

Current Report

EXTENSION

Oklahoma Cooperative Extension Fact Sheets are also available on our website at: extension.okstate.edu

2020-2021 Small Grains Variety Performance Tests

Amanda de Oliveira Silva Small Grains Extension Specialist

Brett Carver Wheat Breeder Robert Calhoun Senior Agriculturalist

Bob Hunger Extension Plant Pathologist

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.received. 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.

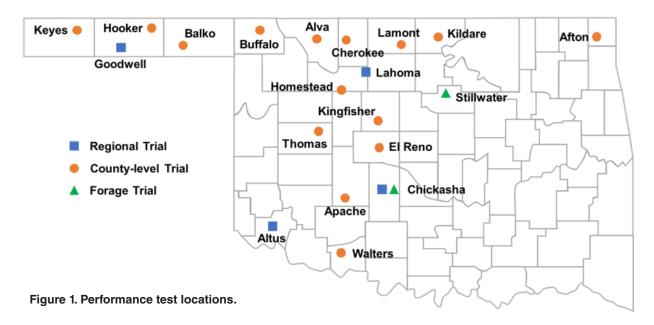
Plots were seven rows wide with 7.5-inch row spacing and were sown with a Great Plains no-till drill modified for cone-seeded, small-plot research. Except for dryland locations in the Panhandle, plots were planted 25 feet long and trimmed to 19 feet at harvest with the plot combine. Panhandle dryland 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 Winterstieger 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 indicted 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



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



Funding Provided By

Oklahoma Wheat Commission
Oklahoma Wheat Research Foundation
OSU Cooperative Extension Service
OSU Agricultural Experiment Station
Entry fees from participating seed companies

Area Extension Staff

Brian Pugh, OSU Area Agronomist – Northeast District Josh Bushong, OSU Area Agronomist – Northwest District Gary Strickland, Southwest Research and Extension Center Regional Agronomist and Jackson County Extension Educator

County Extension Staff

Thomas Puffinbarger, Alfalfa County Extension Educator Loren Sizelove, Beaver County Extension Educator David Nowlin, Caddo County Extension Educator Kyle Worthington, Canadian County Extension Educator Justin Wagner, Cimarron County Extension Educator Kimbreley Davis, Cotton County Extension Educator Zack Henderson, Custer County Extension Educator Rick Nelson, Garfield County Extension Educator Ally Minor, Grady County Extension Educator Sarah Donahue, Grant County Extension Educator Darrell McBee, Harper County Extension Educator Shannon Mallory, Kay County Extension Educator Bryan Kennedy, Kingfisher County Extension Educator Troy Gosney, Major County Extension Educator Brooke Downing, Ottawa County Extension Educator Dr. Britt Hicks, Texas County Extension Educator & Area Extension Livestock Specialist

Greg Highfill, Woods County Extension Educator

Station Superintendents/Staff

Erich Wehrenberg, Agronomy Research Station, Stillwater, Lahoma

David Victor, North Central Research Station, Lahoma Cameron Murley, Oklahoma Panhandle Research and Extension Center, Goodwell

Sumit Sharma, Assistant Extension Specialist, Oklahoma Panhandle Research and Extension Center, Goodwell Michael Pettijohn, South Central Research Station, Chickasha Mike Schulz, Blake Sisson, Greg Chavez, Southwest Research and Extension Center, Altus

We sincerely thank our variety trial cooperators for donation of land, time and resources. Variety trial cooperators not otherwise listed in this document include:

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

2020-2021 Summary of All Regions.

			Central	North Central	Northwest	Panhandle	Southwest
				grain yield	(bu/ac)		
AgriMaXX	AM Cartwright	63					
AgriPro	AP Bigfoot	58					
AgriPro	AP EverRock						48
AgriPro AgriPro	AP Roadrunner AP18 AX	77 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 CROPLAN	Allegiant 3063	62 69					
CROPLAN	CP7017AX CP7050AX	59 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	40				
KWA KWA	KS Silverado KS Western Star	61 66	46 57	50 50	58 62	64	53 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	LCS Julep LCS Photon AX	62 59	 52	 56	 E 1		 55
LCS	LCS Photon AX LCS Revere	59 57	5Z 		54 		
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 OGI	Breakthrough	 62	61	 54	60 53	55 60	 55
OGI	Doublestop CL+ Duster	62		5 4 	53 		55
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 OGI	Showdown Skydance	67 	60	58 60	73	63	66 50
OGI	Smith's Gold	60	54	54	59	55	52
ÖĞİ	Strad CL+		60	58			
OGI	Uncharted		59	57			46
PlainsGold	Canvas	69				65	68
PlainsGold	Crescent AX	59			63	61	
PlainsGold Westbred	Guardian WB4269	67 71	 56	 58	 58	60	 63
Westbred	WB4401	60	56 54		56 		
Westbred	WB4699	70		58	62	59	61
Westbred	WB4792	66	57	58	67	58	63
	Experimentals						
KSU	KS12DH0156-88	60					
OSU	OCW03S580S-8WF	 71	52 65	54 55	 70	 61	49
OSU OSU	OK12716W OK15DMASBx7 ARS 6	-8	65 	55 	73	61	67
OSU	OK15DIMASBX7 ARS 8-2						
	Mean LSD (0.05)	63 6	56 5	56 7	62 6	60 6	56 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.

