/ac Nexicor at complete flag leaf emergence on 04/08/21

Extension Educator: David Nowlin
 Previous crop: Soybean
 Soil Type: Tilman silty clay loam
 Soil test: pH=5.9, N= 23, P= 85, K= 433

Licensee	Variety	Grain Yield			Test Weight			Protein		
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.
		----- bu/ac -----			----- lb/bu -----			----- % -----		
PlainsGold	Canvas	75	78	3	62.3	62.2	-0.1	10.5	11.0	0.5
KWA	KS Western Star	75	73	-2	62.1	61.1	-1.0	10.4	11.0	0.6
Westbred	WB4792	66	70	4	63.2	63.0	-0.3	11.2	11.5	0.3
Westbred	WB4269	66	67	2	61.8	61.7	-0.1	11.4	11.8	0.4
LCS	LCS Chrome	62	64	2	62.1	62.3	0.2	11.8	12.0	0.2
OGI	Showdown	61	66	5	60.8	60.9	0.1	11.9	12.1	0.2
Westbred	WB4699	61	70	9	60.7	61.7	1.0	10.7	11.1	0.4
LCS	LCS Photon AX	58	59	1	62.7	62.6	-0.1	13.1	13.5	0.4
CROPLAN	CP7909	57	69	12	60.4	60.6	0.2	10.8	11.5	0.7
OGI	Gallagher	56	60	4	62.0	61.7	-0.4	12.2	12.0	-0.2
OGI	Doublestop CL+	55	60	4	63.5	63.3	-0.3	13.3	13.2	-0.1
KWA	KS Silverado	55	62	7	62.3	62.4	0.1	11.9	12.3	0.4
OGI	Big Country	54	58	4	61.5	61.1	-0.4	13.8	13.2	-0.6
OGI	Skydance	53	53	1	61.2	61.4	0.2	13.5	13.2	-0.3
KWA	KS Dallas	52	70	18	60.5	60.8	0.3	12.0	12.0	0.0
OGI	OK Corral	51	56	5	60.7	59.7	-1.0	12.6	12.3	-0.3
AgriPro	Bob Dole	50	50	0	60.7	60.5	-0.2	13.4	13.9	0.5
AgriPro	AP EverRock	50	54	4	61.9	61.6	-0.3	12.5	13.0	0.5
AgriPro	SY Rugged	49	48	-1	60.9	60.4	-0.5	13.0	12.9	-0.1
OGI	Smith's Gold	49	53	4	61.8	61.5	-0.3	13.2	13.2	0.0
OGI	Green Hammer	46	51	5	61.5	61.3	-0.2	14.2	14.4	0.2
AgriPro	SY Achieve CL2	40	43	3	61.9	62.1	0.3	14.4	14.8	0.4
OGI	Uncharted	35	39	4	61.0	60.5	-0.5	13.8	13.6	-0.2
	Experimentals									
	OK12716W	67	74	7	61.8	61.8	0.0	11.0	11.1	0.1
	OCW03S580S-8WF	46	50	4	60.2	60.2	0.1	13.4	13.7	0.3
	Mean	55	60	4	61.6	61.4	-0.1	12.4	12.6	0.2
	LSD (0.05)	6	7	7	0.8	0.8	NS	0.7	0.8	NS

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. There was no lodging across the trial. Light to moderate stripe rust pressure observed during grain-fill. Freeze injury occurred in late April and ranged from 0 to 30% depending on the variety. In 2020, plots at this location were lost due to the severe mid-April freeze. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. NS = not significant. Double-dashes "--" = data not available

Balko Wheat Variety Trial

Cooperator: Kenton Patzkowsky
 Planting & harvest dates: 9/18/20 & 6/24/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Loren Sizelove
 Previous crop: Fallow
 Soil Type: Bippus clay loam
 Soil test: pH= 7.9, N= 26, P= 39, K= 1250

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
PlainsGold	Guardian	65	--	--	63.2	11.0
Westbred	WB4699	65	60	--	59.3	10.6
KWA	KS Dallas	60	--	--	60.1	11.2
PlainsGold	Canvas	60	59	--	59.6	11.2
AGSECO	AG Icon	60	56	66	59.7	12.0
Westbred	WB4792	59	58	--	60.8	10.9
OGI	Bentley	59	58	67	59.1	11.5
OGI	Doublestop CL+	59	55	65	61.9	12.8
OGI	Showdown	59	56	69	58.1	11.7
KWA	KS Western Star	58	--	--	61.6	11.6
AgriPro	Bob Dole	58	57	--	59.1	12.3
OGI	OK Corral	57	53	--	56.4	11.9
OGI	Lonerider	57	53	67	60.8	11.7
LCS	LCS Chrome	56	56	66	61.3	11.8
OGI	Breakthrough	55	54	65	60.0	11.8
AgriPro	SY Rugged	55	55	67	58.5	11.5
PlainsGold	Crescent AX	55	57	--	60.3	11.3
OGI	Big Country	54	--	--	58.1	12.3
OGI	Smith's Gold	52	54	66	58.0	11.8
AgriPro	SY Achieve CL2	52	--	--	60.0	12.6
OGI	Baker's Ann	51	51	62	58.7	11.9
OGI	Iba	48	53	67	59.1	11.3
CROPLAN	CP7909	47	--	--	56.4	12.1
OGI	Gallagher	46	50	65	56.8	11.8
	Experimentals					
	OK12716W	63	--	--	58.9	11.2
	Mean	56	55	66	59.4	11.7
	LSD (0.05)	5	4	3	1.5	0.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available

Buffalo Wheat Variety Trial

Cooperator: NRCS
 Planting & harvest dates: 11/3/20 & 6/24/21
 Management: Grain-only
 Tillage: no-till

Extension Educator: Darrell McBee
 Previous crop: Fallow
 Soil Type: St. Paul silt loam
 Soil test: pH= 7, N= 26, P= 60, K= 710

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Showdown	74	80	81	63.5	10.6
OGI	Baker's Ann	72	80	--	63.7	11.7
Westbred	WB4792	71	80	--	64.3	10.9
LCS	LCS Chrome	70	77	76	64.2	12.2
AgriPro	Bob Dole	70	75	79	63.8	11.3
OGI	Big Country	65	--	--	63.7	11.9
Westbred	WB4269	65	79	79	64.0	10.8
AgriPro	SY Rugged	64	75	77	64.2	11.0
KWA	KS Western Star	64	--	--	64.0	11.0
OGI	Iba	62	73	74	64.8	10.9
OGI	OK Corral	61	73	--	62.9	11.3
OGI	Gallagher	60	65	70	64.2	11.0
KWA	KS Dallas	60	--	--	61.0	11.4
AgriPro	SY Achieve CL2	60	--	--	64.5	12.7
OGI	Lonerider	59	--	--	65.5	11.7
CROPLAN	CP7909	58	--	--	64.0	10.8
Westbred	WB4699	58	70	--	62.7	10.0
OGI	Doublestop CL+	57	71	72	65.5	13.7
KWA	KS Silverado	57	--	--	63.2	11.2
OGI	Smith's Gold	56	73	76	63.2	11.5
OGI	Breakthrough	55	66	67	65.1	11.3
PlainsGold	Canvas	54	76	--	64.1	11.2
PlainsGold	Crescent AX	51	66	--	64.8	11.1
LCS	LCS Photon AX	44	--	--	64.7	12.4
Experimentals						
	OK12716W	64	--	--	64.0	10.3
Mean		61	74	75	64.0	11.4
LSD (0.05)		NS	10	6	1.3	0.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. NS = not significant. Double-dashes "--" = data not available

Cherokee Wheat Variety Trial

Cooperator: Kenneth Failes
 Planting & harvest dates: 10/5/20 & 6/17/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Tommy Puffinbarger
 Previous crop: Wheat
 Soil Type: Dale silt loam
 Soil test: pH= 6.4, N= 29, P= 42, K= 490

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Showdown	81	90	79	61.6	8.3
OGI	Bentley	73	81	69	60.5	8.2
OGI	Iba	72	79	70	62.3	8.3
Westbred	WB4792	72	80	75	63.3	8.6
PlainsGold	Canvas	71	79	--	61.6	8.2
PlainsGold	Crescent AX	71	82	--	61.9	8.1
LCS	LCS Chrome	69	72	67	62.2	9.0
PlainsGold	Guardian	68	--	--	61.7	8.5
AgriPro	SY Rugged	68	77	70	61.6	8.4
CROPLAN	CP7909	67	--	--	60.9	8.4
OGI	Lonerider	67	--	--	61.6	9.2
OGI	Gallagher	65	79	72	62.1	8.8
OGI	Smith's Gold	65	76	68	60.8	8.2
KWA	KS Western Star	64	--	--	60.7	8.0
AgriPro	SY Achieve CL2	64	--	--	62.0	8.7
AgriPro	Bob Dole	64	72	70	61.2	9.6
Westbred	WB4699	64	80	67	60.0	8.5
OGI	Big Country	64	68	--	60.2	8.4
KWA	KS Dallas	64	--	--	61.8	8.4
OGI	Baker's Ann	63	75	71	62.7	8.6
OGI	Breakthrough	63	74	66	62.2	8.3
Westbred	WB4401	62	--	65	63.2	8.8
Westbred	WB4269	61	78	69	61.4	9.6
OGI	OK Corral	61	75	--	58.9	7.7
KWA	KS Silverado	60	--	--	62.4	8.5
LCS	LCS Photon AX	60	--	--	63.3	9.5
OGI	Doublestop CL+	57	72	69	63.7	11.0
AgriMaXX	AM Cartwright	54	--	--	62.1	10.5
OGI	Skydance	52	--	--	64.0	9.8
	Experimental					
	OK12716W	80	--	--	60.6	7.7
Mean		65	77	70	61.7	8.7
LSD (0.05)		5	6	6	1.3	0.9

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available

Chickasha Regional Wheat Management Variety Trial

Cooperator: OSU South Central Research Station

Extension Educator: Alexandria Minor

Planting & harvest dates: 10/23/20 & 06/18/21

Previous crop: Australian winter peas

Soil Type: Dale silt loam

Management: Grain-only, conventional tillage

Soil test: pH= 7.3, N= 45, P= 43, K= 271

Nitrogen: 45 lbs/ac soil test + 6 lbs/ac at planting + 100 lbs/ac topdress on 2/26/21

