



Current Report

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2018-2019 Small Grains Variety Performance Tests

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Wheat Crop Overview

According to the August 2019 USDA crop report, Oklahoma wheat production is estimated to be approximately 110 million bushels, which is about 57 percent greater than 2018 production (Table 1) and 12 percent greater than 2017 production. The increase in total grain production is the result of 250,000 more harvested acres than 2018 and much greater yield per acre. The 4.3 million acres planted in the 2019 crop year was a 2 percent decrease compared to the previous year, and was 16 percent lower than the previous 10-year average. The number of harvested acres is estimated at 2.75 million, which is 10 percent greater than in 2018 (Table 1). The statewide average yield is projected at 40 bushels per acre, which would be a new record. This is 12 bushels per acre (43 percent) greater than the 2018 state average and 11.5 bushels per acre (40 percent) greater than the previous ten-year average.

Table 1. Oklahoma wheat production for 2018 and 2019 as estimated by USDA NASS, August 2019.

	2018	2019
Harvested Acres	2.5 million	2.75 million
Yield (bu/ac)	28	40
Total bushels	70 million	110 million

The 2018-2019 wheat growing season was challenging from establishment through grain-fill, but the end result was a harvest that exceeded expectations for most producers. Dual purpose wheat producers in most areas of the state benefitted from a full profile of moisture in early September and favorable conditions for wheat growth. Wheat forage production was well above average, with some varieties producing more than 2 tons of forage per acre by mid-December (see CR 2141 *Fall forage production and first hollow stem date for small grain varieties during the 2018-2019 crop year* for more information).

The same rains that fueled fall forage growth kept many grain-only producers from planting in a timely fashion. Sowing wheat in late October through the end of November was the norm, and many wheat fields entered the winter months still trying to emerge or with only one or two leaves. Cool conditions further delayed development and occurrence of first hollow stem was approximately one week later than the long-term average. Fortunately, moderate temperatures and ample moisture allowed a late-emerging and under-developed wheat crop to add tillers and develop a plant canopy.

Conditions for wheat development and grain fill remained mostly favorable until excessive rainfall events in May had many producers again questioning whether or not a wheat crop would be harvested in 2019. The October 1, 2018 – July 22, 2019 time frame was the fourth wettest on record for Oklahoma, and May stood out as an extreme month in an already wet production year. The Oklahoma Mesonet station at Lahoma, for example, recorded 12.7 inches of rainfall in May 2019, which is approximately 8 inches more than normal. The Kingfisher station reported 15.9 inches of May rainfall, which is more than 10 inches above normal. Several fields were complete losses due to flooding, and several additional fields were severely lodged from waterlogged soil conditions. There was concern that waterlogged soil conditions would adversely affect seed development and seed fill, resulting in poor yields or low test weights.

These wet and cool conditions also paved the way for severe disease incidence and severity in the 2019 Oklahoma wheat crop, especially in north-central Oklahoma. Few diseases were observed during the fall of 2018, with leaf rust at a low incidence being the primary disease reported. Lack of disease in the fall was probably the result of a significantly later planting date across much of the state as discussed above. Foliar disease also was slow to start in the spring, but with the cool and moist weather extending into the late spring, both rusts (leaf and stripe) and the leaf spot diseases (*Septoria*, *Stagonospora* and tan spot) were much more widespread and severe across Oklahoma in 2019. Often, *Septoria* and

Stagonospora were found on the upper wheat leaves and flag leaf, which is atypical in Oklahoma. At many locations, foliar diseases were not observed until well into May, and a few locations (e.g. northwestern Oklahoma and the Panhandle) had lighter foliar disease pressure than the rest of Oklahoma. Most locations in north-central and central Oklahoma had at least one foliar disease of moderate to high severity with a few locations having a high severity of several diseases. Septoria and leaf rust remained the most prominent diseases across the state. Physiological leaf spot was detectable on some cultivars when symptoms of Septoria or leaf rust were delayed or suppressed by a fungicide treatment.

Root rots (primarily dryland root rot caused by the fungus Fusarium) and black chaff (caused by the bacterium Xanthomonas) were more prevalent than typical for Oklahoma. Fusarium head blight (scab) also occurred primarily in northeastern Oklahoma, but fortunately did not occur at a high incidence over the main wheat area of Oklahoma. Barley yellow dwarf was sporadic and was observed at only a few locations. The wheat curl mite-transmitted virus diseases (wheat streak mosaic, Triticum mosaic and high plains disease) were found but not nearly to the level as found in the past couple of years. Delayed planting is a recommended management strategy for these insect-vectorized diseases, and the delayed planting associated with the wet fall probably helped reduce the incidence of barley yellow dwarf and the mite-transmitted virus diseases. Powdery mildew was observed at a lower incidence and severity than in most years. In summary, it was a very active year for diseases in Oklahoma with the mild and wet weather facilitating many diseases. The mild and wet weather also improved yield prospects by the time producers were making decisions regarding application of foliar fungicides, and many producers chose to protect yield potential with foliar fungicides. Data from fungicide treated and nontreated variety trial comparisons at Lahoma, Apache and Chickasha provide indication of the impact of foliar disease on grain yield and suggest that applying a foliar fungicide was a profitable decision for many Oklahoma wheat farmers in 2019.

Harvest started approximately one week later than normal, with no reports of wheat harvested prior to Memorial Day in 2019. Rainfall resulted in a very slow and intermittent start to harvest and waterlogged soil conditions presented challenges. Weather and soil conditions improved by mid-June, and harvest continued at a steady pace until conclusion in the latter half of July in the Oklahoma Panhandle. Grain yields exceeded expectations with some of the best yields coming from Harper County west through the Panhandle. The delayed harvest and waterlogged soil conditions did result in some low test weights, but the extent of the damage varied by geography and variety.

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.

Conventional-till plots were eight rows wide with 6-inch row spacing and were sown with a Hege small-plot cone seeder. No-till 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. With the exception of 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. Experimental design for all sites other than Apache and Lahoma was a randomized complete block with four replications. Apache and Lahoma were a split-plot arrangement of a randomized complete block with four replications where whole plots were fungicide treated or non-treated, and sub-plots were wheat variety.

Conventional-till plots received 50 pounds per acre of 18-46-0 in-furrow at planting. No-till plots received 5 gallons per acre of 10-34-0 at planting. The Marshall dual-purpose (DP) trial, Union City, Walters and forage trials were sown at 120 pounds per acre. The Panhandle irrigated and dryland locations were sown at 90 and 45 pounds per acre, respectively. 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 Hege or Wintersteiger Delta small plot combine. Grain weight, test weight and moisture content were collected from each plot, and grain yields were corrected to 12 percent moisture content. Grain moisture at all sites was generally below 12 percent, and maximum and minimum grain moisture for all plots at a location typically ranged no more than 2 percent. The Afton plots were harvested, but data are not reported as the trial coefficient of variation (c.v.) exceeded 25. The Marshall plots were not harvested due to severe weed pressure.

Data Interpretation

Yield and test weight 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 or test weight. In this report, one can be 95 percent confident that the difference between two varieties is real if the difference is equal to or greater than the LSD value. Data that is not significant is indicated by "NS." For example, if the LSD value is 4 bushels per acre in a trial which Variety A yielded 30 bushels per acre and Variety B yielded 26, then Variety A would be considered to have a statistically greater 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 percent chance that the 4-bushels-per-acre difference between Variety A and Variety B does not truly exist, but random chance caused the five-bushel difference. These chance factors may include differences in fertility, moisture availability and diseases, for example. To aid in determining the varieties with the highest yields and test weights, 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 variety performance.

2018-2019 Oklahoma wheat variety performance tests region summary.