						Apache					Chickasha	El Reno	El Ren
icensee	Variety A	Afton	Altus	Alva	Apache	Fungicide	Balko	Buffalo	Cherokee	Chickasha	IM	DP	GO
					gr	ain yield (bu	ı/ac)						
•	AM Cartwright	58	56	47					54	40	60	58	64
•	AP Bigfoot		63							17	46		
0	AP EverRock		57		50	54					28		
3	AP Roadrunner		68							58	80		
0	AP18 AX	67	64					70		29	41		
0	Bob Dole	67	65	57	50	50	58	70	64	31	50	61	69
0	SY Achieve CL2	53	60	56 50	40	43	52 55	60	64	15	33	-	-
-	SY Rugged AG Icon		66 65	59 58	49 	48	55 60	64	68 	19 36	37 61	62	65 62
	AG Radical	50	76							22	59	58 	
	Allegiant 3063		68							19	46		
	CP7017AX		66							33	62		
	CP7050AX		69							28	38		
	CP7909	56	69	63	57	69	47	58	67	20	49		
	Buckhorn AX		61							24	42		
•	Everest	53									42		
	KS Dallas		63	59	52	70	60	60	64	24	50	62	58
	KS Hamilton		75			70				38	72		
	KS Hatchett		62							15	37		
	KS Silverado		61	57	55	62		57	60	21	52	57	51
	KS Western Star		59	59	75	73	58	64	64	46	68	59	58
	Zenda	56	61							31	51		
	LCS Atomic AX		70							26	32		
	LCS Chrome	33	68	58	62	64	56	70	69	52	76	57	62
	LCS Fusion AX		41							24	56		
	LCS Helix AX		67							34	46		
	LCS Julep		57							31	70		
	LCS Photon AX	70	70	56	58	59		44	60	25	38	54	63
	LCS Revere		67							24	34		
	LCS Valiant		65							36	52		
	Baker's Ann			54			51	72	63	25	32	60	58
	Bentley	53	66	62			59		73	21	42		
	Big Country	57	54	61	54	58	54	65	64	59	63	63	67
	Breakthrough			61			55	55	63				
	Doublestop CL+	42	58	46	55	60	59	57	57	55	62	62	66
	Duster		60							42	58		
	Gallagher	39	60	56	56	60	46	60	65	28	49	50	64
	Green Hammer		65		46	51				31	45	52	66
	ba			58			48	62	72				
	Lonerider			62			57	59	67				
	OK Corral	65	61	63	51	56	57	61	61	35	53	63	66
	Showdown	53	78	65	61	66	59	74	81	34	42	75	78
	Skydance	65	55	50	53	53			52	28	34		
	Smith's Gold	49	63	55	49	53	52	56	65	33	48	59	60
	Strad CL+									45	60	54	67
	Uncharted		62		35	39				39	53	64	61
	Canvas		75		75	78	60	54	71	42	73		
	Crescent AX		66	64			55	51	71	22	43		
	Guardian		64	65			65		68	52	64		
	TAM112												
,	TAM115												
•	TAM204												
•	WB4269	56	70	51	66	67		65	61	46	69	53	55
	WB4401	63	52	56					62	27	48	50	67
	WB4699		70	63	61	70	65	58	64	31	71		
Vestbred \	WB4792 Experimentals	27	70	61	66	70	59	71	72	32	61	62	64
	KS12DH0156-88		58							28	52		
	OCW03S580S-8WF		63		46	50				35	52	43	59
	OK12716W	48	75	73	67	74	63	64	80	45	66	76	75
	OK15DMASBx7 ARS 6-8											66	65
	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 Irrigated	Hooker	Keyes	Kildare	Kingfisher	Lahoma	Lahoma Fungicide	Thomas	Walters
				grain yield (bu/ac)						
AgriMaXX	AM Cartwright	89				69	58	75		
AgriPro	AP Bigfoot	82					61	81		
AgriPro	AP EverRock AP Roadrunner	96 90					57 80	82 84		32
AgriPro AgriPro	AP hoadrunner AP18 AX	90					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 62	71 75		
CHS CROPLAN	Allegiant 3063 CP7017AX	103 94					62 79	75 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 KWA	KS Dallas KS Hamilton	91 89	69	29		53	63 68	89 83	59	39
ΛVVA KWA	KS Hamilton KS Hatchett	99					68 60	83 74		
KWA	KS Silverado	99			15	39	56	7 4 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		
_CS _CS	LCS Chrome LCS Fusion AX	91 73	71 	27	30	52 	64 58	80 75	55 	40
_CS _CS	LCS Fusion AX	73 98					60	75 76		
_CS	LCS Julep	86					57	74 74		
_CS	LCS Photon AX	89			38	71	58	74	61	35
_CS	LCS Revere	90					54	76		
LCS	LCS Valiant	101			40		59	79 70		
ogi ogi	Baker's Ann Bentley	89 94	69 74	25 30	40 19	64 	63 68	78 78	59	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 ogi	Gallagher Green Hammer	78 	64 	28	16 39	69 73	61 66	71 82	61 50	42 41
OGI	lba	82	67	25		73		0Z 		41
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 ogi	Smith's Gold Strad CL+	78 	67 	24	21 35	68 80	66 61	75 79	57 55	45
ogi 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		
Natley Natley	TAM112		56 60	24						
Natley Natley	TAM115 TAM204		60 68	30 20						
Nestbred	WB4269	95			27	57	67	80	55	49
Nestbred	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
KSU	Experimentals KS12DH0156-88	88					61	75		
NSU OSU	OCW03S580S-8WF	88			22	66	58	75 83	57	39
DSU DSU	OK12716W	99	55	28	20	66	63	81	60	53
OSU	OK15DMASBx7 ARS 6								60	
USC	OK15MASBx7 ARS 8-2	<u> 2</u> 9					57	81	66	
	Mean	91	66	27	28	65	61	78	59	43
	LSD (0.05)	12	NS	7	9	6	NS	NS	11	43 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
LČS	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 59	61.4	14.3
PlainsGold	Crescent AX	59 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	56 57	60.9	12.8
AgriPro	SY Achieve CL2	57 56	59.4	14.0
AgriPio LCS	LCS Fusion AX	55		12.4
LUJ		33	59.0	12.4
OSU	Experimentals OK12716W	71	61.1	10.4
KSU	KS12DH0156-88	60		12.4 13.5
NOU	V9150U0100-00	00	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

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

Management: Grain-only Tillage: conventional

Extension Educator: Brooke Downing

Previous crop: Corn Soil Type: Taloka silt loam

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

Licensee	Variety	Grai 2020-21	in Yield 2-year	Test Weight 2020-21	Protein 2020-21
		bu/8	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 LSD (0.05)	53 9	54 8	57.9 2.0	11.1 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