Fungicide: none

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Big Country	59	59	64	61.5	14.3
AgriPro	AP Roadrunner	58	--	--	59.1	12.4
OGI	Doublestop CL+	55	57	56	63.6	13.7
LCS	LCS Chrome	52	47	48	57.8	12.7
PlainsGold	Guardian	52	--	--	61.1	13.8
KWA	KS Western Star	46	--	--	59.5	11.9
Westbred	WB4269	46	48	53	60.3	12.2
OGI	Strad CL+	45	--	--	61.7	14.5
PlainsGold	Canvas	42	37	--	58.8	13.0
OGI	Duster	42	38	42	61.5	14.0
AgriMaXX	AM Cartwright	40	36	--	60.3	14.1
OGI	Uncharted	39	47	--	60.7	14.2
KWA	KS Hamilton	38	--	--	58.9	13.9
LCS	LCS Valiant	36	--	--	60.4	14.4
AGSECO	AG Icon	36	42	45	59.8	14.8
OGI	OK Corral	35	--	--	58.6	14.4
LCS	LCS Helix AX	34	--	--	61.4	14.2
OGI	Showdown	34	38	42	59.9	13.8
OGI	Smith's Gold	33	39	47	60.6	13.8
CROPLAN	CP7017AX	33	--	--	58.6	12.7
Westbred	WB4792	32	37	--	61.1	13.4
AgriPro	Bob Dole	31	42	48	60.5	14.7
LCS	LCS Julep	31	--	--	57.8	12.5
KWA	Zenda	31	37	44	62.0	13.7
Westbred	WB4699	31	34	--	57.1	11.9
OGI	Green Hammer	31	37	43	59.6	15.7
AgriPro	AP18 AX	29	--	--	61.5	14.7
OGI	Gallagher	28	29	41	60.0	15.1
OGI	Skydance	28	41	--	61.1	16.6
CROPLAN	CP7050AX	28	--	--	61.0	16.4
Westbred	WB4401	27	--	--	60.4	14.5
LCS	LCS Atomic AX	26	--	--	61.3	15.7
LCS	LCS Photon AX	25	--	--	60.7	15.8
OGI	Baker's Ann	25	32	43	62.9	16.6
Dyna-Gro	Buckhorn AX	24	--	--	60.2	15.4
KWA	KS Dallas	24	--	--	57.2	14.8
LCS	LCS Revere	24	--	--	59.8	13.8
LCS	LCS Fusion AX	24	--	--	57.6	12.9
AGSECO	AG Radical	22	--	--	55.4	13.9
PlainsGold	Crescent AX	22	30	--	57.7	15.3
OGI	Bentley	21	31	37	60.6	14.5
KWA	KS Silverado	21	--	--	56.2	14.3
CROPLAN	CP7909	20	34	--	56.1	13.5
CHS	Allegiant 3063	19	--	--	52.0	13.7
AgriPro	SY Rugged	19	31	40	58.5	15.4
AgriPro	AP Bigfoot	17	--	--	49.2	14.4
KWA	KS Hatchett	15	--	--	40.7	14.5
AgriPro	SY Achieve CL2	15	30	39	50.2	14.9
AgriPro	AP EverRock	*	--	--	*	*
	Experimentals					
	OK12716W	45	--	--	60.2	12.3
	OCW03S580S-8WF	35	--	--	59.2	13.6
	KS12DH0156-88	28	--	--	59.6	13.8
	Mean	32	39	46	58.8	14.1
	LSD (0.05)	7	8	7	4.5	0.7

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Hail storm occurred on early April and a spring freeze event occurred on late April. Average rating for hail and freeze damage was 30%. In 2020, plots at this location were lost due to the severe mid-April freeze. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. Severe stripe rust pressure observed during heading and flowering stages. * Data not reported due to unknown causes of atypical poor grain yield and test weight. Double-dashes "--" = data not available

Chickasha Intensive Wheat Management Variety Trial

Cooperator: OSU South Central Research Station
 Planting & harvest dates: 10/23/20 & 06/18/21
 Soil Type: Dale silt loam

Extension Educator: Alexandria Minor
 Previous crop: Australian winter peas

Management: Grain-only, conventional tillage

Soil test: pH= 7.3, N= 45, P= 43 , K= 271

Nitrogen: 45 lbs/ac soil test + 6 lbs/ac at planting + 100 lbs/ac topdress on 2/26/21 + 40 lbs/ac topdress on 3/24/21

Fungicide: 4 fl oz/ac Tebucure Fung. 3.6 at jointing on 3/24/21 and 13 fl oz/ac Nexicor on 4/12/2021

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
AgriPro	AP Roadrunner	80	--	--	59.9	13.1
LCS	LCS Chrome	76	66	64	59.7	13.4
PlainsGold	Canvas	73	67	--	61.7	13.2
KWA	KS Hamilton	72	--	--	60.8	13.4
Westbred	WB4699	71	72	--	59.7	11.7
LCS	LCS Julep	70	--	--	61.1	13.1
Westbred	WB4269	69	72	74	61.2	13.1
KWA	KS Western Star	68	--	--	59.9	12.2
PlainsGold	Guardian	64	--	--	61.5	13.9
OGI	Big Country	63	66	69	59.5	15.1
CROPLAN	CP7017AX	62	--	--	61.9	12.9
OGI	Doublestop CL+	62	65	67	62.8	14.8
Westbred	WB4792	61	68	--	61.8	13.9
AGSECO	AG Icon	61	64	65	60.0	15.1
AgriMaXX	AM Cartwright	60	59	--	58.3	13.9
OGI	Strad CL+	60	--	--	60.6	14.7
AGSECO	AG Radical	59	--	--	60.7	14.0
OGI	Duster	58	64	65	61.4	14.9
LCS	LCS Fusion AX	56	--	--	60.0	12.9
OGI	Uncharted	53	63	--	60.8	14.6
OGI	OK Corral	53	--	--	57.5	15.0
LCS	LCS Valiant	52	--	--	60.2	15.1
KWA	KS Silverado	52	--	--	59.9	15.5
KWA	Zenda	51	60	64	61.1	14.2
AgriPro	Bob Dole	50	64	68	59.2	15.3
KWA	KS Dallas	50	--	--	57.6	15.4
OGI	Gallagher	49	63	68	57.9	15.1
CROPLAN	CP7909	49	64	--	60.7	14.6
Westbred	WB4401	48	--	--	58.4	14.9
OGI	Smith's Gold	48	56	64	59.9	14.8
AgriPro	AP Bigfoot	46	--	--	60.2	16.0
LCS	LCS Helix AX	46	--	--	60.1	14.7
CHS	Allegiant 3063	46	--	--	59.9	14.6
OGI	Green Hammer	45	58	62	59.5	16.2
PlainsGold	Crescent AX	43	57	--	61.0	15.7
Dyna-Gro	Buckhorn AX	42	--	--	60.5	17.0
OGI	Bentley	42	53	62	60.2	15.5
OGI	Showdown	42	52	58	59.5	15.1
AgriPro	AP18 AX	41	--	--	59.0	15.1
CROPLAN	CP7050AX	38	--	--	60.2	16.6
LCS	LCS Photon AX	38	--	--	59.9	16.4
AgriPro	SY Rugged	37	51	56	57.6	15.2
KWA	KS Hatchett	37	--	--	59.5	15.4
LCS	LCS Revere	34	--	--	59.5	14.7
OGI	Skydance	34	53	--	60.3	16.6
AgriPro	SY Achieve CL2	33	54	59	61.1	16.0
OGI	Baker's Ann	32	51	58	59.8	17.5
LCS	LCS Atomic AX	32	--	--	58.5	16.0
AgriPro	AP EverRock	28	--	--	57.3	16.4
Experimentals						
	OK12716W	66	--	--	61.5	13.3
	OCW03S580S-8WF	52	--	--	58.9	14.5
	KS12DH0156-88	52	--	--	59.8	14.5
Mean		52	61	64	60.0	14.7
LSD (0.05)		9	9	8	1.3	0.8

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Hail storm occurred on early April and a spring freeze event occurred on late April. Average rating for hail and freeze damage was 30%. In 2020, plots at this location were lost due to the severe mid-April freeze. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. Severe stripe rust pressure observed during heading and flowering stages. Double-dashes "--" = data not available

Chickasha Standard vs. Intensive Wheat Management Comparison

Cooperator: OSU South Central Research Station

Extension Educator: Alexandria Minor

Planting & harvest dates: 10/23/20 & 06/18/21

Previous crop: Australian winter peas

Soil Type: Dale silt loam

Management: Grain-only, conventional tillage

Soil test: pH= 7.3, N= 45, P= 43 , K= 271

Nitrogen: All plots had a total of 51 lbs/ac of N at planting (45 lbs/ac soil test + 6 lbs/ac applied) and received 100 lbs/ac of N on 2/26/21

Intensive management plots received additional 40 lbs/ac of N on 3/24/21 and two fungicide applications; 4 fl oz/ac Tebucure Fung. 3.6 at jointing on 3/24/21 and 13 fl oz/ac Nexicor on 4/12/21