Licensee	Variety	Regional Trial Locations					
		Central	North Central	Northwest	Panhandle	Southwest	
-----grain yield (bu/ac)-----							
AGSECO	AG Gallant	54	-	-	64	66	-
AGSECO	AG Icon	63	59	54	67	77	-
AgriMAXX	AM Eastwood	48	44	39	-	77	41
OGI	Baker's Ann	65	-	-	-	-	-
OGI	Bentley	58	54	56	68	81	54
AgriPro	Bob Dole	66	-	68	81	-	-
PlainsGold	Canvas	55	-	-	-	-	-
CROPLAN	CP7826	53	51	47	-	67	53
CROPLAN	CP7869	56	-	-	-	-	-
CROPLAN	CP7909	63	-	-	-	-	-
PlainsGold	Crescent AX	58	-	-	-	-	-
OGI	Doublestop CL Plus	61	59	57	72	73	54
OGI	Duster	57	51	-	-	79	55
OGI	Gallagher	60	52	53	69	74	55
OGI	Green Hammer	-	57	57	-	80	58
OGI	Iba	59	51	47	64	85	52
KWA	Joe	63	-	54	-	-	-
KWA	KS Venada	58	-	-	-	-	-
KWA	KS080093K-18	57	-	-	-	-	-
PlainsGold	Langin	57	-	-	67	84	-
KWA	Larry	56	-	-	62	78	-
LCS	LCH15ACC7-7	60	-	-	-	-	-
LCS	LCS Chrome	58	53	52	70	80	55
LCS	LCS Pistol	58	-	-	-	-	-
OGI	Lonerider	56	-	-	61	82	-
Dyna-Gro	Long Branch	47	37	-	56	76	-
OGI	NF 101	52	-	-	-	-	42
OGI	Ruby Lee	62	60	55	-	73	59
OGI	Showdown	59	52	49	71	82	61
OGI	Skydance	62	-	-	-	-	54
OGI	Smith's Gold	59	55	51	65	74	56
OGI	Spirit Rider	61	-	51	-	-	-
OGI	Stardust	48	-	41	-	-	-
AgriPro	SY Achieve CL2	57	-	52	-	-	-
AgriPro	SY Benefit	47	-	42	-	-	44
AgriPro	SY Flint	54	50	-	-	-	51
AgriPro	SY Grit	48	42	44	60	74	45
AgriPro	SY Monument	-	-	-	-	78	-
AgriPro	SY Razor	-	-	-	-	-	-
AgriPro	SY Rugged	59	56	52	70	80	49
Watley	TAM 112	46	-	-	52	75	-
AGSECO	TAM 114	58	-	-	68	74	-
Watley	TAM 204	46	42	-	54	76	-
WestBred	WB4269	64	65	53	67	76	60
WestBred	WB4303	60	60	58	74	76	-
WestBred	WB4418	57	-	-	-	-	-
WestBred	WB4515	51	47	47	-	-	-
WestBred	WB4595	62	-	-	-	-	-
WestBred	WB4699	64	-	-	-	-	-
WestBred	WB4792	67	-	-	-	-	-
WestBred	WB-Grainfield	52	-	-	62	83	-
KWA	Zenda	61	-	-	-	-	-
OSU Experimentals							
	OCW04S717T-6W	-	-	-	-	-	-
	OK149132C	60	57	-	-	-	-
	OK14P212	-	-	-	62	79	54
	OK14P736W	-	-	-	55	75	47
	OK15MASBx7 8-1	-	-	-	-	-	-
	OK16729W	68	-	-	-	-	-
	OK168512	-	-	-	60	81	-
	OK16D101089	-	64	-	-	-	-
Mean		57	53	52	65	77	52
LSD (0.05)		5	5	4	6	5	6

2018-2019 Oklahoma wheat variety performance tests summary.

Licensee	Variety	Altus	Alva	Apache	Apache Fungicide	Balko	Buffalo	Cherokee	Chickasha	Chickasha IWM	Goodwell Irrigated	Goodwell Homestead
-----grain yield (bu/ac)-----												
AGSECO	AG Gallant	59	68	-	-	81	72	53	29	66	74	-
AGSECO	AG Icon	67	75	-	-	88	66	59	47	68	90	64
AgriMAXX	AM Eastwood	49	59	40	65	81	-	39	27	62	93	48
OGI	Baker's Ann	58	-	-	-	85	-	60	39	69	100	-
OGI	Bentley	57	73	55	84	86	84	47	41	65	85	63
AgriPro	Bob Dole	49	90	-	-	-	86	68	54	78	83	77
PlainsGold	Canvas	71	-	-	-	-	-	-	32	60	98	-
CROPLAN	CP7826	57	70	61	74	83	-	47	41	64	67	50
CROPLAN	CP7869	67	-	-	-	-	-	-	30	56	91	-
CROPLAN	CP7909	57	-	-	-	-	-	-	49	79	90	-
PlainsGold	Crescent AX	44	-	-	-	-	-	-	38	71	96	-
OGI	Doublestop CL Plus	51	82	65	68	87	72	63	58	68	79	69
OGI	Duster	66	63	55	76	91	-	36	34	70	88	52
OGI	Gallagher	56	73	59	83	94	78	57	30	77	86	65
OGI	Green Hammer	70	-	64	73	-	-	60	44	72	-	68
OGI	Iba	62	67	48	80	92	74	53	30	72	93	59
KWA	Joe	64	78	-	-	97	-	50	42	65	97	68
KWA	KS Venada	40	-	-	-	-	-	-	39	68	80	-
KWA	KS080093K-18	53	-	-	-	-	-	-	32	58	91	-
PlainsGold	Langin	52	69	-	-	86	80	52	32	71	89	-
KWA	Larry	57	66	-	-	93	75	46	52	62	85	47
LCS	LCH15ACC7-7	61	-	-	-	-	-	-	35	71	88	-
LCS	LCS Chrome	52	80	70	68	86	74	55	41	57	94	66
LCS	LCS Pistol	62	-	-	-	-	-	-	34	67	86	-
OGI	Lonerider	58	60	-	-	93	75	47	28	70	94	-
Dyna-Gro	Long Branch	59	57	-	-	91	75	32	21	50	77	41
OGI	NF 101	46	-	47	65	-	-	-	29	61	72	-
OGI	Ruby Lee	50	64	76	82	81	-	53	49	76	87	66
OGI	Showdown	74	72	57	76	94	83	56	42	63	90	60
OGI	Skydance	50	70	72	79	-	-	-	54	72	83	-
OGI	Smith's Gold	61	66	64	77	90	80	51	46	65	79	64
OGI	Spirit Rider	50	-	-	-	-	-	-	41	78	92	62
OGI	Stardust	60	-	-	-	-	-	-	27	59	74	48
AgriPro	SY Achieve CL2	44	-	-	-	-	-	-	45	75	78	56
AgriPro	SY Benefit	33	-	54	75	-	-	-	33	65	71	45
AgriPro	SY Flint	51	-	54	78	-	-	-	40	67	87	47
AgriPro	SY Grit	38	63	50	77	93	71	47	31	60	91	47
AgriPro	SY Monument	-	74	-	-	91	-	57	-	-	98	66
AgriPro	SY Razor	33	-	63	67	-	-	-	43	59	-	-
AgriPro	SY Rugged	56	73	58	68	91	82	54	44	64	90	60
Watley	TAM 112	49	48	-	-	84	73	34	26	63	76	-
AGSECO	TAM 114	66	73	-	-	97	81	50	29	67	82	-
Watley	TAM 204	48	54	-	-	88	67	39	20	63	84	42
WestBred	WB4269	65	72	77	80	87	79	51	50	75	91	70
WestBred	WB4303	43	67	59	71	91	88	67	37	73	96	70
WestBred	WB4418	58	-	-	-	-	-	-	35	66	93	-
WestBred	WB4515	50	-	-	-	-	-	-	33	60	82	59
WestBred	WB4595	60	-	-	-	-	-	-	42	74	90	-
WestBred	WB4699	58	-	-	-	-	-	-	38	73	98	-
WestBred	WB4792	67	-	-	-	-	-	-	43	75	95	-
WestBred	WB-Grainfield	56	59	-	-	94	84	42	33	63	94	55
KWA	Zenda	57	-	-	-	-	-	-	44	69	79	-
OSU Experimentals												
OCW04S717T-6W												
OK149132C												
OK14P212												
OK14P736W												
OK15MASBx7 8-1												
OK16729W												
OK168512												
OK16D101089												
Mean		56	68	58	74	89	77	50	39	67	87	59
LSD (0.05)		10	5	8	8	4	8	7	6	7	9	7

2018-2019 Oklahoma wheat variety performance tests summary. (cont'd)