			Grain Yield		Test Weight	Protein
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21
			bu/ac		lb/bu	%
OGI	Showdown	78	71	72	60.0	10.5
GSECO	AG Radical	76			60.5	10.7
lainsGold	Canvas	75	71	71	61.6	10.3
WA	KS Hamilton	75			61.6	10.3
CS	LCS Photon AX	70	49		62.7	11.7
Vestbred	WB4699	70	68	65	60.4	10.8
Vestbred	WB4792	70	67	67	63.0	10.0
.CS	LCS Atomic AX	70			60.4	11.3
Vestbred	WB4269	70	44	51	60.1	11.5
ROPLAN	CP7050AX	69			62.6	11.6
ROPLAN	CP7909	69	61	60	61.1	11.4
HS	Allegiant 3063	68			60.6	10.5
griPro	AP Roadrunner	68			60.6	10.8
CS CS	LCS Chrome	68	63	60	60.8	11.6
CS	LCS Revere	67			61.5	10.8
CS CS	LCS Helix AX	67			61.9	10.9
lainsGold	Crescent AX	66	44	44	60.4	9.8
griPro		66	53	44 54	59.9	9.8 10.7
ROPLAN	SY Rugged CP7017AX	66		54 	60.6	
						9.8
)GI	Bentley	66	47	51	58.8	10.7
GSECO	AG Icon	65	55	59	60.4	11.8
GI	Green Hammer	65	47	55	61.6	12.2
CS	LCS Valiant	65			61.5	11.3
griPro	Bob Dole	65	50	49	60.4	11.3
lainsGold	Guardian	64	64		62.2	10.6
.griPro	AP18 AX	64			59.2	10.7
.griPro	AP Bigfoot	63			61.2	11.1
(WA	KS Dallas	63	50		61.5	10.4
)GI	Smith's Gold	63	55	57	61.0	10.7
(WA	KS Hatchett	62			59.4	12.4
)GI	Uncharted	62	45	51	60.3	10.1
)yna-Gro	Buckhorn AX	61			61.8	11.5
)GI	OK Corral	61	61		59.4	11.6
.WA	KS Silverado	61	51		61.6	9.4
WA	Zenda	61	53	54	61.2	11.2
GI	Duster	60	47	53	60.7	11.2
griPro	SY Achieve CL2	60	48	47	60.6	11.7
ĞI	Gallagher	60	51	53	61.0	10.7
WA	KS Western Star	59	54		61.4	11.0
GI	Doublestop CL+	58	61	58	62.2	12.6
CS	LCS Julep	57			61.2	12.1
griPro	AP EverRock	57	46		59.4	11.8
griMaXX	AM Cartwright	56			60.6	11.1
IGI	Skydance	55	39	43	61.8	11.5
)GI	Big Country	54	46	43 	61.1	12.2
Vestbred	WB4401	54 52	39		60.1	11.3
CS CS	LCS Fusion AX	41			54.8	11.4
03		41			04.0	11.4
NCI I	Experimentals	75			60.0	11.0
SU	OK12716W	75			60.0	11.6
)SU	OCW03S580S-8WF	63			58.8	10.9
(SU	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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	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
oğı .	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

			Grain Yield		Test Weight	Protein	
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21	
			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	8.0	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. 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

Extension Educator: David Nowlin

Previous crop: Soybean

Soil Type: Tilman silty clay loam Soil test: pH=5.9, N= 23, P= 85, K= 433

Fungicide: 13 fl oz/ac Nexicor at complete flag leaf emergence on 04/08/21

			Grain Yield	Test Weight	Protein	
Licensee	Variety	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	8.0	8.0

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. 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

			Grain Yield			Test Weight			Protein	
Licensee	Variety	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.
	-	k	ou/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	11	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-8W	/F 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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21
			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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	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
Vestbred	WB4269	65	79	79	64.0	10.8
AgriPro	SY Rugged	64	75	77	64.2	11.0
ΚŴΑ	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
Vestbred	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
_CS	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

			Grain Yield		Test Weight	Protein
Licensee	Variety	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	lba	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
_CS	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	02			01.0	0.0
	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 Planting & harvest dates: 10/23/20 & 06/18/21

Soil Type: Dale silt loam

Management: Grain-only, conventional tillage Soil

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

Extension Educator: Alexanderia Minor

Previous crop: Australian winter peas

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

Fungicide: none

			Grain Yield		Test Weight	Protein
icensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21
			bu/ac		lb/bu	%
)GI	Big Country	59	59	64	61.5	14.3
griPro	AP Roadrunner	58			59.1	12.4
ĞI	Doublestop CL+	55	57	56	63.6	13.7
CS	LCS Chrome	52	47	48	57.8	12.7
PlainsGold	Guardian	52			61.1	13.8
(WA	KS Western Star	46			59.5	11.9
Vestbred	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
griMaXX	AM Cartwright	40	36		60.3	14.1
ĞI	Uncharted	39	47		60.7	14.2
WA	KS Hamilton	38			58.9	13.9
CS	LCS Valiant	36			60.4	14.4
GSECO	AG Icon	36	42	45	59.8	14.8
GI	OK Corral	35			58.6	14.4
.CS	LCS Helix AX	34			61.4	14.2
)GI	Showdown	34	38	42	59.9	13.8
)GI	Smith's Gold	33	39	47	60.6	13.8
ROPLAN	CP7017AX	33			58.6	12.7
Vestbred	WB4792	32	37		61.1	13.4
griPro	Bob Dole	31	42	48	60.5	14.7
.CS	LCS Julep	31	42 		57.8	12.5
(WA	Zenda	31	37	44	62.0	13.7
Vestbred	WB4699	31	34		57.1	11.9
)GI	Green Hammer	31	37	43	59.6	15.7
.griPro	AP18 AX	29		43	61.5	14.7
ignero DGI	Gallagher	28	29	41	60.0	15.1
)GI	· ·			41		
	Skydance	28	41		61.1	16.6
ROPLAN	CP7050AX	28			61.0	16.4
Vestbred	WB4401	27			60.4	14.5
.CS	LCS Atomic AX	26			61.3	15.7
.CS	LCS Photon AX	25			60.7	15.8
OGI	Baker's Ann	25	32	43	62.9	16.6
yna-Gro	Buckhorn AX	24			60.2	15.4
(WA	KS Dallas	24			57.2	14.8
CS	LCS Revere	24			59.8	13.8
.CS	LCS Fusion AX	24			57.6	12.9
GSECO	AG Radical	22			55.4	13.9
lainsGold	Crescent AX	22	30		57.7	15.3
)GI	Bentley	21	31	37	60.6	14.5
WA	KS Silverado	21			56.2	14.3
ROPLAN	CP7909	20	34		56.1	13.5
HS	Allegiant 3063	19			52.0	13.7
griPro	SY Rugged	19	31	40	58.5	15.4
.griPro	AP Bigfoot	17			49.2	14.4
:WA	KS Hatchett	15			40.7	14.5
.griPro	SY Achieve CL2	15	30	39	50.2	14.9
griPro	AP EverRock	*			*	*
	Experimentals					
	OK 12716W	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