Licensee	Variety	2020-2021 Grain Yield			Test Weight			Protein		
		Standard	Intensive	Diff	Standard	Intensive	Diff	Standard	Intensive	Diff
		----- bu/ac -----			----- lb/bu -----			----- % -----		
OGI	Big Country	59	63	4	61.5	59.5	-2.0	14.3	15.1	0.8
AgriPro	AP Roadrunner	58	80	22	59.1	59.9	0.8	12.4	13.1	0.7
OGI	Doublestop CL+	55	62	7	63.6	62.8	-0.8	13.7	14.8	1.1
LCS	LCS Chrome	52	76	24	57.8	59.7	1.8	12.7	13.4	0.7
PlainsGold	Guardian	52	64	13	61.1	61.5	0.3	13.8	13.9	0.1
KWA	KS Western Star	46	68	21	59.5	59.9	0.4	11.9	12.2	0.3
Westbred	WB4269	46	69	23	60.3	61.2	0.9	12.2	13.1	0.9
OGI	Strad CL+	45	60	15	61.7	60.6	-1.1	14.5	14.7	0.2
PlainsGold	Canvas	42	73	31	58.8	61.7	2.9	13.0	13.2	0.2
OGI	Duster	42	58	17	61.5	61.4	-0.1	14.0	14.9	0.9
AgriMaXX	AM Cartwright	40	60	20	60.3	58.3	-2.0	14.1	13.9	-0.2
OGI	Uncharted	39	53	15	60.7	60.8	0.1	14.2	14.6	0.4
KWA	KS Hamilton	38	72	34	58.9	60.8	1.9	13.9	13.4	-0.5
LCS	LCS Valiant	36	52	16	60.4	60.2	-0.2	14.4	15.1	0.7
AGSECO	AG Icon	36	61	25	59.8	60.0	0.2	14.8	15.1	0.3
OGI	OK Corral	35	53	18	58.6	57.5	-1.1	14.4	15.0	0.6
LCS	LCS Helix AX	34	46	12	61.4	60.1	-1.4	14.2	14.7	0.5
OGI	Showdown	34	42	8	59.9	59.5	-0.4	13.8	15.1	1.3
OGI	Smith's Gold	33	48	15	60.6	59.9	-0.8	13.8	14.8	1.0
CROPLAN	CP7017AX	33	62	30	58.6	61.9	3.3	12.7	12.9	0.2
Westbred	WB4792	32	61	29	61.1	61.8	0.6	13.4	13.9	0.5
AgriPro	Bob Dole	31	50	19	60.5	59.2	-1.3	14.7	15.3	0.6
LCS	LCS Julep	31	70	39	57.8	61.1	3.3	12.5	13.1	0.6
KWA	Zenda	31	51	20	62.0	61.1	-0.9	13.7	14.2	0.5
Westbred	WB4699	31	71	41	57.1	59.7	2.6	11.9	11.7	-0.2
OGI	Green Hammer	31	45	14	59.6	59.5	-0.1	15.7	16.2	0.5
AgriPro	AP18 AX	29	41	12	61.5	59.0	-2.5	14.7	15.1	0.4
OGI	Gallagher	28	49	21	60.0	57.9	-2.1	15.1	15.1	0.0
OGI	Skydance	28	34	6	61.1	60.3	-0.8	16.6	16.6	0.0
CROPLAN	CP7050AX	28	38	11	61.0	60.2	-0.8	16.4	16.6	0.2
Westbred	WB4401	27	48	21	60.4	58.4	-2.0	14.5	14.9	0.4
LCS	LCS Atomic AX	26	32	6	61.3	58.5	-2.8	15.7	16.0	0.3
LCS	LCS Photon AX	25	38	13	60.7	59.9	-0.8	15.8	16.4	0.6
OGI	Baker's Ann	25	32	6	62.9	59.8	-3.1	16.6	17.5	0.9
Dyna-Gro	Buckhorn AX	24	42	18	60.2	60.5	0.4	15.4	17.0	1.6
KWA	KS Dallas	24	50	26	57.2	57.6	0.4	14.8	15.4	0.6
LCS	LCS Revere	24	34	10	59.8	59.5	-0.3	13.8	14.7	0.9
LCS	LCS Fusion AX	24	56	32	57.6	60.0	2.5	12.9	12.9	0.0
AGSECO	AG Radical	22	59	37	55.4	60.7	5.3	13.9	14.0	0.1
PlainsGold	Crescent AX	22	43	21	57.7	61.0	3.3	15.3	15.7	0.4
OGI	Bentley	21	42	20	60.6	60.2	-0.3	14.5	15.5	1.0
KWA	KS Silverado	21	52	31	56.2	59.9	3.7	14.3	15.5	1.2
CROPLAN	CP7909	20	49	28	56.1	60.7	4.6	13.5	14.6	1.1
CHS	Allegiant 3063	19	46	27	52.0	59.9	7.9	13.7	14.6	0.9
AgriPro	SY Rugged	19	37	18	58.5	57.6	-0.9	15.4	15.2	-0.2
AgriPro	AP Bigfoot	17	46	29	49.2	60.2	11.0	14.4	16.0	1.6
KWA	KS Hatchett	15	37	22	40.7	59.5	18.8	14.5	15.4	0.9
AgriPro	SY Achieve CL2	15	33	19	50.2	61.1	10.9	14.9	16.0	1.1
AgriPro	AP EverRock	*	28	--	*	57.3	--	*	16.4	--
Experimentals										
	OK12716W	45	66	20	60.2	61.5	1.3	12.3	13.3	1.0
	OCW03S580S-8WF	35	52	17	59.2	58.9	-0.3	13.6	14.5	0.9
	KS12DH0156-88	28	52	23	59.6	59.8	0.2	13.8	14.5	0.7
Mean		32	52	20	58.8	60.0	1.2	14.1	14.7	0.6
LSD (0.05)		7	9	11	4.5	1.3	4.8	0.7	0.8	1.1

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Hail storm occurred on early April and a spring freeze event occurred on late April. Average rating for hail and freeze damage was 30%. Severe stripe rust pressure observed during heading and flowering stages. * Data not reported due to unknown causes of atypical poor grain yield and test weight.

EI Reno Dual-Purpose Wheat Variety Trial

Cooperator: Jerry Lingo
 Planting & harvest dates: 9/24/20 & 6/14/21
 Management: Dual-purpose
 Tillage: Conventional

Extension Educator: Kyle Worthington
 Previous crop: Wheat
 Soil Type: Bethany silt loam
 Soil test: pH=6.1, N= 50, P= 50, K= 387

Licensee	Variety	Grain Yield		Test Weight	Protein
		2020-21	2-Year	2020-21	2020-21
		----- bu/ac -----		-- lb/bu --	-- % --
OGI	Showdown	75	73	61.4	10.5
OGI	Uncharted	64	66	61.7	10.2
OGI	Big Country	63	68	60.3	10.2
OGI	OK Corral	63	61	59.6	9.8
Westbred	WB4792	62	--	62.3	9.9
AgriPro	SY Rugged	62	64	61.6	10.0
OGI	Doublestop CL+	62	63	65.0	10.1
KWA	KS Dallas	62	--	60.6	9.6
AgriPro	Bob Dole	61	64	61.2	10.1
OGI	Baker's Ann	60	58	62.9	10.4
KWA	KS Western Star	59	--	61.2	10.4
OGI	Smith's Gold	59	59	61.5	10.0
AgriMaXX	AM Cartwright	58	--	62.6	10.5
AGSECO	AG Icon	58	59	60.4	10.3
KWA	KS Silverado	57	--	61.4	10.3
LCS	LCS Chrome	57	63	60.6	10.2
LCS	LCS Photon AX	54	--	63.4	10.1
OGI	Strad CL+	54	58	62.5	10.2
Westbred	WB4269	53	60	62.1	10.7
OGI	Green Hammer	52	54	62.4	10.1
Westbred	WB4401	50	--	62.1	9.8
OGI	Gallagher	50	50	60.2	10.0
Experimentals					
	OK12716W	76	--	62.1	9.6
	OK15DMASBx7 ARS 6-8	66	--	63.2	10.0
	OK15MASBx7 ARS 8-29	55	--	60.9	9.7
	OCW03S580S-8WF	43	--	58.0	10.1
Mean		59	61	61.6	10.1
LSD (0.05)		5	5	0.9	NS

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Plots were grazed from 12/1/20 to 3/8/21 at an average stocking rate of 333 pounds of animal BW per acre. NS= not significant. Double-dashes "--" = data not available

EI Reno Grain-Only Wheat Variety Trial

Cooperator: Jerry Lingo
 Planting & harvest dates: 10/23/20 & 6/14/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Kyle Worthington
 Previous crop: Wheat
 Soil Type: Bethany silt loam
 Soil test: pH=6.1, N= 50, P= 50, K= 387

Licensee	Variety	Grain Yield 2020-21	Test Weight 2020-21	Protein 2020-21
		---- bu/ac ----	-- lb/bu --	-- % --
OGI	Showdown	78	61.4	9.3
AgriPro	Bob Dole	69	61.3	10.2
OGI	Big Country	67	59.6	10.3
OGI	Strad CL+	67	62.3	10.3
Westbred	WB4401	67	62.1	9.3
OGI	Doublestop CL+	66	64.9	11.2
OGI	OK Corral	66	58.5	9.5
OGI	Green Hammer	66	62.3	11.3
AgriPro	SY Rugged	65	61.6	10.4
OGI	Gallagher	64	61.2	9.8
Westbred	WB4792	64	61.5	9.5
AgriMaXX	AM Cartwright	64	62.0	10.4
LCS	LCS Photon AX	63	62.5	10.5
AGSECO	AG Icon	62	59.7	10.3
LCS	LCS Chrome	62	60.4	10.6
OGI	Uncharted	61	61.6	10.5
OGI	Smith's Gold	60	61.4	10.2
OGI	Baker's Ann	58	61.8	10.5
KWA	KS Dallas	58	58.8	9.9
KWA	KS Western Star	58	59.4	9.9
Westbred	WB4269	55	61.2	10.4
KWA	KS Silverado	51	60.0	9.7
	Experimentals			
	OK12716W	75	61.4	9.1
	OK15MASBx7 ARS 8-29	69	61.3	9.4
	OK15DMASBx7 ARS 6-8	65	62.7	10.2
	OCW03S580S-8WF	59	60.0	10.1
	Mean	63	61.2	10.1
	LSD (0.05)	4	0.8	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column.