Source	Variety	Hooker	Keyes	Kildare	Kingfisher	Lahoma	Lahoma Fungicide	Lamont	Thomas	Union City	Walters
grain yield (bu/ac)											
AGSECO	AG Gallant	39	70	-	-	34	59	-	-	-	-
AGSECO	AG Icon	43	88	62	66	44	62	35	59	55	-
AgriMAXX	AM Eastwood	54	82	73	72	12	43	18	38	22	9
OGI	Baker's Ann	55	-	65	-	50	71	38	-	-	-
OGI	Bentley	59	91	77	71	36	65	38	48	43	20
AgriPro	Bob Dole	-	-	76	69	59	73	55	-	-	-
PlainsGold	Canvas	-	-	-	20	49	-	-	-	-	-
CROPLAN	CP7826	39	76	66	60	30	61	30	42	47	20
CROPLAN	CP7869	-	-	-	-	33	60	-	-	-	-
CROPLAN	CP7909	-	-	-	-	38	66	-	-	-	-
PlainsGold	Crescent AX	-	-	-	-	37	63	-	-	-	-
OGI	Doublestop CL Plus	49	76	68	60	44	63	42	54	55	34
OGI	Duster	47	89	-	68	34	53	12	43	40	26
OGI	Gallagher	34	81	61	65	45	67	27	48	41	19
OGI	Green Hammer	-	-	64	66	52	66	37	57	46	25
OGI	Iba	52	83	59	75	35	64	21	37	39	21
KWA	Joe	60	87	59	72	46	61	35	-	-	-
KWA	KS Venada	-	-	-	-	52	71	-	-	-	-
KWA	KS080093K-18	-	-	-	-	43	64	-	-	-	-
PlainsGold	Langin	65	94	-	-	35	64	-	-	-	-
KWA	Larry	50	85	-	66	26	53	28	36	-	-
LCS	LCH15ACC7-7	-	-	-	-	40	65	-	-	-	-
LCS	LCS Chrome	55	85	62	73	42	60	30	55	41	30
LCS	LCS Pistol	-	-	-	-	34	64	-	-	-	-
OGI	Lonerider	55	84	-	-	25	62	-	-	-	-
Dyna-Gro	Long Branch	55	82	-	49	22	53	-	35	31	-
OGI	NF 101	-	-	-	-	43	60	-	-	36	12
OGI	Ruby Lee	50	73	61	70	43	66	37	51	52	26
OGI	Showdown	58	85	70	68	31	57	28	45	42	38
OGI	Skydance	-	-	-	-	48	67	-	-	-	15
OGI	Smith's Gold	49	77	55	64	39	65	32	53	49	22
OGI	Spirit Rider	-	-	58	-	37	65	35	-	-	-
OGI	Stardust	-	-	61	-	21	50	24	-	-	-
AgriPro	SY Achieve CL2	-	-	72	78	35	62	35	-	-	-
AgriPro	SY Benefit	-	-	-	65	27	51	29	-	-	15
AgriPro	SY Flint	-	-	-	67	28	53	25	36	38	23
AgriPro	SY Grit	44	71	73	57	24	50	27	32	32	15
AgriPro	SY Monument	42	81	-	60	41	64	33	49	-	-
AgriPro	SY Razor	-	-	-	-	-	-	-	-	5	-
AgriPro	SY Rugged	53	86	65	73	41	56	40	50	50	15
Watley	TAM 112	51	87	-	-	12	48	-	-	-	-
AGSECO	TAM 114	46	71	-	-	38	64	-	-	-	-
Watley	TAM 204	53	79	-	58	10	50	-	33	38	-
WestBred	WB4269	49	80	62	83	40	62	32	68	52	18
WestBred	WB4303	45	75	72	85	44	67	37	65	40	-
WestBred	WB4418	-	-	-	-	36	56	-	-	-	-
WestBred	WB4515	-	-	74	58	24	54	24	54	31	-
WestBred	WB4595	-	-	-	-	40	66	-	-	-	-
WestBred	WB4699	-	-	-	-	47	70	-	-	-	-
WestBred	WB4792	-	-	-	-	52	70	-	-	-	-
WestBred	WB-Grainfield	56	89	-	63	19	48	16	-	-	-
KWA	Zenda	-	-	75	-	48	72	43	-	-	-
OSU Experimentals											
	OCW04S717T-6W	-	-	-	64	50	62	-	-	46	-
	OK149132C	-	-	-	61	29	57	-	51	50	-
	OK14P212	46	86	-	-	-	-	-	36	31	24
	OK14P736W	55	77	-	-	-	-	-	-	-	18
	OK15MASBx7 8-1	-	-	-	-	40	66	-	-	-	-
	OK16729W	-	-	-	-	51	71	-	-	-	-
	OK168512	63	90	-	-	-	-	-	-	-	-
	OK16D101089	-	-	72	65	56	72	-	63	62	17
Mean		51	82	66	67	37	61	31	48	43	21
LSD (0.05)		7	10	6	8	4	5	5	10	6	4

Regional Trial Location Summary
Locations: Altus, Chickasha, Goodwell and Lahoma

Licensee	Variety	Grain Yield		Test Weight 2018-19 ---lb/bu---
		2018-19 bu/ac	2-Year	
OSU	OK16729W	68	-	57.3
WestBred	WB4792	67	-	55.3
AgriPro	Bob Dole	66	55	55.3
OGI	Baker's Ann	65	57	56.0
WestBred	WB4699	64	-	53.1
WestBred	WB4269	64	61	55.2
CROPLAN	CP7909	63	-	54.9
AGSECO	AG Icon	63	56	55.1
KWA	Joe	63	57	55.5
OGI	Skydance	62	-	57.9
WestBred	WB4595	62	-	55.9
OGI	Ruby Lee	62	58	56.3
KWA	Zenda	61	53	56.8
OGI	Spirit Rider	61	55	52.1
OGI	Doublestop CL Plus	61	54	57.5
OSU	OK149132C	60	-	54.4
WestBred	WB4303	60	53	50.8
OGI	Gallagher	60	56	54.4
LCS	LCH15ACC7-7	60	-	55.8
OGI	Showdown	59	53	52.1
OGI	Iba	59	54	55.1
OGI	Smith's Gold	59	56	55.0
AgriPro	SY Rugged	59	52	53.3
PlainsGold	Crescent AX	58	-	54.9
KWA	KS Venada	58	-	56.1
OGI	Bentley	58	56	52.8
LCS	LCS Pistol	58	52	53.7
LCS	LCS Chrome	58	52	53.3
AGSECO	TAM 114	58	55	55.1
WestBred	WB4418	57	-	53.1
PlainsGold	Langin	57	54	54.2
KWA	KS080093K-18	57	-	53.7
OGI	Duster	57	51	53.3
AgriPro	SY Achieve CL2	57	50	54.8
OGI	Lonerider	56	53	55.7
CROPLAN	CP7869	56	-	54.1
KWA	Larry	56	53	53.1
PlainsGold	Canvas	55	-	51.7
AgriPro	SY Flint	54	50	53.4
AGSECO	AG Gallant	54	-	54.8
CROPLAN	CP7826	53	52	52.8
OGI	NF 101	52	46	55.6
WestBred	WB-Grainfield	52	50	51.6
WestBred	WB4515	51	49	53.1
AgriPro	SY Grit	48	47	50.8
OGI	Stardust	48	48	52.3
AgriMAXX	AM Eastwood	48	45	52.5
Dyna-Gro	Long Branch	47	47	49.5
AgriPro	SY Benefit	47	47	54.2
Watley	TAM 204	46	44	48.9
Watley	TAM 112	46	47	54.8
Mean		57	52	54.1
LSD (0.05)		5	4	1.0

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Altus, Chickasha, Chickasha Intensive Management, Goodwell Irrigated, Lahoma and Lahoma Fungicide trials are included in this analysis.

Central Region

Locations: Chickasha, Kingfisher, Thomas and Union City

Licensee	Variety	Grain Yield		Test Weight 2018-19 ---lb/bu---
		2018-19 bu/ac	2-Year bu/ac	
WestBred	WB4269	65	-	55.0
OSU	OK16D101089	64	-	56.2
WestBred	WB4303	60	46	50.0
OGI	Ruby Lee	60	48	55.5
OGI	Doublestop CL Plus	59	47	57.7
AGSECO	AG Icon	59	-	54.6
OGI	Green Hammer	57	45	54.3
OSU	OK149132C	57	-	55.1
AgriPro	SY Rugged	56	44	53.1
OGI	Smith's Gold	55	46	54.1
OGI	Bentley	54	47	51.4
LCS	LCS Chrome	53	42	52.3
OGI	Gallagher	52	44	52.2
OGI	Showdown	52	42	51.3
OGI	Duster	51	41	52.5
CROPLAN	CP7826	51	-	51.7
OGI	Iba	51	44	53.6
AgriPro	SY Flint	50	41	52.3
WestBred	WB4515	47	42	52.1
AgriMAXX	AM Eastwood	44	-	49.1
Watley	TAM 204	42	35	48.4
AgriPro	SY Grit	42	39	49.9
Dyna-Gro	Long Branch	37	-	47.5
Mean		53	44	52.6
LSD (0.05)		5	3	1.4

Notes: Grain yields adjusted to 12 percent 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, Kingfisher, Thomas and Union City trials are included in this analysis.