Management: Grain-only, conventional tillage

Extension Educator: Alexanderia Minor Previous crop: Australian winter peas

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

			Grain Yield		Test Weight	Protein	
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21	
			bu/ac		lb/bu	%	
AgriPro	AP Roadrunner	80			59.9	13.1	
_ČS	LCS Chrome	76	66	64	59.7	13.4	
PlainsGold	Canvas	73	67		61.7	13.2	
(WA	KS Hamilton	72			60.8	13.4	
Vestbred	WB4699	71	72		59.7	11.7	
.CS	LCS Julep	70			61.1	13.1	
Vestbred	WB4269	69	72	74	61.2	13.1	
(WA	KS Western Star	68			59.9	12.2	
PlainsGold	Guardian	64			61.5	13.9	
		63	66	69	59.5	15.1	
OGI	Big Country						
ROPLAN	CP7017AX	62			61.9	12.9	
)GI	Doublestop CL+	62	65	67	62.8	14.8	
Vestbred	WB4792	61	68		61.8	13.9	
GSECO	AG Icon	61	64	65	60.0	15.1	
griMaXX	AM Cartwright	60	59		58.3	13.9	
)GI	Strad CL+	60			60.6	14.7	
GSECO	AG Radical	59			60.7	14.0	
OGI	Duster	58	64	65	61.4	14.9	
.CS	LCS Fusion AX	56			60.0	12.9	
OGI	Uncharted	53	63		60.8	14.6	
OGI	OK Corral	53			57.5	15.0	
.CS	LCS Valiant	52			60.2	15.1	
(WA	KS Silverado	52			59.9	15.5	
(WA	Zenda	51	60	64	61.1	14.2	
igriPro	Bob Dole	50	64	68	59.2	15.3	
(WA	KS Dallas	50			57.6	15.4	
OGI		49	63	68	57.0 57.9	15.4	
	Gallagher						
ROPLAN	CP7909	49	64		60.7	14.6	
Vestbred	WB4401	48			58.4	14.9	
OGI	Smith's Gold	48	56	64	59.9	14.8	
\griPro	AP Bigfoot	46			60.2	16.0	
.CS	LCS Helix AX	46			60.1	14.7	
CHS	Allegiant 3063	46			59.9	14.6	
)GI	Green Hammer	45	58	62	59.5	16.2	
PlainsGold	Crescent AX	43	57		61.0	15.7	
yna-Gro	Buckhorn AX	42			60.5	17.0	
GI	Bentley	42	53	62	60.2	15.5	
OGI	Showdown	42	52	58	59.5	15.1	
.griPro	AP18 AX	41			59.0	15.1	
ROPLAN	CP7050AX	38			60.2	16.6	
.CS	LCS Photon AX	38			59.9	16.4	
.griPro	SY Rugged	37	51	56	57.6	15.2	
(WA	KS Hatchett	37			59.5	15.4	
.CS	LCS Revere	34			59.5	14.7	
)GI	Skydance	34	53		60.3	16.6	
.griPro	SKydance SY Achieve CL2	33	53 54	59	61.1	16.0	
			5 4 51				
GI CC	Baker's Ann	32		58	59.8	17.5	
CS	LCS Atomic AX	32			58.5	16.0	
griPro	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 occured 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 CR-2143.18

Chickasha Standard vs. Intensive Wheat Management Comparison

Cooperator: OSU South Central Research Station

Planting & harvest dates: 10/23/20 & 06/18/21 Soil Type: Dale silt loam

Management: Grain-only, conventional tillage

Extension Educator: Alexanderia Minor Previous crop: Australian winter peas

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

			021 Grain \			Test Weigh		0	Protein	5
Licensee	Variety	Standard	Intensive	Diff	Standard	Intensive	Diff	Standard	Intensive	Dif
			bu/ac			- Ib/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
ÖĞI	Doublestop CL+	55	62	7	63.6	62.8	-0.8	13.7	14.8	1.1
.CS	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
WA	KS Western Star	46	68	21	59.5	59.9	0.4	11.9	12.2	0.3
Vestbred	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
)GI	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
(WA	KS Hamilton	38	72	34	58.9	60.8	1.9	13.9	13.4	-0.5
.CS	LCS Valiant	36	52	16	60.4	60.2	-0.2	14.4	15.1	0.7
GSECO	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
.CS	LCS Helix AX	34	46	12	61.4	60.1	-1.4	14.2	14.7	0.5
)GI	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
Vestbred	WB4792	32	61	29	61.1	61.8	0.6	13.4	13.9	0.5
\griPro	Bob Dole	31	50	19	60.5	59.2	-1.3	14.7	15.3	0.6
.čs	LCS Julep	31	70	39	57.8	61.1	3.3	12.5	13.1	0.6
(WA	Zenda	31	51	20	62.0	61.1	-0.9	13.7	14.2	0.5
Vestbred	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
)GI	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	
		20 27		21						0.2
Vestbred	WB4401		48		60.4	58.4	-2.0	14.5	14.9	0.4
.CS	LCS Atomic AX	26	32	6	61.3	58.5	-2.8	15.7	16.0	0.3
.CS	LCS Photon AX	25	38	13	60.7	59.9	-0.8	15.8	16.4	0.6
)GI	Baker's Ann	25	32	6	62.9	59.8	-3.1	16.6	17.5	0.9
)yna-Gro	Buckhorn AX	24	42	18	60.2	60.5	0.4	15.4	17.0	1.6
(WA	KS Dallas	24	50	26	57.2	57.6	0.4	14.8	15.4	0.6
.CS	LCS Revere	24	34	10	59.8	59.5	-0.3	13.8	14.7	0.9
.CS	LCS Fusion AX	24	56	32	57.6	60.0	2.5	12.9	12.9	0.0
GSECO	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
CWA	KS Silverado	21	52	31	56.2	59.9	3.7	14.3	15.5	1.2
ROPLAN	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
griPro	SY Rugged	19	37	18	58.5	57.6	-0.9	15.4	15.2	-0.2
griPro	AP Bigfoot	17	46	29	49.2	60.2	11.0	14.4	16.0	1.6
WA	KS Hatchett	15	37	22	40.7	59.5	18.8	14.5	15.4	0.9
griPro	SY Achieve CL2	15	33	19	50.2	61.1	10.9	14.9	16.0	1.1
agriPro	AP EverRock	*	28		JU.∠ *	57.3		14.3 *	16.4	1. 1
giiFiu			20			57.5			10.4	
	Experimentals	4.5	00	00	00.0	045	4.0	10.0	10.0	
	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.