EI Reno Wheat Variety Trial — Dual-Purpose vs. Grain-Only Comparison

Cooperator: Jerry Lingo
 Planting dates: 9/24/20 (dual-purpose) & 10/23/20 (grain-only)
 Harvest date: 6/14/21
 Tillage: Conventional

Extension Educator: Kyle Worthington
 Previous crop: Wheat
 Soil Type: Bethany silt loam
 Soil test: pH=6.1, N= 50, P= 50, K= 387

Licensee	Variety	Grain Yield			Test Weight			Protein		
		Dual-purpose	Grain-Only	Diff.	Dual-purpose	Grain-Only	Diff.	Dual-purpose	Grain-Only	Diff.
		----- bu/ac -----			----- lb/bu -----			----- % -----		
OGI	Showdown	75	78	-3	61.4	61.4	0.0	10.5	9.3	1.2
AgriPro	Bob Dole	61	69	-8	61.2	61.3	-0.1	10.1	10.2	-0.1
OGI	Big Country	63	67	-4	60.3	59.6	0.7	10.2	10.3	-0.1
OGI	Strad CL+	54	67	-13	62.5	62.3	0.2	10.2	10.3	-0.1
Westbred	WB4401	50	67	-17	62.1	62.1	0.0	9.8	9.3	0.5
OGI	Doublestop CL+	62	66	-4	65.0	64.9	0.1	10.1	11.2	-1.1
OGI	OK Corral	63	66	-3	59.6	58.5	1.1	9.8	9.5	0.3
OGI	Green Hammer	52	66	-14	62.4	62.3	0.1	10.1	11.3	-1.2
AgriPro	SY Rugged	62	65	-3	61.6	61.6	0.0	10.0	10.4	-0.4
OGI	Gallagher	50	64	-14	60.2	61.2	-1.0	10.0	9.8	0.2
Westbred	WB4792	62	64	-2	62.3	61.5	0.8	9.9	9.5	0.4
AgriMaXX	AM Cartwright	58	64	-6	62.6	62.0	0.6	10.5	10.4	0.1
LCS	LCS Photon AX	54	63	-9	63.4	62.5	0.9	10.1	10.5	-0.4
AGSECO	AG Icon	58	62	-4	60.4	59.7	0.7	10.3	10.3	0.0
LCS	LCS Chrome	57	62	-5	60.6	60.4	0.2	10.2	10.6	-0.4
OGI	Uncharted	64	61	3	61.7	61.6	0.1	10.2	10.5	-0.3
OGI	Smith's Gold	59	60	-1	61.5	61.4	0.1	10.0	10.2	-0.2
OGI	Baker's Ann	60	58	1	62.9	61.8	1.1	10.4	10.5	0.1
KWA	KS Dallas	62	58	4	60.6	58.8	1.8	9.6	9.9	-0.3
KWA	KS Western Star	59	58	1	61.2	59.4	1.8	10.4	9.9	0.5
Westbred	WB4269	53	55	-2	62.1	61.2	0.9	10.7	10.4	0.3
KWA	KS Silverado	57	51	6	61.4	60.0	1.4	10.3	9.7	0.6
Experimentals										
	OK12716W	76	75	1	62.1	61.4	0.7	9.6	9.1	0.5
	OK15MASBx7 ARS 8-29	55	69	-14	60.9	61.3	-0.4	9.7	9.4	0.3
	OK15DMASBx7 ARS 6-8	66	65	1	63.2	62.7	0.5	10.0	10.2	-0.2
	OCW03S580S-8WF	43	59	-16	58.0	60.0	-2.0	10.1	10.1	0.0
Mean		59	63	-5	61.6	61.2	0.4	10.1	10.1	0
LSD (0.05)		5	4	7	0.9	0.8	1.2	NS	0.5	1

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Plots were grazed from 12/1/20 to 3/8/21 at an average stocking rate of 333 pounds of animal BW per acre.

Goodwell Irrigated Regional Wheat Variety Trial

Cooperator: OK Panhandle Res. & Ext. Center
 Planting & harvest dates: 10/7/20 & 6/25/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Dr. Britt Hicks
 Previous crop: Fallow
 Soil Type: Gruver clay loam
 Soil test: pH= 7.5, N= 62, P= 15, K= 930

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
LCS	LCS Atomic AX	110	--	--	64.9	13.8
CROPLAN	CP7909	104	75	80	63.5	14.0
CHS	Allegiant 3063	103	--	--	63.6	13.9
OGI	Showdown	101	74	80	64.2	14.1
LCS	LCS Valiant	101	--	--	64.5	14.7
KWA	KS Hatchett	99	--	--	63.3	15.1
KWA	KS Silverado	99	63	--	65.8	14.1
LCS	LCS Helix AX	98	--	--	64.8	13.9
Westbred	WB4401	97	--	--	64.5	13.9
AgriPro	AP EverRock	96	67	--	63.2	15.4
PlainsGold	Canvas	96	77	83	64.4	14.4
OGI	OK Corral	95	68	--	61.3	14.7
Westbred	WB4269	95	66	74	64.9	12.9
AgriPro	Bob Dole	95	65	71	64.6	14.5
AGSECO	AG Radical	94	--	--	63.2	15.3
OGI	Bentley	94	66	72	62.8	14.6
AgriPro	AP18 AX	94	--	--	63.1	14.9
CROPLAN	CP7017AX	94	--	--	64.6	14.2
KWA	KS Western Star	94	73	--	63.3	14.3
AgriPro	SY Rugged	93	75	80	63.9	13.5
Dyna-Gro	Buckhorn AX	92	--	--	65.1	15.9
KWA	KS Dallas	91	67	--	62.7	14.5
LCS	LCS Chrome	91	63	73	63.4	15.2
CROPLAN	CP7050AX	91	--	--	65.4	15.2
PlainsGold	Crescent AX	90	67	77	63.4	14.7
AgriPro	AP Roadrunner	90	--	--	63.3	14.4
LCS	LCS Revere	90	--	--	64.5	14.2
Westbred	WB4699	90	69	79	63.1	13.6
KWA	KS Hamilton	89	--	--	62.5	15.1
OGI	Baker's Ann	89	61	74	63.9	14.9
AgriMaXX	AM Cartwright	89	63	72	63.4	14.2
LCS	LCS Photon AX	89	57	--	64.9	15.7
AgriPro	SY Achieve CL2	88	63	68	64.9	15.8
AGSECO	AG Icon	87	64	73	63.4	14.7
OGI	Lonerider	87	65	74	64.7	15.8
OGI	Big Country	86	--	--	62.7	15.9
LCS	LCS Julep	86	--	--	65.3	14.9
OGI	Duster	85	62	70	64.1	14.8
OGI	Breakthrough	84	62	68	64.9	14.5
Westbred	WB4792	84	62	73	65.8	14.2
OGI	Iba	82	67	75	65.4	13.7
PlainsGold	Guardian	82	70	--	63.7	15.5
AgriPro	AP Bigfoot	82	--	--	65.2	15.0
KWA	Zenda	78	56	64	64.1	14.3
OGI	Smith's Gold	78	55	63	65.4	14.8
OGI	Gallagher	78	60	68	64.7	14.9
OGI	Doublestop CL+	76	58	65	65.3	15.6
	LCS Fusion AX	73	--	--	60.6	14.2
	Experimentals					
OSU	OK12716W	99	--	--	64.0	14.2
KSU	KS12DH0156-88	88	--	--	62.4	15.1
	Mean	91	65	73	64.0	14.6
	LSD (0.05)	12	9	9	0.7	0.6

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available

Hooker Wheat Variety Trial

Cooperator: Ernest and Dan Herald
 Planting & harvest dates: 9/22/20 & 6/24/21
 Management: Grain-only
 Tillage: Minimal tillage

Extension Educator: Dr. Britt Hicks
 Previous crop: Grain sorghum
 Soil Type: Dalhart fine sandy loam
 Soil test: pH= 6.6, N= 17, P= 29, K= 629

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
AGSECO	AG Icon	80	66	58	61.7	14.9
OGI	Doublestop CL+	79	67	60	61.7	16.2
KWA	KS Western Star	75	--	--	60.8	13.7
OGI	Bentley	74	64	63	59.7	15.2
PlainsGold	Crescent AX	73	62	--	60.2	14.5
CROPLAN	CP7909	73	--	--	61.7	14.9
AgriPro	SY Achieve CL2	71	--	--	60.2	15.5
LCS	LCS Chrome	71	60	59	60.0	15.1
PlainsGold	Canvas	70	64	--	59.9	14.1
OGI	Baker's Ann	69	61	59	60.0	16.3
KWA	KS Dallas	69	--	--	60.7	14.6
OGI	OK Corral	68	--	--	61.5	14.9
Watley	TAM204	68	--	--	60.5	15.8
OGI	Smith's Gold	67	58	55	61.6	15.9
OGI	Iba	67	65	60	59.1	13.3
OGI	Lonerider	66	59	58	60.8	15.5
OGI	Big Country	65	--	--	59.0	17.3
OGI	Gallagher	64	61	52	58.9	16.2
OGI	Showdown	63	59	59	59.5	15.7
PlainsGold	Guardian	61	--	--	59.2	14.3
AgriPro	SY Rugged	61	56	55	58.5	14.4
Westbred	WB4792	60	60	--	59.9	15.0
Watley	TAM115	60	--	--	59.9	15.4
Westbred	WB4699	58	58	--	59.7	14.5
OGI	Breakthrough	57	55	58	61.2	14.8
Watley	TAM112	56	--	--	59.4	14.6
AgriPro	Bob Dole	55	54	--	59.9	17.0
	Experimental					
	OK12716W	55	--	--	58.3	14.6
	Mean	66	61	58	60.1	15.1
	LSD (0.05)	NS	NS	NS	NS	1.2

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Due to the high variability of the data in 2021, no significant (NS) statistical differences were detected among varieties for yield and test weight. Double-dashes "--" = data not available

Keyes Wheat Variety Trial

Cooperator: J.B. Stewart
 Planting & harvest dates: 9/22/20 & 7/8/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Justin Wagner
 Previous crop: Wheat
 Soil Type: Sperm clay loam
 Soil test: pH= 8, N= 108, P= 9, K= 826

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
PlainsGold	Guardian	33	--	--	58.8	14.2
PlainsGold	Canvas	33	51	--	56.2	13.1
KWA	KS Western Star	31	--	--	57.8	13.5
Watley	TAM115	30	--	--	58.0	14.6
OGI	Bentley	30	35	54	56.0	14.3
Westbred	WB4792	29	49	--	56.3	13.4
CROPLAN	CP7909	29	--	--	56.1	14.4
KWA	KS Dallas	29	--	--	53.7	14.3
OGI	Gallagher	28	37	52	55.1	14.8
OGI	Showdown	28	32	50	56.7	14.4
LCS	LCS Chrome	27	40	55	54.9	14.6
PlainsGold	Crescent AX	27	42	--	56.7	14.3
OGI	Doublestop CL+	27	35	48	56.4	15.4
AgriPro	SY Rugged	26	44	58	54.1	13.6
OGI	Breakthrough	26	41	58	56.3	14.1
OGI	Lonerider	26	41	55	58.3	15.6
OGI	OK Corral	26	40	--	52.5	13.7
OGI	Baker's Ann	25	37	--	58.5	15.2
OGI	Iba	25	35	51	54.3	13.5
OGI	Smith's Gold	24	33	48	55.9	14.8
AGSECO	AG Icon	24	41	57	53.5	14.8
OGI	Big Country	24	--	--	55.1	14.8
Watley	TAM112	24	--	--	57.2	15.0
AgriPro	SY Achieve CL2	23	--	--	56.7	15.9
Westbred	WB4699	23	39	--	52.3	13.2
AgriPro	Bob Dole	23	29	--	53.0	14.9
Watley	TAM204	20	--	--	51.7	15.2
	Experimental					
	OK12716W	28	--	--	56.4	13.7
	Mean	27	39	53	55.6	14.4
	LSD (0.05)	7	6	5	2.0	0.6