North Central Region Summary

Locations: Homestead, Kildare, Lahoma and Lamont

Licensee	Variety	<i>Grain Yield</i>		<i>Test Weight</i>
		2018-19	2-Year	2018-19
		-----bu/ac-----		---lb/bu---
AgriPro	Bob Dole	68	45	54.9
WestBred	WB4303	58	42	49.5
OGI	Green Hammer	57	-	53.9
OGI	Doublestop CL Plus	57	43	55.4
OGI	Bentley	56	45	50.9
OGI	Ruby Lee	55	43	53.4
KWA	Joe	54	42	53.3
AGSECO	AG Icon	54	-	53.0
WestBred	WB4269	53	-	53.1
OGI	Gallagher	53	38	52.5
AgriPro	SY Rugged	52	-	50.6
LCS	LCS Chrome	52	40	52.9
AgriPro	SY Achieve CL2	52	38	52.5
OGI	Spirit Rider	51	-	49.8
OGI	Smith's Gold	51	39	53.1
OGI	Showdown	49	38	49.6
OGI	Iba	47	38	52.2
CROPLAN	CP7826	47	-	50.0
WestBred	WB4515	47	-	51.5
AgriPro	SY Grit	44	-	49.4
OGI	Stardust	41	35	50.2
AgriMAXX	AM Eastwood	39	-	49.3
Mean		52	40	51.9
LSD (0.05)		4	3	1.1

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Data for varieties reported from the Homestead, Kildare, Lahoma, Lahoma Fungicide and Lamont trials are included in this analysis.

Northwest Region
Locations: Alva, Buffalo and Cherokee

Licensee	Variety	<i>Grain Yield</i>		<i>Test Weight 2018-19</i>
		<i>2018-19</i>	<i>2-Year</i>	
-----bu/ac-----				
AgriPro	Bob Dole	81	-	56.3
WestBred	WB4303	74	-	52.3
OGI	Doublestop CL Plus	72	50	58.0
OGI	Showdown	71	47	53.2
AgriPro	SY Rugged	70	47	53.9
LCS	LCS Chrome	70	49	55.4
OGI	Gallagher	69	45	55.3
AGSECO	TAM 114	68	46	55.4
OGI	Bentley	68	48	52.7
WestBred	WB4269	67	-	54.7
PlainsGold	Langin	67	47	53.8
AGSECO	AG Icon	67	-	55.6
OGI	Smith's Gold	65	43	55.7
OGI	Iba	64	44	55.2
AGSECO	AG Gallant	64	-	55.1
OSU	OK14P212	62	45	53.8
WestBred	WB-Grainfield	62	-	52.5
KWA	Larry	62	44	52.4
OGI	Lonerider	61	40	54.9
AgriPro	SY Grit	60	41	52.5
OSU	OK168512	60	-	55.6
Dyna-Gro	Long Branch	56	-	50.9
OSU	OK14P736W	55	-	53.5
Watley	TAM 204	54	-	49.3
Watley	TAM 112	52	-	53.0
Mean		65	46	54.0
LSD (0.05)		6	4	1.1

Notes: Grain yields adjusted to 12 percent 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
Locations: Balko, Goodwell, Hooker and Keyes

Licensee	Variety	Grain Yield		Test Weight 2018-19
		2018-19	2-Year	
-----bu/ac-----				----lb/bu----
KWA	Joe	85	68	58.7
PlainsGold	Langin	84	65	57.1
WestBred	WB-Grainfield	83	66	57.9
OGI	Showdown	82	65	56.7
OGI	Lonerider	82	64	58.1
OSU	OK168512	81	-	59.1
OGI	Bentley	81	64	56.8
LCS	LCS Chrome	80	61	57.1
OGI	Iba	80	61	58.9
AgriPro	SY Rugged	80	62	56.3
OGI	Duster	79	63	56.3
OSU	OK14P212	79	62	57.5
KWA	Larry	78	64	57.4
AgriPro	SY Monument	78	63	56.9
AgriMAXX	AM Eastwood	77	-	56.6
AGSECO	AG Icon	77	-	57.4
Dyna-Gro	Long Branch	76	65	55.6
WestBred	WB4269	76	-	57.1
Watley	TAM 204	76	58	53.4
WestBred	WB4303	76	60	53.3
OSU	OK14P736W	75	-	57.7
Watley	TAM 112	75	59	58.4
AGSECO	TAM 114	74	60	59.0
OGI	Smith's Gold	74	59	58.1
AgriPro	SY Grit	74	57	55.0
OGI	Gallagher	74	60	56.6
OGI	Ruby Lee	73	58	57.5
OGI	Doublestop CL Plus	73	58	59.1
CROPLAN	CP7826	67	-	55.4
AGSECO	AG Gallant	66	-	56.9
Mean		77	62	57.1
LSD (0.05)		5	3	0.8

Notes: Grain yields adjusted to 12 percent 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	<i>Grain Yield</i>		<i>Test Weight</i> 2017-18
		2017-18	2-Year	
<i>-----bu/ac-----</i>				<i>----lb/bu----</i>
OGI	Showdown	61	50	57.6
WestBred	WB4269	60	-	59.3
OGI	Ruby Lee	59	45	59.4
OGI	Green Hammer	58	47	58.9
OGI	Smith's Gold	56	46	58.7
LCS	LCS Chrome	55	48	57.1
OGI	Duster	55	44	57.9
OGI	Gallagher	55	42	58.0
OGI	Doublestop CL Plus	54	47	61.1
OSU	OK14P212	54	-	57.6
OGI	Bentley	54	47	56.4
OGI	Skydance	54	-	60.1
CROPLAN	CP7826	53	-	57.4
OGI	Iba	52	45	59.1
AgriPro	SY Flint	51	44	58.0
AgriPro	SY Rugged	49	42	57.8
OSU	OK14P736W	47	-	57.0
AgriPro	SY Grit	45	39	56.2
AgriPro	SY Benefit	44	37	57.7
OGI	NF 101	42	34	57.1
AgriMAXX	AM Eastwood	41	-	56.5
Mean		52	44	58.1
LSD (0.05)		6	4	1.0

Notes: Grain yields adjusted to 12 percent 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 trials are included in this analysis.

Apache Wheat Variety Trial

Planting & harvest dates: 10/4/18 & 6/10/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Soybean (hayed)
 Soil type: Tillman silty clay loam
 Soil test: pH = 5.2, P = 134, K = 494

Licensee	Variety	Grain Yield			Test Weight 2017-18	Lodging 2017-18
		2017-18	2-Year	3-Year		
		-----bu/ac-----			---lb/bu---	
WestBred	WB4269	77	-	-	60.0	2
OGI	Ruby Lee	76	54	58	59.8	2
OGI	Skydance	72	-	-	60.5	2
LCS	LCS Chrome	70	54	59	57.7	1
OGI	Doublestop CL Plus	65	50	53	62.2	1
OGI	Green Hammer	64	48	54	58.0	2
OGI	Smith's Gold	64	46	53	58.8	1
AgriPro	SY Razor	63	-	-	60.4	2
CROPLAN	CP7826	61	-	-	57.7	1
OGI	Gallagher	59	42	52	57.8	2
WestBred	WB4303	59	45	-	53.3	1
AgriPro	SY Rugged	58	44	-	57.6	2
OGI	Showdown	57	46	51	56.3	2
OGI	Bentley	55	46	51	54.2	2
OGI	Duster	55	42	47	56.6	3
AgriPro	SY Flint	54	45	47	58.0	3
AgriPro	SY Benefit	54	42	-	57.9	2
AgriPro	SY Grit	50	38	-	55.6	1
OGI	Iba	48	41	51	58.1	3
OGI	NF 101	47	36	-	57.4	3
AgriMAXX	AM Eastwood	40	-	-	54.1	2
OSU Experimentals						
OK14P736W	41	-	-	55.5	1	
OK14P212	36	-	-	52.5	3	
Mean		58	45	52	57.4	2
LSD (0.05)		8	6	6	1.4	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Low stripe and leaf rust disease pressure and moderate to severe Septoria disease pressure observed during grain-fill.