El 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

		Grain	Yield	Test Weight	Protein	
Licensee	Variety -	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

El 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	9 69	61.3	9.4	
	OK15DMASBx7 ARS 6-		62.7	10.2	
	OCW03S580S-8WF	59	60.0	10.1	
	Mean	63	61.2	10.1	
	LSD (0.05)	4	8.0	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.

El 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

		Grai	n Yield		Test	Weight		Protein		
Licensee	Variety L	Dual-purpose	Grain-Only	Diff.	Dual-purpose	Grain-Only	Diff.	Dual-purpos	e Grain-Only	Diff.
		bu	u/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	8.0	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	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

			Grain Yield		Test Weight	Protein
Licensee	Variety	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
_CS	LCS Valiant	101			64.5	14.7
(WA	KS Hatchett	99			63.3	15.1
(WA	KS Silverado	99	63		65.8	14.1
.CS	LCS Helix AX	98			64.8	13.9
Vestbred	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
Vestbred	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 ÁX	94			63.1	14.9
CROPLAN	CP7017AX	94			64.6	14.2
(WA	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
(WA	KS Dallas	91	67		62.7	14.5
				70		
.CS	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
.CS	LCS Revere	90			64.5	14.2
Vestbred	WB4699	90	69	79	63.1	13.6
(WA	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
.CS	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	73 74	64.7	15.8
)GI	Big Country	86			62.7	15.9
.CS	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
Vestbred	WB4792	84	62	73	65.8	14.2
OGI	lba	82	67	75	65.4	13.7
PlainsGold	Guardian	82	70		63.7	15.5
AgriPro	AP Bigfoot	82			65.2	15.0
(WA	Zenda	78	56	64	64.1	14.3
OGI	Smith's Gold	78	55	63	65.4	14.8
)GI	Gallagher	78	60	68	64.7	14.9
)GI	Doublestop CL+	76 76	58	65	65.3	15.6
JGI	LCS Fusion AX	76 73	50		60.6	14.2
		13			0.00	14.∠
2011	Experimentals	00			04.0	44.0
OSU	OK12716W	99			64.0	14.2
KSU	KS12DH0156-88	88			62.4	15.1
	Moon	04	GF.	70	64.0	14.0
	Mean LSD (0.05)	91 12	65 9	73 9	64.0 0.7	14.6 0.6
	1 50 (0.05)	12	ч	ч	0.7	11 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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	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
LČS	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	lba	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
5	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: Sherm clay loam

Soil test: pH= 8, N= 108, P= 9, K= 826

			Grain Yield		Test Weight	Protein	
Licensee	Variety	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	
OĞI	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

			Grain Yield		Test Weight	Protein	
Licensee	Variety	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	
_CS	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	
_ČS	LCS Chrome	3	30	55	57	46.6	
OGI	Showdown	3	30	57	61	41.7	
Vestbred	WB4792	4	28	53		42.2	
CROPLAN	CP7909	5	27			42.9	
OGI	Uncharted	4	27	54	60	44.7	
Vestbred	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	
Vestbred	WB4699	4	17	49		35.1	
OGI	Gallagher	4	16	46	51	37.7	
ΚWA	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

			Grain Yield	Test Weight	Protein		
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21	
			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		57	59.0	11.4	
OGI	Skydance	72	56		64.0	12.7	
AgriPro	Bob Dole	71	53	59	59.7	11.8	
_CS	LCS Photon AX	71			63.6	12.6	
Vestbred	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	
Vestbred	WB4792	61	48		56.7	11.2	
AGSECO	AG Icon	60	48	54	57.7	12.3	
Vestbred	WB4269	57	46	58	59.3	11.3	
AgriPro	SY Achieve CL2	54	44	55	60.4	12.6	
ΚŴΑ	KS Dallas	53			57.4	12.3	
_CS	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