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available

Kildare Wheat Variety Trial

Cooperator: Don Schieber
 Planting & harvest dates: 11/18/20 & 7/7/21
 Management: Grain-only
 Tillage: No-till

Extension Educator: Shannon Mallory
 Previous crop: Wheat
 Soil Type: Tabler silt loam
 Soil test: pH= 6.9, N= 23, P= 145, K= 463

Licensee	Variety	Grain Yield			Test Weight	Protein
		2020-21	2-Year	3-Year	2020-21	2020-21
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Skydance	4	41	--	--	48.5
OGI	Doublestop CL+	3	41	61	63	49.5
OGI	Baker's Ann	4	40	60	62	46.5
OGI	Green Hammer	4	39	61	62	44.4
AgriPro	Bob Dole	3	38	63	68	44.7
LCS	LCS Photon AX	3	38	--	--	47.7
OGI	Strad CL+	3	35	56	--	48.0
AgriPro	SY Achieve CL2	4	34	60	64	44.1
AgriPro	SY Rugged	5	31	56	59	46.0
LCS	LCS Chrome	3	30	55	57	46.6
OGI	Showdown	3	30	57	61	41.7
Westbred	WB4792	4	28	53	--	42.2
CROPLAN	CP7909	5	27	--	--	42.9
OGI	Uncharted	4	27	54	60	44.7
Westbred	WB4269	4	27	55	58	45.0
OGI	Big Country	3	25	54	--	44.0
OGI	OK Corral	3	23	49	--	39.6
OGI	Smith's Gold	4	21	49	51	40.0
KWA	KS Western Star	5	20	--	--	42.7
OGI	Bentley	3	19	55	63	39.4
Westbred	WB4699	4	17	49	--	35.1
OGI	Gallagher	4	16	46	51	37.7
KWA	KS Silverado	4	15	--	--	33.2
Experimentals						
	OCW03S580S-8WF	3	22	--	--	39.4
	OK12716W	3	20	--	--	34.6
Mean		4	28	55	60	42.7
LSD (0.05)		--	9	7	5	4.7

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Fusarium head blight (scab) disease was present at a severe level, which prevented measurement of protein concentration in the grain based upon near-infrared transmittance spectroscopy. Lodging is reported on a 1 to 5 scale, with 1 indicating no lodging. Double-dashes "--" = data not available

Kingfisher Wheat Variety Trial

Cooperator: Tary Helt
 Planting & harvest dates: 10/24/20 & 6/19/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Bryan Kennedy
 Previous crop: Wheat
 Soil Type: Tilman silt loam
 Soil test: pH= 6.2, N= 38, P= 26, K= 374

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Strad CL+	80	57	--	62.0	12.9
OGI	Big Country	75	55	59	59.5	12.9
OGI	Uncharted	75	58	61	61.0	12.1
OGI	Green Hammer	73	55	59	62.4	13.5
OGI	Showdown	72	52	57	59.0	11.4
OGI	Skydance	72	56	--	64.0	12.7
AgriPro	Bob Dole	71	53	59	59.7	11.8
LCS	LCS Photon AX	71	--	--	63.6	12.6
Westbred	WB4401	71	--	--	61.6	11.1
OGI	Doublestop CL+	70	52	54	63.6	13.3
AgriPro	SY Rugged	70	53	60	60.2	11.7
AgriMaXX	AM Cartwright	69	--	--	60.7	11.6
OGI	Gallagher	69	50	55	60.5	11.4
OGI	Smith's Gold	68	52	56	59.6	12.2
OGI	OK Corral	67	50	--	59.6	12.2
OGI	Baker's Ann	64	50	--	61.8	13.0
Westbred	WB4792	61	48	--	56.7	11.2
AGSECO	AG Icon	60	48	54	57.7	12.3
Westbred	WB4269	57	46	58	59.3	11.3
AgriPro	SY Achieve CL2	54	44	55	60.4	12.6
KWA	KS Dallas	53	--	--	57.4	12.3
LCS	LCS Chrome	52	39	51	55.4	13.0
KWA	KS Western Star	51	--	--	55.9	12.7
KWA	KS Silverado	39	--	--	57.5	12.1
Experimentals						
	OCW03S580S-8WF	66	--	--	58.7	12.1
	OK12716W	66	--	--	58.8	11.5
Mean		65	51	57	59.9	12.2
LSD (0.05)		6	5	6	1.1	0.3

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Double-dashes "--" = data not available

Lahoma Regional Wheat Variety Trial

Cooperator: OSU North Central Research Station
Planting & harvest dates: 10/22/20 & 6/16/21
Management: Grain-only, conventional tillage
Fungicide: none

Extension Educator: Rick Nelson
Previous crop: Wheat
Soil Type: Pond Creek silt loam
Soil test: pH= 5.2, N= 168, P= 78 , K= 356

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
AgriPro	AP Roadrunner	80	--	--	61.2	12.6
CROPLAN	CP7017AX	79	--	--	59.2	11.5
Westbred	WB4699	70	83	71	60.3	10.9
LCS	LCS Atomic AX	68	--	--	60.3	11.6
OGI	Uncharted	68	76	69	60.2	12.2
CROPLAN	CP7909	68	83	68	58.5	11.8
KWA	KS Hamilton	68	--	--	60.1	13.1
OGI	Bentley	68	78	64	63.0	11.9
Westbred	WB4269	67	88	72	60.5	11.8
OGI	Green Hammer	66	77	69	60.5	13.8
KWA	Zenda	66	78	68	60.6	11.5
OGI	Smith's Gold	66	75	63	60.5	12.1
LCS	LCS Chrome	64	76	65	58.5	12.7
Westbred	WB4792	64	81	71	58.4	12.0
OGI	Baker's Ann	63	77	68	60.4	12.7
KWA	KS Dallas	63	75	--	59.5	13.0
OGI	Breakthrough	62	--	--	59.1	12.8
Dyna-Gro	Buckhorn AX	62	--	--	60.2	13.0
CHS	Allegiant 3063	62	--	--	62.0	11.6
OGI	Gallagher	61	74	64	59.9	12.1
OGI	Lonerider	61	--	--	58.6	12.7
AgriPro	AP Bigfoot	61	--	--	58.1	11.5
OGI	Big Country	61	67	61	58.7	12.7
OGI	Strad CL+	61	80	--	61.7	13.8
LCS	LCS Helix AX	60	--	--	59.6	12.3
AgriPro	SY Rugged	60	76	64	57.4	12.5
KWA	KS Hatchett	60	--	--	59.7	12.5
OGI	OK Corral	60	76	--	60.4	12.4
OGI	Showdown	60	74	60	60.0	11.2
OGI	Skydance	60	--	--	55.8	13.1
LCS	LCS Valiant	59	--	--	59.6	12.6
AgriPro	SY Achieve CL2	59	74	61	58.0	12.6
Westbred	WB4401	59	79	--	60.6	11.5
LCS	LCS Fusion AX	58	--	--	60.2	11.3
AgriMaXX	AM Cartwright	58	80	68	57.2	12.5
AgriPro	Bob Dole	58	75	69	59.6	12.4
PlainsGold	Guardian	58	71	--	59.9	13.7
LCS	LCS Photon AX	58	75	--	58.4	12.9
AGSECO	AG Radical	57	--	--	59.1	12.9
AgriPro	AP EverRock	57	73	--	56.6	12.9
LCS	LCS Julep	57	--	--	56.1	13.1
OGI	Duster	56	64	54	57.6	12.9
KWA	KS Silverado	56	77	--	57.4	12.9
AGSECO	AG Icon	56	74	64	60.9	12.9
KWA	KS Western Star	56	67	--	59.0	12.8
PlainsGold	Crescent AX	55	73	61	58.7	11.6
AgriPro	AP18 AX	55	--	--	58.4	11.6
CROPLAN	CP7050AX	54	--	--	57.4	13.0
LCS	LCS Revere	54	--	--	58.7	11.5
OGI	Doublestop CL+	53	74	64	60.0	13.4
PlainsGold	Canvas	52	72	55		59.5
12.2						
Experimentals						
OSU	OK12716W	63	--	--	59.5	11.5
KSU	KS12DH0156-88	61	--	--	61.7	13.2
OSU	OCW03S580S-8WF	58	--	--	58.9	12.1
OSU	OK15MASBx7 ARS 8-29	57	--	--	58.5	11.7
Mean		61	76	65	59.3	12.4
LSD (0.05)		NS	8	7	NS	0.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Due to the high variability of the data in 2021, no significant (NS) statistical differences were detected among varieties for yield and test weight. Severe stripe rust and leaf rust pressure observed during grain-fill. Double-dashes "--" = data not available

Lahoma Regional Fungicide Wheat Variety Trial

Cooperator: OSU North Central Research Station
Planting & harvest dates: 10/22/20 & 6/16/21
Management: Grain-only, conventional tillage
Fungicide: 9 fl oz/ac Trivapro at Feekes 9 on 4/19/21

Extension Educator: Rick Nelson
Previous crop: Wheat
Soil Type: Pond Creek silt loam
Soil test: pH= 5.2, N= 168, P= 78, K= 356