Apache Fungicide Wheat Variety Trial

Planting & harvest dates: 10/4/18 & 6/10/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Soybean (hayed)
 Soil type: Tillman silty clay loam
 Soil test: pH = 5.2, P = 134, K = 494

Licensee	Variety	Grain Yield			Test Weight 2017-18	Lodging 2017-18
		2017-18	2-Year	3-Year		
-----bu/ac-----						
OGI	Bentley	84		64	57.8	1
OGI	Gallagher	83	54	61	60.4	1
OGI	Ruby Lee	82	56	61	60.2	1
OGI	Iba	80	57	60	61.4	1
WestBred	WB4269	80	-	-	59.6	1
OGI	Skydance	79	-	-	61.4	2
AgriPro	SY Flint	78	57	58	59.7	1
AgriPro	SY Grit	77	54	-	58.8	1
OGI	Smith's Gold	77	55	58	60.0	2
OGI	Showdown	76	55	58	58.3	1
OGI	Duster	76	53	56	59.3	1
AgriPro	SY Benefit	75	53	-	59.2	1
CROPLAN	CP7826	74	-	-	59.0	1
OGI	Green Hammer	73	53	56	59.8	1
WestBred	WB4303	71	49	-	56.5	1
LCS	LCS Chrome	68	52	59	57.8	1
AgriPro	SY Rugged	68	50	-	58.4	1
OGI	Doublestop CL Plus	68	52	55	61.7	1
AgriPro	SY Razor	67	-	-	60.6	2
OGI	NF 101	65	45	-	59.7	2
AgriMAXX	AM Eastwood	65	-	-	58.1	1
OSU Experimentals						
	OK14P212	73	-	-	59.8	2
	OK14P736W	71	-	-	59.4	1
Mean		74	53	59	59.4	1
LSD (0.05)		8	6	6	1.0	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5 with 1 indicating no lodging.

Apache Wheat Variety Trial - Fungicide vs. No Fungicide Comparison

Planting & harvest dates: 10/4/18 & 6/10/19
Management: Grain-only, no-till

Previous crop: Soybean (hayed)
Fungicide: 4 fl oz/ac TebuStar at heading on 4/12/19

Licensee	Variety	2018-19			2018-19			3-Year			Test Weight				
		No Fungicide	Fungicide	Diff.											
Grain Yield bu/ac															
WestBred	WB4269	77	80	3	-	54	56	-	58	61	-	60.0	59.6	-0.4	
OGL	Ruby Lee	76	82	6	-	-	-	-	-	-	3	59.8	60.2	0.4	
OGL	Skydance	72	79	7	-2	54	52	-2	59	59	0	60.5	61.4	0.9	
LCS	LCS Chrome	70	68	-2	3	50	52	2	53	55	2	62.2	57.8	-0.5	
OGL	Doublestop CL Plus	65	68	3	-	53	52	2	54	56	2	58.0	59.8	1.8	
OGL	Green Hammer	64	73	9	-	48	53	5	53	58	5	58.8	60.0	1.2	
OGL	Smith's Gold	64	77	13	-	46	55	9	53	-	-	60.4	60.6	0.2	
AgriPro	SY Razor	63	67	4	-	-	-	-	-	-	-	57.7	59.0	1.3	
CROPLAN	CP7826	61	74	13	-	-	-	-	-	-	-	57.8	60.4	2.6	
OGL	Gallagher	59	83	24	-	42	54	12	52	61	9	-	53.3	56.5	3.2
WestBred	WB4303	59	71	12	-	45	49	4	-	-	-	-	57.6	58.4	0.8
AgriPro	SY Rugged	58	68	10	-	44	50	6	-	-	-	-	56.3	58.3	2.0
OGL	Showdown	57	76	19	-	46	55	9	51	58	7	-	54.2	57.8	3.6
OGL	Bentley	55	84	29	-	46	60	14	51	64	13	-	56.6	59.3	2.7
OGL	Duster	55	76	21	-	42	53	11	47	56	9	-	-	-	-
AgriPro	SY Flint	54	78	24	-	45	57	12	47	58	11	-	58.0	59.7	1.7
AgriPro	SY Benefit	54	75	21	-	42	53	11	-	-	-	-	57.9	59.2	1.3
AgriPro	SY Grit	50	77	27	-	38	54	16	-	-	-	-	55.6	58.8	3.2
OGL	Iba	48	80	32	-	41	57	16	51	60	9	-	58.1	61.4	3.3
OGL	NF 101	47	65	18	-	36	45	9	-	-	-	-	57.4	59.7	2.3
AgriMAXX	AM Eastwood	40	65	25	-	-	-	-	-	-	-	-	54.1	58.1	4.0
OSI Experiments															
OK14P736W		41	71	30	-	-	-	-	-	-	-	55.5	59.4	3.9	
OK14P212		36	73	37	-	-	-	-	-	-	-	52.5	59.8	7.3	
Mean LSD (0.05)		58	74	17	45	53	9	52	59	5	57.4	59.4	2.0		
		8	8	9	6	6	7	6	6	6	1.4	1.0	1.2		

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Boldfaced values in the "Diff." column represent a statistical difference between the fungicide vs. no fungicide averages for that variety. Low stripe and leaf rust disease pressure and moderate to severe Septoria disease pressure observed during grain-fill.

Altus Regional Wheat Variety Trial

Planting & harvest dates: 10/4/18 & 5/31/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Hollister silty clay loam
 Soil test: pH = 7.1, P = 58, K = 877

Licensee	Variety	Grain Yield			Test Weight 2017-18	Lodging 2017-18
		2017-18	2-Year	3-Year		
		-----bu/ac-----			--lb/bu--	
OGI	Showdown	74	49	41	57.3	3
PlainsGold	Canvas	71	-	-	56.8	2
OGI	Green Hammer	70	47	41	59.0	2
CROPLAN	CP7869	67	-	-	59.4	2
AGSECO	AG Icon	67	44	40	57.4	3
WestBred	WB4792	67	-	-	58.1	2
OGI	Duster	66	38	37	57.3	3
AGSECO	TAM 114	66	39	37	60.5	3
WestBred	WB4269	65	46	44	59.0	3
KWA	Joe	64	41	40	59.4	3
LCS	LCS Pistol	62	38	34	57.7	3
OGI	Iba	62	37	35	58.5	3
LCS	LCH15ACC7-7	61	-	-	57.9	2
OGI	Smith's Gold	61	40	38	57.4	2
WestBred	WB4595	60	-	-	58.8	2
OGI	Stardust	60	36	34	56.2	3
Dyna-Gro	Long Branch	59	40	37	53.3	2
AGSECO	AG Gallant	59	-	-	59.6	3
OGI	Lonerider	58	36	-	59.2	2
OGI	Baker's Ann	58	35	34	59.4	3
WestBred	WB4418	58	-	-	56.4	2
WestBred	WB4699	58	-	-	56.3	2
KWA	Zenda	57	33	33	57.9	3
CROPLAN	CP7909	57	-	-	56.1	3
KWA	Larry	57	40	32	54.9	2
OGI	Bentley	57	40	34	54.6	2
CROPLAN	CP7826	57	38	-	56.0	2
OGI	Gallagher	56	34	34	57.2	3
AgriPro	SY Rugged	56	35	32	56.5	3
WestBred	WB-Grainfield	56	33	31	55.8	3
KWA	KS080093K-18	53	-	-	57.8	2
LCS	LCS Chrome	52	36	33	55.0	2
PlainsGold	Langin	52	31	-	55.7	3
OGI	Doublestop CL Plus	51	33	33	60.4	2
AgriPro	SY Flint	51	32	30	55.5	3
OGI	Ruby Lee	50	34	31	58.0	3
OGI	Spirit Rider	50	30	-	54.0	3
WestBred	WB4515	50	34	33	56.3	3
OGI	Skydance	50	-	-	59.6	3
Watley	TAM 112	49	34	-	57.2	3
AgriMAXX	AM Eastwood	49	29	-	58.0	3
AgriPro	Bob Dole	49	28	33	55.2	3
Watley	TAM 204	48	29	27	48.3	3
OGI	NF 101	46	27	26	56.8	3
AgriPro	SY Achieve CL2	44	27	30	57.5	3
PlainsGold	Crescent AX	44	-	-	55.7	3
WestBred	WB4303	43	29	29	51.0	3
KWA	KS Venada	40	-	-	58.7	2
AgriPro	SY Grit	38	23	24	53.6	2
AgriPro	SY Benefit	33	20	21	55.6	3
AgriPro	SY Razor	33	-	-	56.7	3
OSU Experimentals						
	OK14P212	77	51	-	59.7	3
	OK16729W	72	-	-	58.5	3
	OK149132C	68	-	-	59.5	3
	OK16D101089	64	-	-	58.5	3
	OK14P736W	60	-	-	56.0	3
Mean	56	35	34	57.0	2	
LSD (0.05)	10	7	6	1.6		

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a 1-to-5 scale, with 1 indicating no lodging. Moderate leaf rust pressure throughout grain-fill.