Liconoco	Variaty	2020-21	Grain Yield 2-Year	3-Year	Test Weight 2020-21	<i>Protein</i> 2020-21
Licensee	Variety	2020-21	2-Year	3-year	2020-21	2020-21
			bu/ac		lb/bu	%
AgriPro	AP Roadrunner	80			61.2	12.6
CROPLAN	CP7017AX	79			59.2	11.5
Vestbred	WB4699	70	83	71	60.3	10.9
.CS	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
CWA	KS Hamilton	68			60.1	13.1
OGI	Bentley	68	78	64	63.0	11.9
Vestbred	WB4269	67	88	72	60.5	11.8
OGI	Green Hammer	66	77	69	60.5	13.8
(WA	Zenda	66	78	68	60.6	11.5
OGI	Smith's Gold	66	75	63	60.5	12.1
.CS	LCS Chrome	64	76	65	58.5	12.7
Vestbred	WB4792	64	81	71	58.4	12.0
OGI	Baker's Ann	63	77	68	60.4	12.7
(WA	KS Dallas	63	75		59.5	13.0
OGI	Breakthrough	62			59.1	12.8
Ovna-Gro	Buckhorn AX	62			60.2	13.0
CHS	Allegiant 3063	62	 		62.0	11.6
)GI	Gallagher	61	 74	64	59.9	12.1
)GI	Lonerider	61			58.6	12.7
AgriPro	AP Bigfoot	61	 		58.1	11.5
OGI	Big Country	61	67	61	58.7	12.7
)GI	Strad CL+	61	80		61.7	
.CS						13.8
	LCS Helix AX	60			59.6	12.3
AgriPro	SY Rugged	60	76	64	57.4	12.5
(WA	KS Hatchett	60			59.7	12.5
OGI 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
CS	LCS Valiant	59	 		59.6	12.6
AgriPro	SY Achieve CL2	59	74	61	58.0	12.6
Vestbred	WB4401	59	79		60.6	11.5
_CS	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
_CS	LCS Photon AX	58	75		58.4	12.9
AGSECO	AG Radical	57			59.1	12.9
\griPro	AP EverRock	57	73		56.6	12.9
.CS	LCS Julep	57			56.1	13.1
OGI	Duster	56	64	54	57.6	12.9
CWA	KS Silverado	56	77		57.4	12.9
GSECO	AG Icon	56	74	64	60.9	12.9
(WA	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
ROPLAN	CP7050AX	54			57.4	13.0
.CS	LCS Revere	54			58.7	11.5
)GI	Doublestop CL+	53	74	64	60.0	13.4
PlainsGold	Canvas	52	72	55	55.6	59.5
2.2		<u> </u>	. -	30		22.0
2011	Experimentals	0.0			50. 5	44 =
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

lotes: 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

	_		Grain Yield	Test Weight	Protein	
Licensee	Variety -	2020-21	2-Year	3-Year	2020-21	2020-21
			bu/ac		lb/bu	%
ΚWA	KS Dallas	89	93		61.8	13.0
Vestbred	WB4699	88	96	88	62.6	10.9
AgriPro	SY Rugged	87	90	79	61.8	12.4
OGI Navi Dua	Showdown	85	88	78	63.2	11.4
AgriPro	AP Roadrunner	84			60.6	12.4
.CS	LCS Atomic AX	84			63.0	12.2
(WA	KS Hamilton	83			60.5	13.5
(WA	Zenda	83	89	83	63.3	12.2
Vestbred	WB4792	82	97	88	60.6	11.9
)GI	Big Country	82	78	73	60.2	12.7
\griPro	AP EverRock	82	86		62.4	13.4
ÖĞI	Green Hammer	82	86	79	62.9	14.0
griPro	AP Bigfoot	81			62.0	12.0
PlainsGold	Guardian	81	87		63.0	13.7
igriPro	AP18 AX	81			62.8	11.9
CROPLAN	CP7909	81	96	86	62.4	12.2
Vestbred	WB4269	80	96	85	62.5	12.2
.CS	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
.CS	LCS Valiant	79			62.7	12.9
)GI	Strad CL+	79	95		63.0	13.6
\griPro	SY Achieve CL2	79	84	77	61.8	13.2
)ĞI	Breakthrough	79			60.4	13.0
OGI	Bentley	78	89	81	62.1	12.3
Dyna-Gro	Buckhorn AX	78			63.5	13.8
(WA	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
Vestbred	WB4401	77	88		63.7	12.1
)GI	Uncharted	7 <i>7</i> 76	79	76	61.1	12.1
.CS						
	LCS Revere	76 70			61.8	11.7
.CS	LCS Helix AX	76			62.7	12.4
HS	Allegiant 3063	75			63.3	12.4
PlainsGold	Crescent AX	75	88	80	63.7	12.3
.CS	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
\griMaXX	AM Cartwright	75	88	80	60.4	12.8
ĞSECO	AG Icon	74	87	79	61.1	13.2
CS	LCS Julep	74			59.5	12.9
.griPro	Bob Dole	7 4 74	83	79	60.7	13.1
WA	KS Hatchett	74		7 	61.7	12.8
.CS	LCS Photon AX	74 74	84		61.6	13.4
PlainsGold		74 73	90			13.4
	Canvas			77	60.8	
(WA	KS Western Star	73	83		61.2	12.3
GSECO	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
OSU	Experimentals	92			61.6	10.4
	OCW03S580S-8WF	83				12.4
DSU	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