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
KWA	KS Dallas	89	93	--	61.8	13.0
Westbred	WB4699	88	96	88	62.6	10.9
AgriPro	SY Rugged	87	90	79	61.8	12.4
OGI	Showdown	85	88	78	63.2	11.4
AgriPro	AP Roadrunner	84	--	--	60.6	12.4
LCS	LCS Atomic AX	84	--	--	63.0	12.2
KWA	KS Hamilton	83	--	--	60.5	13.5
KWA	Zenda	83	89	83	63.3	12.2
Westbred	WB4792	82	97	88	60.6	11.9
OGI	Big Country	82	78	73	60.2	12.7
AgriPro	AP EverRock	82	86	--	62.4	13.4
OGI	Green Hammer	82	86	79	62.9	14.0
AgriPro	AP Bigfoot	81	--	--	62.0	12.0
PlainsGold	Guardian	81	87	--	63.0	13.7
AgriPro	AP18 AX	81	--	--	62.8	11.9
CROPLAN	CP7909	81	96	86	62.4	12.2
Westbred	WB4269	80	96	85	62.5	12.1
LCS	LCS Chrome	80	85	76	61.5	12.8
CROPLAN	CP7017AX	80	--	--	61.5	11.7
OGI	Lonerider	80	--	--	62.7	12.8
OGI	Skydance	80	--	--	61.0	13.3
LCS	LCS Valiant	79	--	--	62.7	12.9
OGI	Strad CL+	79	95	--	63.0	13.6
AgriPro	SY Achieve CL2	79	84	77	61.8	13.2
OGI	Breakthrough	79	--	--	60.4	13.0
OGI	Bentley	78	89	81	62.1	12.3
Dyna-Gro	Buckhorn AX	78	--	--	63.5	13.8
KWA	KS Silverado	78	93	--	61.5	13.2
OGI	OK Corral	78	86	--	62.1	12.5
OGI	Baker's Ann	78	85	81	62.7	13.2
Westbred	WB4401	77	88	--	63.7	12.1
OGI	Uncharted	76	79	76	61.1	12.2
LCS	LCS Revere	76	--	--	61.8	11.7
LCS	LCS Helix AX	76	--	--	62.7	12.4
CHS	Allegiant 3063	75	--	--	63.3	12.4
PlainsGold	Crescent AX	75	88	80	63.7	12.3
LCS	LCS Fusion AX	75	--	--	61.1	11.9
CROPLAN	CP7050AX	75	--	--	62.0	13.7
OGI	Smith's Gold	75	81	76	62.7	12.1
AgriMaXX	AM Cartwright	75	88	80	60.4	12.8
AGSECO	AG Icon	74	87	79	61.1	13.2
LCS	LCS Julep	74	--	--	59.5	12.9
AgriPro	Bob Dole	74	83	79	60.7	13.1
KWA	KS Hatchett	74	--	--	61.7	12.8
LCS	LCS Photon AX	74	84	--	61.6	13.4
PlainsGold	Canvas	73	90	77	60.8	12.1
KWA	KS Western Star	73	83	--	61.2	12.3
AGSECO	AG Radical	71	--	--	60.4	12.5
OGI	Duster	71	78	70	60.7	12.5
OGI	Gallagher	71	84	78	61.7	12.0
OGI	Doublestop CL+	67	82	75	62.0	13.8
	Experimentals					
OSU	OCW03S580S-8WF	83	--	--	61.6	12.4
OSU	OK12716W	81	--	--	61.5	11.3
OSU	OK15MASBx7 ARS 8-29	81	--	--	61.4	11.7
KSU	KS12DH0156-88	75	--	--	62.2	12.7
	Mean	78	87	79	61.9	12.6
	LSD (0.05)	NS	8	6	NS	0.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Due to the high variability of the data in 2021, no significant (NS) statistical differences were detected among varieties for yield and test weight. Severe stripe rust and leaf rust pressure observed during grain-fill. Double-dashes "--" = data not available

Lahoma Wheat Variety Trial — No Fungicide vs. Fungicide Comparison

Cooperator: OSU North Central Research Station
 Planting & harvest dates: 10/22/20 & 6/16/21
 Management: Grain-only, conventional tillage
 Fungicide: 9 fl oz/ac Trivapro at Feekes 9 on 4/19/21

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil Type: Pond Creek silt loam
 Soil test: pH= 5.2, N= 168, P= 78 , K= 356

Licensee	Variety	Grain Yield			Test Weight			Protein		
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.
		----- bu/ac -----			----- lb/bu -----			----- % -----		
AgriPro	AP Roadrunner	80	84	4	61.2	60.6	-0.5	12.6	12.4	-0.2
CROPLAN	CP7017AX	79	80	1	59.2	61.5	2.3	11.5	11.7	0.2
Westbred	WB4699	70	88	18	60.3	62.6	2.3	10.9	10.9	-0.1
LCS	LCS Atomic AX	68	84	16	60.3	63.0	2.7	11.6	12.2	0.6
OGI	Uncharted	68	76	8	60.2	61.1	0.8	12.2	12.2	0.0
CROPLAN	CP7909	68	81	13	58.5	62.4	3.9	11.8	12.2	0.4
KWA	KS Hamilton	68	83	15	60.1	60.5	0.5	13.1	13.5	0.4
OGI	Bentley	68	78	11	63.0	62.1	-0.9	11.9	12.3	0.4
Westbred	WB4269	67	80	14	60.5	62.5	2.0	11.8	12.1	0.3
OGI	Green Hammer	66	82	15	60.5	62.9	2.4	13.8	14.0	0.2
KWA	Zenda	66	83	17	60.6	63.3	2.7	11.5	12.2	0.7
OGI	Smith's Gold	66	75	10	60.5	62.7	2.2	12.1	12.1	0.0
LCS	LCS Chrome	64	80	16	58.5	61.5	3.0	12.7	12.8	0.1
Westbred	WB4792	64	82	18	58.4	60.6	2.2	12.0	11.9	-0.1
OGI	Baker's Ann	63	78	15	60.4	62.7	2.4	12.7	13.2	0.5
KWA	KS Dallas	63	89	26	59.5	61.8	2.3	13.0	13.0	0.0
OGI	Breakthrough	62	79	17	59.1	60.4	1.3	12.8	13.0	0.2
Dyna-Gro	Buckhorn AX	62	78	16	60.2	63.5	3.4	13.0	13.8	0.8
CHS	Allegiant 3063	62	75	14	62.0	63.3	1.3	11.6	12.4	0.9
OGI	Gallagher	61	71	9	59.9	61.7	1.9	12.1	12.0	-0.1
OGI	Lonerider	61	80	19	58.6	62.7	4.1	12.7	12.8	0.1
AgriPro	AP Bigfoot	61	81	21	58.1	62.0	3.9	11.5	12.0	0.5
OGI	Big Country	61	82	22	58.7	60.2	1.5	12.7	12.7	0.0
OGI	Strad CL+	61	79	19	61.7	63.0	1.3	13.8	13.6	-0.2
LCS	LCS Helix AX	60	76	16	59.6	62.7	3.1	12.3	12.4	0.1
AgriPro	SY Rugged	60	87	27	57.4	61.8	4.5	12.5	12.4	-0.1
KWA	KS Hatchett	60	74	14	59.7	61.7	2.0	12.5	12.8	0.3
OGI	OK Corral	60	78	19	60.4	62.1	1.7	12.4	12.5	0.1
OGI	Showdown	60	85	26	60.0	63.2	3.2	11.2	11.4	0.2
OGI	Skydance	60	80	20	55.8	61.0	5.2	13.1	13.3	0.2
LCS	LCS Valiant	59	79	21	59.6	62.7	3.1	12.6	12.9	0.3
AgriPro	SY Achieve CL2	59	79	20	58.0	61.8	3.9	12.6	13.2	0.6
Westbred	WB4401	59	77	19	60.6	63.7	3.1	11.5	12.1	0.6
LCS	LCS Fusion AX	58	75	17	60.2	61.1	0.9	11.3	11.9	0.6
AgriMaXX	AM Cartwright	58	75	17	57.2	60.4	3.2	12.5	12.8	0.3
AgriPro	Bob Dole	58	74	16	59.6	60.7	1.1	12.4	13.1	0.7
PlainsGold	Guardian	58	81	23	59.9	63.0	3.1	13.7	13.7	0.0
LCS	LCS Photon AX	58	74	16	58.4	61.6	3.2	12.9	13.4	0.5
AGSECO	AG Radical	57	71	15	59.1	60.4	1.3	12.9	12.5	-0.4
AgriPro	AP EverRock	57	82	25	56.6	62.4	5.8	12.9	13.4	0.5
LCS	LCS Julep	57	74	18	56.1	59.5	3.5	13.1	12.9	-0.2
OGI	Duster	56	71	15	57.6	60.7	3.1	12.9	12.5	-0.4
KWA	KS Silverado	56	78	22	57.4	61.5	4.1	12.9	13.2	0.3
AGSECO	AG Icon	56	74	18	60.9	61.1	0.2	12.9	13.2	0.3
KWA	KS Western Star	56	73	17	59.0	61.2	2.2	12.8	12.3	-0.5
PlainsGold	Crescent AX	55	75	20	58.7	63.7	5.0	11.6	12.3	0.7
AgriPro	AP18 AX	55	81	27	58.4	62.8	4.4	11.6	11.9	0.3
CROPLAN	CP7050AX	54	75	21	57.4	62.0	4.7	13.0	13.7	0.7
LCS	LCS Reverse	54	76	22	58.7	61.8	3.1	11.5	11.7	0.2
OGI	Doublestop CL+	53	67	13	60.0	62.0	2.1	13.4	13.8	0.4
PlainsGold	Canvas	52	73	21	59.5	60.8	1.3	12.2	12.1	-0.1
Experimentals										
OSU	OK12716W	63	81	18	59.5	61.5	2.0	11.5	11.3	-0.2
KSU	KS12DH0156-88	61	75	13	61.7	62.2	0.4	13.2	12.7	-0.5
OSU	OCW03S580S-8WF	58	83	26	58.9	61.6	2.7	12.1	12.4	0.3
OSU	OK15MASBx7 ARS 8-29	57	81	24	58.5	61.4	3.0	11.7	11.7	0.0
Mean		61	78	17	59.3	61.9	2.5	12.4	12.6	0.2
LSD (0.05)		NS	NS	NS	NS	NS	NS	0.4	0.4	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Due to the high variability of the data in 2021, no significant statistical differences were detected among varieties for yield and test weight. Severe stripe rust and leaf rust pressure observed during grain-fill.