Alva Wheat Variety Trial

Planting & harvest dates: 10/22/18 & 6/21/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Grant silt loam
 Soil test: pH = 7.2, P = 35, K = 664

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
AgriPro	Bob Dole	90	53	-	57.9	2
OGI	Doublestop CL Plus	82	49	54	59.5	1
LCS	LCS Chrome	80	48	54	58.1	1
KWA	Joe	78	47	54	57.2	2
AGSECO	AG Icon	75	-	-	57.9	2
AgriPro	SY Monument	74	45	51	56.5	2
AgriPro	SY Rugged	73	45	-	56.1	2
OGI	Gallagher	73	42	47	57.2	2
AGSECO	TAM 114	73	42	-	57.7	3
OGI	Bentley	73	45	49	54.7	2
OGI	Showdown	72	41	48	55.5	2
WestBred	WB4269	72	-	-	57.1	3
CROPLAN	CP7826	70	-	-	54.6	2
OGI	Skydance	70	-	-	58.5	3
PlainsGold	Langin	69	41	46	55.9	3
AGSECO	AG Gallant	68	-	-	57.5	2
WestBred	WB4303	67	39	-	53.3	2
OGI	Iba	67	39	47	57.4	3
KWA	Larry	66	41	47	53.8	2
OGI	Smith's Gold	66	40	45	57.3	2
OGI	Ruby Lee	64	39	45	55.1	3
AgriPro	SY Grit	63	37	-	55.3	2
OGI	Duster	63	38	42	53.3	3
OGI	Lonerider	60	36	42	56.6	2
AgriMAXX	AM Eastwood	59	-	-	54.8	3
WestBred	WB-Grainfield	59	36	46	54.0	3
Dyna-Gro	Long Branch	57	36	-	53.8	2
Watley	TAM 204	54	32	37	50.8	3
Watley	TAM 112	48	32	38	54.0	4
OSU Experimentals						
	OK149132C	68	-	-	56.4	2
	OK168512	65	-	-	57.5	3
	OK14P212	57	34	-	55.3	3
	OK14P736W	55	-	-	55.5	2
Mean		68	41	47	55.9	2
LSD (0.05)		5	6	4	1.0	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Low leaf rust and low to moderate Septoria disease pressure observed during grain-fill.

Balko Wheat Variety Trial

Planting & harvest dates: 9/27/18 & 7/4/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Fallow
 Soil type: Bippus clay loam
 Soil test: pH = 7.9, P = 48, K = 1,141

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
AGSECO	TAM 114	97	65	-	60.3	1
KWA	Joe	97	70	63	59.6	1
OGI	Gallagher	94	66	53	59.0	1
OGI	Showdown	94	70	58	58.5	1
WestBred	WB-Grainfield	94	65	55	58.4	1
OGI	Lonerider	93	64	53	59.9	1
KWA	Larry	93	69	56	58.9	1
AgriPro	SY Grit	93	59	-	57.3	1
OGI	Iba	92	58	51	59.4	1
AgriPro	SY Monument	91	62	53	58.4	1
WestBred	WB4303	91	62	-	53.4	1
AgriPro	SY Rugged	91	64	-	57.3	1
OGI	Duster	91	62	52	58.3	1
Dyna-Gro	Long Branch	91	68	-	58.1	1
OGI	Smith's Gold	90	61	51	59.8	1
AGSECO	AG Icon	88	-	-	58.1	1
Watley	TAM 204	88	59	50	53.9	1
WestBred	WB4269	87	-	-	58.3	1
OGI	Doublestop CL Plus	87	60	51	60.5	1
LCS	LCS Chrome	86	58	50	58.7	1
PlainsGold	Langin	86	55	48	56.3	1
OGI	Bentley	86	63	52	57.8	1
OGI	Baker's Ann	85	60	-	59.4	1
Watley	TAM 112	84	55	45	59.3	1
CROPLAN	CP7826	83	-	-	57.9	1
OGI	Ruby Lee	81	55	45	58.3	1
AGSECO	AG Gallant	81	-	-	58.2	1
AgriMAXX	AM Eastwood	81	-	-	57.7	1
OSU Experimentals						
	OK14P212	89	60	-	60.2	1
	OK168512	88	-	-	59.1	1
	OK14P736W	77	-	-	57.0	1
Mean		89	62	52	58.3	1
LSD (0.05)		4	4	4	0.5	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Very low foliar disease pressure observed throughout grain-fill.

Buffalo Wheat Variety Trial

Planting & harvest dates: 9/26/18 & 6/26/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Fallow
 Soil type: St. Paul silt loam
 Soil test: pH = 6.9, P = 60, K = 689

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
WestBred	WB4303	88	-	-	54.5	2
AgriPro	Bob Dole	86	-	-	57.9	3
WestBred	WB-Grainfield	84	-	-	56.9	3
OGI	Bentley	84	61	66	55.8	2
OGI	Showdown	83	59	66	57.2	2
AgriPro	SY Rugged	82	57	-	57.2	3
AGSECO	TAM 114	81	54	-	58.5	3
OGI	Smith's Gold	80	54	-	58.6	3
PlainsGold	Langin	80	57	63	56.3	3
WestBred	WB4269	79	-	-	57.2	2
OGI	Gallagher	78	53	58	58.0	3
OGI	Lonerider	75	52	-	58.4	2
Dyna-Gro	Long Branch	75	-	-	56.5	3
KWA	Larry	75	52	-	56.7	2
OGI	Iba	74	52	62	56.7	3
LCS	LCS Chrome	74	54	62	57.0	2
Watley	TAM 112	73	-	-	57.1	2
OGI	Doublestop CL Plus	72	50	61	59.8	2
AGSECO	AG Gallant	72	-	-	57.4	2
AgriPro	SY Grit	71	48	-	55.2	2
Watley	TAM 204	67	-	-	53.2	2
AGSECO	AG Icon	66	-	-	56.8	2
OSU Experimentals						
	OK14P212	88	63	-	59.1	3
	OK14P736W	69	-	-	57.8	2
	OK168512	68	-	-	58.5	2
Mean		77	55	62	57.1	2
LSD (0.05)		8	5	NS	0.6	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. NS = not significant. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Low Septoria disease pressure observed during grain-fill.

Cherokee Wheat Variety Trial

Planting & harvest dates: 10/22/18 & 7/12/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Dale silt loam
 Soil test: pH = 7.2, P = 51, K = 655

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
AgriPro	Bob Dole	68	48	-	53.3	4
WestBred	WB4303	67	45	-	49.0	4
OGI	Doublestop CL Plus	63	48	57	55.1	3
OGI	Baker's Ann	60	43	-	52.0	4
OGI	Green Hammer	60	-	-	52.5	4
AGSECO	AG Icon	59	-	-	52.2	4
AgriPro	SY Monument	57	47	58	50.5	4
OGI	Gallagher	57	38	49	50.8	4
OGI	Showdown	56	43	57	46.5	4
LCS	LCS Chrome	55	44	55	51.3	3
AgriPro	SY Rugged	54	39	-	48.4	4
AGSECO	AG Gallant	53	-	-	50.4	4
OGI	Ruby Lee	53	39	51	50.1	5
OGI	Iba	53	42	53	52.7	4
PlainsGold	Langin	52	44	54	49.1	5
WestBred	WB4269	51	-	-	49.9	5
OGI	Smith's Gold	51	36	46	51.5	4
KWA	Joe	50	42	58	46.6	4
AGSECO	TAM 114	50	42	-	49.9	5
CROPLAN	CP7826	47	-	-	46.4	4
OGI	Bentley	47	39	51	47.5	4
AgriPro	SY Grit	47	39	-	46.5	4
OGI	Lonerider	47	34	-	49.6	4
KWA	Larry	46	41	51	46.7	4
WestBred	WB-Grainfield	42	37	53	45.7	4
AgriMAXX	AM Eastwood	39	-	-	45.3	4
Watley	TAM 204	39	34	44	44.0	4
OGI	Duster	36	30	40	42.9	5
Watley	TAM 112	34	35	44	47.8	5
Dyna-Gro	Long Branch	32	30	-	42.4	4
OSU Experimentals						
	OK168512	48	-	-	51.0	5
	OK14P212	44	40	-	47.2	5
	OK14P736W	43	-	-	46.8	4
		Mean	50	40	51	48.8
		LSD (0.05)	7	9	6	2.2

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a 1-to-5 scale, with 1 indicating no lodging. Low disease pressure observed during grain-fill. Harvest was extremely delayed due to rain and resulted in poor seed quality.