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

		Grain Yield			Test Weight			Protein			
Licensee	Variety	No Fungicide	Fungicide	Diff.	No	Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Dif
		bu	/ac			Ik	o/bu			- %	
AgriPro	AP Roadrunner	80	84	4	П	61.2	60.6	-0.5	12.6	12.4	-0.2
CROPLAN	CP7017AX	79	80	1	ш	59.2	61.5	2.3	11.5	11.7	0.2
Westbred	WB4699	70	88	18	ш	60.3	62.6	2.3	10.9	10.9	-0.
_CS	LCS Atomic AX	68	84	16	ш	60.3	63.0	2.7	11.6	12.2	0.0
DGI	Uncharted	68	76	8	ш	60.2	61.1	0.8	12.2	12.2	0.
CROPLAN	CP7909	68	81	13	ш	58.5	62.4	3.9	11.8	12.2	0.4
KWA	KS Hamilton	68	83	15	ш	60.1	60.5	0.5	13.1	13.5	0.
OGI	Bentley	68	78	11	ш	63.0	62.1	-0.9	11.9	12.3	0.
Westbred	WB4269	67	80	14	ш	60.5	62.5	2.0	11.8	12.3	0.
	Green Hammer		82		ш						
OGI	Zenda	66		15 17	ш	60.5	62.9	2.4	13.8	14.0	0.
AWA		66	83		ш	60.6	63.3	2.7	11.5	12.2	0.
OGI	Smith's Gold	66	75	10	ш	60.5	62.7	2.2	12.1	12.1	0.
LCS	LCS Chrome	64	80	16	ш	58.5	61.5	3.0	12.7	12.8	0.
Westbred	WB4792	64	82	18	ш	58.4	60.6	2.2	12.0	11.9	-0
OGI	Baker's Ann	63	78	15	ш	60.4	62.7	2.4	12.7	13.2	0.
AWA	KS Dallas	63	89	26		59.5	61.8	2.3	13.0	13.0	0.
OGI	Breakthrough	62	79 70	17		59.1	60.4	1.3	12.8	13.0	0.
Dyna-Gro	Buckhorn AX	62	78 75	16		60.2	63.5	3.4	13.0	13.8	0.
CHS	Allegiant 3063	62	75	14		62.0	63.3	1.3	11.6	12.4	0.
OGI	Gallagher	61	71	9	ш	59.9	61.7	1.9	12.1	12.0	-0
OGI	Lonerider	61	80	19	ш	58.6	62.7	4.1	12.7	12.8	0.
AgriPro	AP Bigfoot	61	81	21	ш	58.1	62.0	3.9	11.5	12.0	0.
OGI	Big Country	61	82	22	ш	58.7	60.2	1.5	12.7	12.7	0.
OGI	Strad CL+	61	79	19	ш	61.7	63.0	1.3	13.8	13.6	-0
LCS	LCS Helix AX	60	76	16	ш	59.6	62.7	3.1	12.3	12.4	0.
AgriPro	SY Rugged	60	87	27	ш	57.4	61.8	4.5	12.5	12.4	-0
KWA	KS Hatchett	60	74	14	ш	59.7	61.7	2.0	12.5	12.8	0.
OGI	OK Corral	60	78	19	ш	60.4	62.1	1.7	12.4	12.5	0.
OGI	Showdown	60	85	26	ш	60.0	63.2	3.2	11.2	11.4	0.
OGI	Skydance	60	80	20	ш	55.8	61.0	5.2	13.1	13.3	0.
LCS	LCS Valiant	59	79	21	ш	59.6	62.7	3.1	12.6	12.9	0.
AgriPro	SY Achieve CL2	59	79	20	ш	58.0	61.8	3.9	12.6	13.2	0.
Westbred	WB4401	59	77	19	ш	60.6	63.7	3.1	11.5	12.1	0.
LCS	LCS Fusion AX	58	75	17	ш	60.2	61.1	0.9	11.3	11.9	0.
AgriMaXX	AM Cartwright	58	75	17	ш	57.2	60.4	3.2	12.5	12.8	0.
AgriPro	Bob Dole	58	74	16	ш	59.6	60.7	1.1	12.4	13.1	0.
PlainsGold	Guardian	58	81	23	ш	59.9	63.0	3.1	13.7	13.7	0.
LCS	LCS Photon AX	58	74	16	ш	58.4	61.6	3.2	12.9	13.4	0.
AGSECO	AG Radical	57	71	15	ш	59.1	60.4	1.3	12.9	12.5	-0
AgriPro	AP EverRock	57	82	25	ш	56.6	62.4	5.8	12.9	13.4	0.
_ČS	LCS Julep	57	74	18	ш	56.1	59.5	3.5	13.1	12.9	-0
OGI	Duster	56	71	15	ш	57.6	60.7	3.1	12.9	12.5	-0
KWA	KS Silverado	56	78	22	ш	57.4	61.5	4.1	12.9	13.2	0.
AGSECO	AG Icon	56	74	18	ш	60.9	61.1	0.2	12.9	13.2	0.
KWA	KS Western Star	56	73	17	ш	59.0	61.2	2.2	12.8	12.3	-0
PlainsGold	Crescent AX	55	75	20	ш	58.7	63.7	5.0	11.6	12.3	0
AgriPro	AP18 AX	55	81	27	ш	58.4	62.8	4.4	11.6	11.9	0.
CROPLAN	CP7050AX	54	75	21	ш	57.4	62.0	4.7	13.0	13.7	0
_CS	LCS Revere	54	76	22	ш	58.7	61.8	3.1	11.5	11.7	0.
OGI	Doublestop CL+	53	67	13	ш	60.0	62.0	2.1	13.4	13.8	0.
PlainsGold	Canvas	52	73	21		59.5	60.8	1.3	12.2	12.1	-0
.aniodola	Experimentals	OL .	, 0	_ '	1 '	00.0	00.0	0	12.2		J
OSU	OK12716W	63	81	18		59.5	61.5	2.0	11.5	11.3	-0
KSU	KS12DH0156-88	61	75	13		61.7	62.2	0.4	13.2	12.7	-0
OSU	OCW03S580S-8WF	58	83	26		58.9	61.6	2.7	12.1	12.7	0.
OSU	OK15MASBx7 ARS 8-		81	24		58.5	61.4	3.0	11.7	11.7	0.
	OKTOWN ODAT ALLO O	20 01	- 01		'	00.0	01.7	0.0	11.7	1 1.7	
	Mean	61	78	17		59.3	61.9	2.5	12.4	12.6	0.
	LSD (0.05)	NS	NS	NS		NS	NS	NS	0.4	0.4	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. 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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21
			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
AĞSECO	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
ΚŇΑ	KS Dallas	59			62.2	14.8
OGI	Baker's Ann	59			64.0	15.9
Nestbred	WB4792	59			64.4	14.7
KWA	KS Western Star	59			61.1	13.6
Nestbred	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
_CS	LCS Chrome	55	55	42	63.5	15.8
OGI	Strad CL+	55			62.8	15.7
Nestbred	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

			Grain Yield	Test Weight	Protein	
Licensee	Variety	2020-21	2-Year	3-Year	2020-21	2020-21
			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
_CS	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
_CS	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

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

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 grainonly, Kingfisher and Thomas trials are included in this analysis.

North-Central Region Summary

Locations: Kildare and Lahoma

Licensee	Variety	Grain Yield 2020-21	Test Weight 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
LČS	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 LSD (0.05)	56 7	54.6 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

Licensee	Variety	Grain Yield 2020-21	Test Weight 2020-21	Protein 2020-21
		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	lba	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 LSD (0.05)	62 6	63.3 1.0	10.3 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 2020-21	Test Weight 2020-21	Protein 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
OĞI	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
OĞI	Big Country	57	58.7	15.0
OGI	Breakthrough	55	60.6	13.8
OGI	lba	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 LSD (0.05)	60 6	59.8 1.2	13.9 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

Licensee	Variety	Grain Yield 2020-21	Test Weight 2020-21	Protein 2020-21	
		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	
oğı	Uncharted	46	60.7	12.3	
	Experimentals				
OSU	OK12716W	67	60.8	11.0	
-	OCW03S580S-8WF	49		12.4	
	Mean LSD (0.05)	56 5	60.8 0.7	11.8 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 Altus, Apache, Apache Fungicide and Walters dual-purpose trials are included in this analysis.