Thomas Wheat Variety Trial

Cooperator: Butch Wherrit
 Planting & harvest dates: 9/25/20 & 6/14/21
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Zack Henderson
 Previous crop: Wheat
 Soil Type: Grant loam
 Soil test: pH= 6.6, N= 16, P= 45, K= 442

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
AgriPro	SY Rugged	68	59	45	62.1	14.2
OGI	OK Corral	65	--	--	60.8	14.8
AgriPro	Bob Dole	64	--	--	63.1	15.3
AGSECO	AG Icon	63	61	--	62.2	14.8
OGI	Big Country	63	--	--	62.5	15.4
OGI	Uncharted	62	63	--	62.7	14.3
OGI	Showdown	62	53	41	64.4	14.7
OGI	Gallagher	61	55	42	63.3	14.3
LCS	LCS Photon AX	61	--	--	63.9	15.5
AgriPro	SY Achieve CL2	61	--	--	64.2	15.6
KWA	KS Dallas	59	--	--	62.2	14.8
OGI	Baker's Ann	59	--	--	64.0	15.9
Westbred	WB4792	59	--	--	64.4	14.7
KWA	KS Western Star	59	--	--	61.1	13.6
Westbred	WB4401	59	--	--	63.6	15.1
KWA	KS Silverado	58	--	--	62.9	14.2
OGI	Smith's Gold	57	55	43	63.7	14.7
LCS	LCS Chrome	55	55	42	63.5	15.8
OGI	Strad CL+	55	--	--	62.8	15.7
Westbred	WB4269	55	61	--	64.0	13.8
OGI	Skydance	54	--	--	63.2	16.1
OGI	Green Hammer	50	53	41	63.2	16.4
OGI	Doublestop CL+	49	51	42	64.9	15.6
Experimentals						
	OK15MASBx7 ARS 8-29	66	--	--	63.4	14.1
	OK15DMASBx7 ARS 6-8	60	--	--	65.1	15.1
	OK12716W	60	--	--	64.1	14.3
	OCW03S580S-8WF	57	--	--	64.0	15.1
Mean		59	55	42	63.3	14.9
LSD (0.05)		11	9	NS	1.2	1.2

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. In 2020, plots at this location were lost due to waterlogging. Thus, the 2-year average represent results from 2019 and 2021 harvest years, and 3-year average represent results from 2021, 2019 and 2018 harvest years. NS = not significant. Double-dashes "--" = data not available

Walters Dual-Purpose Wheat Variety Trial

Cooperator: Jimmy Kinder
 Planting & harvest dates: 9/24/2020 & 6/9/21
 Management: Dual-purpose
 Tillage: No-till

Extension Educator: Kimbreley Davis
 Previous crop: Wheat
 Soil Type: Foard silt loam
 Soil test: pH=6.7, N= 15, P= 58, K= 343

Licensee	Variety	Grain Yield			Test Weight 2020-21	Protein 2020-21
		2020-21	2-Year	3-Year		
		----- bu/ac -----			-- lb/bu --	-- % --
OGI	Showdown	59	54	49	60.1	10.4
OGI	Big Country	49	43	--	57.6	11.8
Westbred	WB4269	49	45	36	60.8	11.1
OGI	Doublestop CL+	48	45	42	62.7	12.5
KWA	KS Western Star	46	--	--	60.5	10.9
OGI	Uncharted	46	43	34	60.9	11.6
OGI	OK Corral	46	40	--	59.0	11.2
OGI	Smith's Gold	45	41	35	61.2	11.4
AgriPro	Bob Dole	44	44	--	59.0	11.3
Westbred	WB4792	44	45	--	61.9	10.5
PlainsGold	Canvas	44	--	--	58.4	10.7
AgriPro	SY Rugged	44	43	33	57.3	10.9
Westbred	WB4699	44	--	--	57.3	10.1
OGI	Gallagher	42	39	32	59.3	10.9
OGI	Green Hammer	41	38	34	60.7	13.2
OGI	Skydance	41	37	30	62.3	12.6
OGI	Bentley	40	39	32	57.0	10.5
LCS	LCS Chrome	40	41	37	57.9	11.5
KWA	KS Dallas	39	--	--	57.6	11.1
CROPLAN	CP7909	38	--	--	57.5	9.7
KWA	KS Silverado	35	--	--	58.4	11.3
LCS	LCS Photon AX	35	--	--	60.2	11.9
AgriPro	AP EverRock	32	--	--	58.2	11.4
Experimentals						
	OK12716W	53	--	--	59.7	10.5
	OCW03S580S-8WF	39	--	--	58.7	11.7
Mean		43	43	36	59.4	11.2
LSD (0.05)		5	4	4	1.6	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Plots were grazed from 11/22/20 to 03/10/21 at a stocking rate of 200 pounds per acre. There was no lodging across the trial. Low stripe rust pressure observed during grain-fill. Double-dashes "--" = data not available

Central Region Summary

Locations: Chickasha, El Reno, Kingfisher and Thomas

<i>Licensee</i>	<i>Variety</i>	<i>Grain Yield 2020-21</i>	<i>Test Weight 2020-21</i>	<i>Protein 2020-21</i>
		-----bu/ac-----	-----lb/bu----	-----%----
OGI	Big Country	65	60.5	13.0
OGI	Doublestop CL+	61	64.1	13.1
OGI	Showdown	60	60.9	12.4
OGI	Strad CL+	60	62.0	13.0
LCS	LCS Chrome	59	59.6	12.6
OGI	Uncharted	59	61.4	12.7
OGI	OK Corral	58	59.1	12.6
AgriPro	Bob Dole	58	60.8	12.9
KWA	KS Western Star	57	59.5	11.8
Westbred	WB4792	57	61.3	12.1
AGSECO	AG Icon	57	60.0	12.9
Westbred	WB4269	56	61.3	11.9
OGI	Smith's Gold	54	61.1	12.6
Westbred	WB4401	54	61.3	12.5
OGI	Gallagher	53	60.5	12.6
AgriPro	SY Rugged	53	60.2	12.8
OGI	Green Hammer	53	61.5	13.9
LCS	LCS Photon AX	52	62.3	13.5
KWA	KS Dallas	51	59.0	12.8
OGI	Baker's Ann	50	62.2	14.0
KWA	KS Silverado	46	59.6	12.7
	Experimentals			
	OK12716W	65	61.3	11.7
	OCW03S580S-8WF	52	59.8	12.6
	Mean	56	60.8	12.7
	LSD (0.05)	5	0.8	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Chickasha, Chickasha Intensive Management, El Reno dual-purpose, El Reno grain-only, Kingfisher and Thomas trials are included in this analysis.

North-Central Region Summary

Locations: Kildare and Lahoma

<i>Licensee</i>	<i>Variety</i>	<i>Grain Yield</i> 2020-21	<i>Test Weight</i> 2020-21
		-----bu/ac---	--lb/bu--
OGI	Green Hammer	62	55.9
OGI	Skydance	60	55.1
OGI	Baker's Ann	60	56.5
AgriPro	SY Rugged	59	55.1
CROPLAN	CP7909	59	54.6
OGI	Strad CL+	58	57.6
OGI	Showdown	58	55.0
LCS	LCS Chrome	58	55.5
Westbred	WB4792	58	53.7
Westbred	WB4699	58	52.6
Westbred	WB4269	58	56.0
AgriPro	SY Achieve CL2	57	54.6
OGI	Uncharted	57	55.3
AgriPro	Bob Dole	57	55.0
LCS	LCS Photon AX	56	55.9
OGI	Big Country	56	54.3
OGI	Bentley	55	54.8
OGI	Smith's Gold	54	54.4
OGI	OK Corral	54	54.0
OGI	Doublestop CL+	54	57.2
KWA	KS Silverado	50	50.7
KWA	KS Western Star	50	54.3
OGI	Gallagher	49	53.1
	Experimentals		
	OK12716W	55	51.9
	OCW03S580S-8WF	54	53.3
	Mean	56	54.6
	LSD (0.05)	7	3.0

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Kildare and Lahoma trials are included in this analysis. Fusarium head blight (scab) disease was present at a severe level at Kildare, which prevented measurement of protein concentration in the grain based upon near-infrared transmittance spectroscopy.

Northwest Region Summary

Locations: Alva, Buffalo and Cherokee

<i>Licensee</i>	<i>Variety</i>	<i>Grain Yield 2020-21</i>	<i>Test Weight 2020-21</i>	<i>Protein 2020-21</i>
		-----bu/ac-----	-----lb/bu-----	-----%-----
OGI	Showdown	73	63.6	9.8
Westbred	WB4792	67	64.1	10.1
LCS	LCS Chrome	65	63.6	10.6
OGI	Iba	64	64.0	10.1
AgriPro	SY Rugged	64	63.6	9.8
CROPLAN	CP7909	63	62.4	9.9
OGI	Big Country	63	61.3	10.3
AgriPro	Bob Dole	63	63.0	11.0
PlainsGold	Crescent AX	63	64.1	9.7
OGI	Lonerider	63	63.9	10.5
KWA	KS Western Star	62	62.8	9.7
OGI	Baker's Ann	62	64.1	10.5
Westbred	WB4699	62	61.7	9.7
OGI	OK Corral	61	61.0	9.5
KWA	KS Dallas	61	62.4	10.0
OGI	Gallagher	60	63.4	10.0
AgriPro	SY Achieve CL2	60	63.6	10.9
OGI	Breakthrough	60	64.1	9.9
OGI	Smith's Gold	59	62.8	10.1
Westbred	WB4269	58	63.1	10.8
KWA	KS Silverado	58	64.0	10.2
LCS	LCS Photon AX	54	63.5	11.5
OGI	Doublestop CL+	53	64.8	12.6
	Experimentals			
	OK12716W	73	63.0	9.3
	Mean	62	63.3	10.3
	LSD (0.05)	6	1.0	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Alva, Buffalo and Cherokee trials are included in this analysis.