Chickasha Regional Wheat Variety Trial

Planting & harvest dates: 11/6/18 & 6/13/19

Previous crop: Wheat

Soil type: Dale silt loam

Management: Grain-only

Tillage: Conventional

Soil test: pH = 7.1, P = 39, K = 274

Nitrogen: 46 lbs/ac soil test + 9 lbs/ac at planting + 100 lbs/ac topdress 2/15/19

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
		bu/ac			--lb/bu--	
OGI	Doublestop CL Plus	58	57	49	56.0	2
OGI	Skydance	54	-	-	56.4	4
AgriPro	Bob Dole	54	57	50	53.5	3
KWA	Larry	52	58	44	51.7	2
WestBred	WB4269	50	57	51	51.1	3
OGI	Ruby Lee	49	55	47	53.3	3
CROPLAN	CP7909	49	-	-	52.0	3
AGSECO	AG Icon	47	50	43	52.3	2
OGI	Smith's Gold	46	54	48	51.6	2
AgriPro	SY Achieve CL2	45	51	43	50.3	3
OGI	Green Hammer	44	49	44	52.3	2
AgriPro	SY Rugged	44	50	42	50.5	3
KWA	Zenda	44	51	46	53.7	2
WestBred	WB4792	43	-	-	49.7	3
AgriPro	SY Razor	43	-	-	56.7	2
KWA	Joe	42	50	44	50.9	3
WestBred	WB4595	42	-	-	51.4	3
OGI	Showdown	42	46	40	48.3	2
CROPLAN	CP7826	41	52	-	50.6	2
OGI	Spirit Rider	41	49	-	47.2	4
LCS	LCS Chrome	41	45	40	51.4	2
OGI	Bentley	41	44	36	48.6	3
AgriPro	SY Flint	40	48	39	50.3	4
KWA	KS Venada	39	-	-	51.8	2
OGI	Baker's Ann	39	52	45	51.3	3
PlainsGold	Crescent AX	38	-	-	51.8	4
WestBred	WB4699	38	-	-	46.3	2
WestBred	WB4303	37	42	38	46.6	3
LCS	LCH15ACC7-7	35	-	-	51.0	2
WestBred	WB4418	35	-	-	48.8	3
OGI	Duster	34	42	41	48.7	4
LCS	LCS Pistol	34	40	36	48.1	3
WestBred	WB4515	33	46	42	47.2	3
WestBred	WB-Grainfield	33	45	40	47.2	3
AgriPro	SY Benefit	33	42	36	51.5	3
PlainsGold	Canvas	32	-	-	47.9	3
KWA	KS080093K-18	32	-	-	49.1	2
PlainsGold	Langin	32	45	-	50.1	4
AgriPro	SY Grit	31	44	36	46.0	2
OGI	Iba	30	48	42	49.5	4
OGI	Gallagher	30	47	41	46.6	3
CROPLAN	CP7869	30	-	-	49.3	3
AGSECO	AG Gallant	29	40	-	49.4	3
OGI	NF 101	29	43	40	50.8	4
AGSECO	TAM 114	29	48	45	47.7	3
OGI	Lonerider	28	45	-	51.0	3
AgriMAXX	AM Eastwood	27	38	-	47.0	3
OGI	Stardust	27	42	34	47.1	2
Watley	TAM 112	26	39	-	50.7	4
Dyna-Gro	Long Branch	21	28	26	43.3	3
Watley	TAM 204	20	30	25	44.1	3
OSU Experimentals						
	OCW04S717T-6W	60	67	-	55.3	2
	OK16D101089	55	-	-	54.6	3
	OK16729W	44	-	-	55.7	3
	OK149132C	43	-	-	51.3	3
Mean		39	47	41	50.3	3
LSD (0.05)		6	7	6	2.1	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a 1-to-5 scale, with 1 indicating no lodging. Low to moderate Septoria and leaf rust and moderate stripe rust disease pressure observed during grain-fill.

Chickasha Intensive Wheat Management Variety Trial

Planting & harvest dates: 11/6/18 & 6/13/19

Management: Grain-only, conventional tillage

Nitrogen: 46 lbs/ac soil test + 9 lbs/ac at planting + 100 lbs/ac topdress 2/15/19 + 40 lbs/ac topdress 3/19/19

Previous crop: Wheat

Soil test: pH = 7.1, P = 39, K = 274

Soil type: Dale silt loam

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
		bu/ac			--lb/bu--	
CROPLAN	CP7909	79	-	-	58.0	1
AgriPro	Bob Dole	78	77	68	57.4	1
OGI	Spirit Rider	78	78	-	56.9	2
OGI	Gallagher	77	77	67	57.4	1
OGI	Ruby Lee	76	74	66	59.3	1
WestBred	WB4792	75	-	-	56.5	1
WestBred	WB4269	75	77	70	57.2	1
AgriPro	SY Achieve CL2	75	72	65	57.8	1
WestBred	WB4595	74	-	-	58.5	1
WestBred	WB4303	73	73	66	54.2	1
WestBred	WB4699	73	-	-	54.9	1
OGI	Iba	72	73	67	58.3	1
OGI	Skydance	72	-	-	60.0	1
OGI	Green Hammer	72	71	63	57.4	1
PlainsGold	Langin	71	71	-	57.5	2
PlainsGold	Crescent AX	71	-	-	58.6	2
LCS	LCH15ACC7-7	71	-	-	58.8	1
OGI	Duster	70	68	65	56.4	2
OGI	Lonerider	70	74	-	59.4	1
OGI	Baker's Ann	69	71	65	59.1	1
KWA	Zenda	69	70	62	58.8	1
KWA	KS Venada	68	-	-	56.9	1
OGI	Doublestop CL Plus	68	69	62	59.3	1
AGSECO	AG Icon	68	68	59	56.6	1
LCS	LCS Pistol	67	64	59	55.9	1
AgriPro	SY Flint	67	71	62	56.4	1
AGSECO	TAM 114	67	74	70	55.5	1
WestBred	WB4418	66	-	-	56.2	1
AGSECO	AG Gallant	66	71	-	57.8	1
AgriPro	SY Benefit	65	70	63	57.9	1
KWA	Joe	65	71	64	57.5	1
OGI	Bentley	65	72	64	56.8	1
OGI	Smith's Gold	65	73	66	55.5	1
AgriPro	SY Rugged	64	65	58	56.4	1
CROPLAN	CP7826	64	66	-	53.5	1
Watley	TAM 112	63	65	-	58.8	1
Watley	TAM 204	63	62	56	54.6	1
OGI	Showdown	63	66	62	54.4	1
WestBred	WB-Grainfield	63	71	68	53.9	1
AgriMAXX	AM Eastwood	62	68	-	56.1	1
KWA	Larry	62	69	60	55.9	1
OGI	NF 101	61	66	61	58.6	2
WestBred	WB4515	60	67	64	56.9	1
AgriPro	SY Grit	60	70	63	55.3	1
PlainsGold	Canvas	60	-	-	54.9	1
AgriPro	SY Razor	59	-	-	57.1	1
OGI	Stardust	59	69	59	54.6	1
KWA	KS080093K-18	58	-	-	52.3	1
LCS	LCS Chrome	57	58	51	49.8	1
CROPLAN	CP7869	56	-	-	53.5	1
Dyna-Gro	Long Branch	50	51	49	49.8	1
OSU Experimentals						
	OK149132C	77	-	-	57.8	2
	OK16729W	73	-	-	57.8	1
	OK16D101089	73	-	-	58.1	1
	OCW04S717T-6W	70	72	-	57.3	1
Mean		67	70	63	56.6	1
LSD (0.05)		7	7	6	1.7	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a 1-to-5 scale, with 1 indicating no lodging.