Heading Date and Plant Height

Licenses	Variaty	Altuo	Chickasha	Goodwell		Ctillwotor	Altuo	Chiokooho	Goodwell		Ctillurata
Licensee	Variety	Altus							Irrigated		
				50% head	ding		K	olant heig	ght at har	vest (in)	
AgriMaXX	AM Cartwright	4/16	4/28	5/10	5/3	4/23	78	73	68	85	85
AgriPro AgriPro	AP Bigfoot AP EverRock	4/14 4/15	4/19 4/19	5/8 5/7	5/3 5/2	4/19 4/18	66 63	76 68	62 70	91 85	89 85
AgriPro	AP Roadrunner	4/15	4/19 4/28	5/7 5/9	5/2 5/1	4/18 4/25	67	82	70 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
AĞSECO	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 Dyna-Gro	CP7909 Buckhorn AX	4/17 4/8	4/26 4/26	5/7 5/4	5/1 5/1	4/20 4/20	80 78	78 76	73 71	88 94	92 93
KWA	KS Dallas	4/18	4/28	5/10	5/3	4/24	70	66	60	90	93 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	LCS Helix AX	4/14	4/26	5/9 5/10	5/1	4/21	80	72 76	68	90	90
LCS	LCS Julep LCS Photon AX	4/25 4/9	4/30 4/15	5/10 5/5	5/3 5/1	4/27 4/17	83 81	76 73	68 70	87 94	85 96
LCS	LCS Photon AX	4/11	4/13	5/6	5/1	4/18	71	73 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 OGI	Duster	4/20 4/19	4/26 4/26	5/9 5/9	5/2 5/2	4/20 4/21	75 73	76 71	65 63	88 90	86 88
OGI	Gallagher Green Hammer	4/11	4/26	5/9	5/2 5/2	4/23	88	71		100	97
OGI	Iba	 / 1 1		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 PlainsGold	Canvas Crescent AX	4/16 4/10	4/26 4/15	5/10 5/6	5/4 5/1	4/24 4/16	86	71 68	61 75	84 90	82 92
PlainsGold	Guardian	4/10	4/15 4/28	5/6 5/7	5/ I 5/4	4/16 4/25	86 86	68 83	75 63	90 91	92 95
Westbred	WB4269	4/20	4/26 4/26	5/7 5/7	5/4 5/2	4/25 4/19	65	82	65	84	95 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				 E/A	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

AgriMAXX Wheat Company

Matt Wehmeyer 7167 Highbanks Road Mascoutah, IL 62258 Phone: (855) 629-9432

Email: matt@agrimaxxwheat.com www.agrimaxxwheat.com

Variety: AM Cartwright

AgriPro

Greg McCormack 8750 NW 66th st. Silver Lake, KS 66539 Phone: (620) 532-6283

Email: greg.mccormack@syngenta.com

www.agriprowheat.com

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

AGSECO, Inc.

Steve Ahring P.O. Box 7 Girard, KS 66743

Phone: (620) 724-6223

Email: steve@delangeseed.com www.agseco.com

Varieties: AG Icon, AG Radical

CHS

Zack Meyer PO Box 187 Okarche, OK 73762 Phone: (580) 938-1198 Email:zack.meyer@chsinc.com

www.chswesternok.com Variety: Allegiant 3063

CROPLAN by Winfield United

Cameron Aker 500 North 1st street Vincent, IA 50594 Garrison, ND 58540 Phone: (515) 356-4524

Email: claker@landolakes.com www.croplan.com

Varieties: CP7017 AX, CP7050 AX, CP7909

Dyna-Gro Seed

Shawn Carter 3492 Long Prairie Road Suite 200 Flower Mound, TX 75022 Phone: (318) 282-9804

Email: shawn.carter@nutrien.com

www.dynagroseed.com Variety: Buckhorn AX

Kansas Wheat Alliance (KWA)

Daryl Strouts 1990 Kimball Ave. Suite 200 Manhattan, KS 66502 Phone: (785) 320-4080

Email: kwa@kansas.net www.kswheatalliance.org

Varieties: KS Dallas, KS Hamilton, KS Hatchett, KS Silvera-

do, KS Western Star, Zenda, KS12DH0156-88

Limagrain Cereal Seeds (LCS)

Nathan Miller

6414 N Sheridan street Wichita, KS 67204 Phone: (316) 755-2042

Email: nathan.miller@limagrain.com www.limargraincereal-

seeds.com

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

LCS Valiant

Oklahoma Genetics, Inc. (OGI)

Mark Hodges 201 South Range Road Stillwater, OK 74074 Phone: (405) 744-4347

Email: hodgesm1@cox.net www.okgenetics.com

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

(Colorado Wheat Research Foundation) Brad Erker/Tyler Benninghoven 4026 S. Timberline Road Suite 100 Fort Collins, CO 80525

Phone: (970) 449-6994

Email: tbenninghoven@coloradowheat.org

www.plainsgold.com

Varieties: Canvas, Crescent AX, Guardian

Watley Seed Andy Watley Box 51

Spearman, TX 79081 Phone: (806) 659-3838

Email: watleyseed@valornet.com

www.watlevseed.com

Varieties: TAM 112, TAM 115, TAM 204

WestBred

John Fenderson 1616 E. Glencoe Road Stillwater, OK 74075 Phone: (620) 243-4263

Email: john.fenderson@bayer.com

www.westbred.com

Varieties: WB4269, WB4401, WB4699, WB4792

The Oklahoma Cooperative Extension Service WE ARE OKLAHOMA

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education

for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.

- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs.
 Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions. For more information, visit https://eeo.okstate.edu.