Panhandle Region Summary

Locations: Balko, Goodwell, Hooker, Keyes

Licensee	Variety	Grain Yield	Test Weight	Protein
		2020-21	2020-21	2020-21
		-----bu/ac-----	-----lb/bu-----	-----%-----
PlainsGold	Canvas	65	60.0	13.2
KWA	KS Western Star	64	60.9	13.3
OGI	Bentley	64	59.4	13.9
CROPLAN	CP7909	63	59.4	13.8
AGSECO	AG Icon	63	59.6	14.1
OGI	Showdown	63	59.6	14.0
KWA	KS Dallas	62	59.3	13.7
OGI	OK Corral	61	57.9	13.8
PlainsGold	Crescent AX	61	60.1	13.7
LCS	LCS Chrome	61	59.9	14.1
OGI	Doublestop CL+	60	61.3	15.0
PlainsGold	Guardian	60	61.2	13.8
Westbred	WB4699	59	58.6	13.0
OGI	Lonerider	59	61.1	14.6
AgriPro	SY Rugged	59	58.7	13.2
OGI	Baker's Ann	58	60.3	14.6
AgriPro	SY Achieve CL2	58	60.4	15.0
Westbred	WB4792	58	60.7	13.4
AgriPro	Bob Dole	57	59.2	14.7
OGI	Big Country	57	58.7	15.0
OGI	Breakthrough	55	60.6	13.8
OGI	Iba	55	59.5	13.0
OGI	Smith's Gold	55	60.2	14.3
OGI	Gallagher	54	58.9	14.4
	Experimentals			
	OK12716W	61	59.4	13.4
Mean		60	59.8	13.9
LSD (0.05)		6	1.2	0.4

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Balko, Goodwell Irrigated, Hooker and Keyes trials are included in this analysis.

Southwest Region Summary

Locations: Altus, Apache and Walters

<i>Licensee</i>	<i>Variety</i>	<i>Grain Yield 2020-21</i>	<i>Test Weight 2020-21</i>	<i>Protein 2020-21</i>
		-----bu/ac-----	-----lb/bu----	-----%-----
PlainsGold	Canvas	68	61.1	10.6
OGI	Showdown	66	60.4	11.2
KWA	KS Western Star	63	61.3	10.8
Westbred	WB4269	63	61.1	11.4
Westbred	WB4792	63	62.8	10.8
Westbred	WB4699	61	60.0	10.6
LCS	LCS Chrome	58	60.8	11.7
CROPLAN	CP7909	58	59.9	10.8
KWA	KS Dallas	56	60.1	11.4
LCS	LCS Photon AX	55	62.1	12.5
OGI	Doublestop CL+	55	62.9	12.9
OGI	Gallagher	54	61.0	11.4
OGI	Big Country	54	60.3	12.7
OGI	OK Corral	54	59.7	11.9
KWA	KS Silverado	53	61.2	11.2
OGI	Smith's Gold	52	61.4	12.1
AgriPro	Bob Dole	52	60.1	12.5
AgriPro	SY Rugged	52	59.6	11.9
OGI	Green Hammer	51	61.3	13.5
OGI	Skydance	50	61.6	12.7
AgriPro	AP EverRock	48	60.3	12.2
OGI	Uncharted	46	60.7	12.3
	Experimentals			
OSU	OK12716W	67	60.8	11.0
	OCW03S580S-8WF	49		12.4
	Mean	56	60.8	11.8
	LSD (0.05)	5	0.7	0.5

Notes: Grain yield and protein concentration were adjusted to 12% moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Altus, Apache, Apache Fungicide and Walters dual-purpose trials are included in this analysis.

Heading Date and Plant Height

Licensee	Variety	Goodwell					Goodwell				
		Altus	Chickasha	Irrigated	Lahoma	Stillwater	Altus	Chickasha	Irrigated	Lahoma	Stillwater
		----- 50% heading -----					---- plant height at harvest (in) ----				
AgriMaXX	AM Cartwright	4/16	4/28	5/10	5/3	4/23	78	73	68	85	85
AgriPro	AP Bigfoot	4/14	4/19	5/8	5/3	4/19	66	76	62	91	89
AgriPro	AP EverRock	4/15	4/19	5/7	5/2	4/18	63	68	70	85	85
AgriPro	AP Roadrunner	4/20	4/28	5/9	5/1	4/25	67	82	71	87	92
AgriPro	AP18 AX	4/13	4/19	5/7	5/1	4/18	70	80	63	89	87
AgriPro	Bob Dole	4/20	4/22	5/8	5/4	4/19	84	84	80	105	97
AgriPro	SY Achieve CL2	4/10	4/19	5/5	5/1	4/18	64	72	71	98	83
AgriPro	SY Rugged	4/16	4/22	5/7	5/1	4/19	73	68	74	82	84
AGSECO	AG Icon	4/11	4/26	5/7	5/2	4/23	79	78	72	93	96
AGSECO	AG Radical	4/14	4/26	5/7	5/1	4/20	80	70	70	90	88
CHS	Allegiant 3063	4/13	4/26	5/6	5/1	4/20	83	72	71	92	85
CROPLAN	CP7017AX	4/9	4/26	5/9	5/3	4/22	72	72	67	78	85
CROPLAN	CP7050AX	4/12	4/15	5/6	5/1	4/16	83	72	71	91	93
CROPLAN	CP7909	4/17	4/26	5/7	5/1	4/20	80	78	73	88	92
Dyna-Gro	Buckhorn AX	4/8	4/26	5/4	5/1	4/20	78	76	71	94	93
KWA	KS Dallas	4/18	4/28	5/10	5/3	4/24	70	66	60	90	86
KWA	KS Hamilton	4/17	4/26	5/7	5/3	4/24	72	78	52	89	84
KWA	KS Hatchett	4/13	4/15	5/6	5/1	4/18	75	67	65	92	88
KWA	KS Silverado	4/11	4/26	5/6	5/1	4/20	71	72	73	92	80
KWA	KS Western Star	4/23	4/30	5/10	5/5	4/30	73	79	77	96	91
KWA	Zenda	4/9	4/26	5/7	5/2	4/24	72	74	64	95	83
LCS	LCS Atomic AX	4/8	4/15	5/5	5/1	4/18	72	72	69	95	83
LCS	LCS Chrome	4/24	4/30	5/10	5/4	4/27	83	88	71	92	96
LCS	LCS Fusion AX	4/18	4/26	5/10	5/2	4/24	77	80	76	99	90
LCS	LCS Helix AX	4/14	4/26	5/9	5/1	4/21	80	72	68	90	90
LCS	LCS Julep	4/25	4/30	5/10	5/3	4/27	83	76	68	87	85
LCS	LCS Photon AX	4/9	4/15	5/5	5/1	4/17	81	73	70	94	96
LCS	LCS Revere	4/11	4/22	5/6	5/1	4/18	71	74	64	88	90
LCS	LCS Valiant	4/14	4/26	5/9	5/1	4/21	81	77	67	90	83
OGI	Baker's Ann	--	4/15	5/8	5/1	4/17	--	81	75	101	98
OGI	Bentley	4/15	4/22	5/8	5/2	4/20	76	76	71	100	93
OGI	Big Country	4/19	4/26	5/10	5/3	4/25	78	83	70	91	99
OGI	Breakthrough	--	--	5/7	5/4	4/21	--	--	68	86	91
OGI	Butler's Gold	--	--	--	--	4/11	--	--	--	--	85
OGI	Doublestop CL+	4/21	4/28	5/9	5/2	4/25	80	90	74	101	96
OGI	Duster	4/20	4/26	5/9	5/2	4/20	75	76	65	88	86
OGI	Gallagher	4/19	4/26	5/9	5/2	4/21	73	71	63	90	88
OGI	Green Hammer	4/11	4/26	--	5/2	4/23	88	73	--	100	97
OGI	Iba	--	--	5/9	--	4/21	--	--	67	--	100
OGI	Lonerider	--	--	5/10	5/3	4/23	--	--	66	88	88
OGI	OK Corral	4/19	4/26	5/10	5/3	4/25	76	73	72	88	90
OGI	Showdown	4/14	4/26	5/8	5/2	4/23	78	77	81	104	100
OGI	Skydance	4/15	4/19	--	5/1	4/18	79	88	--	93	108
OGI	Smith's Gold	4/20	4/28	5/10	5/2	4/21	72	71	58	93	84
OGI	Strad CL+	--	4/26	--	5/2	4/21	--	88	--	105	97
OGI	Uncharted	4/13	4/22	--	5/2	4/18	78	84	--	89	94
PlainsGold	Canvas	4/16	4/26	5/10	5/4	4/24	86	71	61	84	82
PlainsGold	Crescent AX	4/10	4/15	5/6	5/1	4/16	86	68	75	90	92
PlainsGold	Guardian	4/20	4/28	5/7	5/4	4/25	86	83	63	91	95
Westbred	WB4269	4/10	4/26	5/7	5/2	4/19	65	82	65	84	77
Westbred	WB4401	4/15	4/15	5/10	5/2	4/18	72	80	62	95	87
Westbred	WB4699	4/23	4/28	5/10	5/1	4/25	60	73	57	77	82
Westbred	WB4792	4/22	4/26	5/8	5/4	4/23	80	81	67	93	101
Experimentals											
KSU	KS12DH0156-88	4/22	4/30	5/10	--	4/25	68	67	65	--	80
OSU	OCW03S580S-8WF	4/8	4/26	--	5/4	4/20	76	78	--	96	82
OSU	OK12716W	4/19	4/28	5/8	5/4	4/24	91	83	70	95	97
OSU	OK15DMASBx7 ARS 6-8	--	--	--	--	4/23	--	--	--	--	93
OSU	OK15MASBx7 ARS 8-29	--	--	--	5/4	4/23	--	--	--	93	83
Mean		4/15	4/24	5/8	5/2	4/21	76	76	68	92	90

Note: Double-dashes "--" = data not available.

Participating Seed Companies

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Varieties: AP Bigfoot, AP EverRock, AP Roadrunner, AP18 AX, Bob Dole, SY Achieve CL2, SY Rugged, SY Wolverine

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Varieties: AG Icon, AG Radical

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Variety: Allegiant 3063

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Varieties: CP7017 AX, CP7050 AX, CP7909

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Varieties: KS Dallas, KS Hamilton, KS Hatchett, KS Silverado, KS Western Star, Zenda, KS12DH0156-88

Limagrain Cereal Seeds (LCS)

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Varieties: LCS Atomic AX, LCS Chrome, LCS Fusion AX, LCS Helix AX, LCS Julep, LCS Photon AX, LCS Revere, LCS Valiant

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Varieties: Baker's Ann, Bentley, Big Country, Breakthrough, Doublestop CL Plus, Duster, Gallagher, Green Hammer, Iba, Lonerider, OK Corral, Showdown, Skydance, Smith's Gold, Strad CL+, Uncharted

PlainsGold

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Varieties: Canvas, Crescent AX, Guardian

Watley Seed

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Varieties: TAM 112, TAM 115, TAM 204

WestBred

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www.westbred.com
Varieties: WB4269, WB4401, WB4699, WB4792

The Oklahoma Cooperative Extension Service

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