Chickasha Standard vs. Intensive Wheat Management Comparison

Planting & harvest dates: 11/6/18 & 6/13/19

Management: Grain-only, conventional tillage

All plots had 55 lbs/ac N available at planting and received 100 lbs/ac N topdress on 2/15/19. Intensive Wheat Management (IWM) plots received 4 fl oz/ac Tilt at jointing on 2/26/19, 40 lbs/ac additional N on 3/19/19 and 13 fl oz/ac Nericor at heading on 4/26/19.

Licensee	Variety	2018-19 Grain Yield			2018-19 Test Weight		
		Standard	IWM	Diff.	Standard	IWM	Diff.
-bu/ac-							
OGI	Doublestop CL Plus	58	68	10	56.0	59.3	3.3
OGI	Skydance	54	72	18	56.4	60.0	3.6
AgriPro	Bob Dole	54	78	24	53.5	57.4	3.9
KWA	Larry	52	62	10	51.7	55.9	4.2
WestBred	WB4269	50	75	25	51.1	57.2	6.1
OGI	Ruby Lee	49	76	27	53.3	59.3	6.0
CROPLAN	CP7909	49	79	30	52.0	58.0	6.0
AGSECO	AG Icon	47	68	21	52.3	56.6	4.3
OGI	Smith's Gold	46	65	19	51.6	55.5	3.9
AgriPro	SY Achieve CL2	45	75	30	50.3	57.8	7.5
OGI	Green Hammer	44	72	28	52.3	57.4	5.1
AgriPro	SY Rugged	44	64	20	50.5	56.4	5.9
KWA	Zenda	44	69	25	53.7	58.8	5.1
WestBred	WB4792	43	75	32	49.7	56.5	6.8
AgriPro	SY Razor	43	59	16	56.7	57.1	0.4
KWA	Joe	42	65	23	50.9	57.5	6.6
WestBred	WB4595	42	74	32	51.4	58.5	7.1
OGI	Showdown	42	63	21	48.3	54.4	6.1
CROPLAN	CP7826	41	64	23	50.6	53.5	2.9
OGI	Spirit Rider	41	78	37	47.2	56.9	9.7
LCS	LCS Chrome	41	57	16	51.4	49.8	-1.6
OGI	Bentley	41	65	24	48.6	56.8	8.2
AgriPro	SY Flint	40	67	27	50.3	56.4	6.1
KWA	KS Venada	39	68	29	51.8	56.9	5.1
OGI	Baker's Ann	39	69	30	51.3	59.1	7.8
PlainsGold	Crescent AX	38	71	33	51.8	58.6	6.8
WestBred	WB4699	38	73	35	46.3	54.9	8.6
WestBred	WB4303	37	73	36	46.6	54.2	7.6
LCS	LCH15ACC7-7	35	71	36	51.0	58.8	7.8
WestBred	WB4418	35	66	31	48.8	56.2	7.4
OGI	Duster	34	70	36	48.7	56.4	7.7
LCS	LCS Pistol	34	67	33	48.1	55.9	7.8
WestBred	WB4515	33	60	27	47.2	56.9	9.7
WestBred	WB-Grainfield	33	63	30	47.2	53.9	6.7
AgriPro	SY Benefit	33	65	32	51.5	57.9	6.4
PlainsGold	Canvas	32	60	28	47.9	54.9	7.0
KWA	KS080093K-18	32	58	26	49.1	52.3	3.2
PlainsGold	Langin	32	71	39	50.1	57.5	7.4
AgriPro	SY Grit	31	60	29	46.0	55.3	9.3
OGI	Iba	30	72	42	49.5	58.3	8.8
OGI	Gallagher	30	77	47	46.6	57.4	10.8
CROPLAN	CP7869	30	56	26	49.3	53.5	4.2
AGSECO	AG Gallant	29	66	37	49.4	57.8	8.4
OGI	NF 101	29	61	32	50.8	58.6	7.8
AGSECO	TAM 114	29	67	38	47.7	55.5	7.8
OGI	Lonerider	28	70	42	51.0	59.4	8.5
AgriMAXX	AM Eastwood	27	62	35	47.0	56.1	9.1
OGI	Stardust	27	59	32	47.1	54.6	7.5
Watley	TAM 112	26	63	37	50.7	58.8	8.1
Dyna-Gro	Long Branch	21	50	29	43.3	49.8	6.5
Watley	TAM 204	20	63	43	44.1	54.6	10.4
OSU Experimentals							
	OCW04S717T-6W	60	70	10	55.3	57.3	2.0
	OK16D101089	55	73	18	54.6	58.1	3.5
	OK16729W	44	73	29	55.7	57.8	2.1
	OK149132C	43	77	34	51.3	57.8	6.5
	Mean	39	67	29	50.3	56.6	6.3
	LSD (0.05)	6	7	7	2.1	1.7	2.0

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Boldfaced values in the "Diff." column represent a statistical difference between the standard vs. intensive management averages for that variety. Low to moderate Septoria and leaf rust and moderate stripe rust disease pressure observed during grain-fill.

Goodwell Irrigated Wheat Variety Trial

Planting & harvest dates: 9/26/18 & 7/2/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Fallow
 Soil type: Gruver clay loam
 Soil test: pH = 7.6, P = 40, K = 1,290

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
bu/ac						
OGI	Baker's Ann	100	88	76	58.5	1
WestBred	WB4699	98	-	-	58.2	1
PlainsGold	Canvas	98	-	-	57.5	1
AgriPro	SY Monument	98	94	76	58.2	1
KWA	Joe	97	92	80	58.7	1
PlainsGold	Crescent AX	96	-	-	57.5	1
WestBred	WB4303	96	90	76	56.3	1
WestBred	WB4792	95	-	-	59.5	1
LCS	LCS Chrome	94	87	72	58.0	1
OGI	Lonerider	94	92	79	57.6	1
WestBred	WB-Grainfield	94	90	76	57.7	1
WestBred	WB4418	93	-	-	56.3	1
AgriMAXX	AM Eastwood	93	84	-	57.0	1
OGI	Iba	93	87	75	59.2	1
OGI	Spirit Rider	92	86	71	56.2	1
AgriPro	SY Grit	91	87	72	54.8	1
CROPLAN	CP7869	91	-	-	59.1	1
KWA	KS080093K-18	91	-	-	57.5	1
WestBred	WB4269	91	86	75	58.1	1
AgriPro	SY Rugged	90	84	75	57.6	1
WestBred	WB4595	90	-	-	59.5	1
AGSECO	AG Icon	90	89	73	58.6	1
CROPLAN	CP7909	90	-	-	58.2	1
OGI	Showdown	90	84	71	55.3	1
PlainsGold	Langin	89	85	70	57.3	1
LCS	LCH15ACC7-7	88	-	-	58.2	1
OGI	Duster	88	90	77	57.3	1
OGI	Ruby Lee	87	83	70	59.2	1
AgriPro	SY Flint	87	85	73	58.3	1
LCS	LCS Pistol	86	87	74	57.5	1
OGI	Gallagher	86	87	73	58.7	1
OGI	Bentley	85	80	71	57.0	1
KWA	Larry	85	85	73	57.7	1
Watley	TAM 204	84	82	74	53.9	1
AgriPro	Bob Dole	83	81	69	56.5	1
OGI	Skydance	83	-	-	59.0	1
AGSECO	TAM 114	82	87	72	60.3	1
WestBred	WB4515	82	74	63	57.9	1
KWA	KS Venada	80	-	-	59.1	1
OGI	Smith's Gold	79	81	69	58.9	1
OGI	Doublestop CL Plus	79	77	66	59.6	1
KWA	Zenda	79	78	70	58.5	1
AgriPro	SY Achieve CL2	78	74	64	57.5	1
Dyna-Gro	Long Branch	77	86	74	55.1	1
Watley	TAM 112	76	77	64	58.7	1
AGSECO	AG Gallant	74	73	-	57.3	1
OGI	Stardust	74	74	63	57.9	1
OGI	NF 101	72	63	57	57.3	1
AgriPro	SY Benefit	71	75	65	55.9	1
CROPLAN	CP7826	67	74	-	55.9	1
OSU Experimentals						
	OK14P212	98	88	-	56.3	1
	OK16729W	97	-	-	59.6	1
	OK14P736W	92	-	-	58.0	1
	OK149132C	88	-	-	57.3	1
	OK168512	79	-	-	57.9	1
	Mean	87	83	71	57.7	1
	LSD (0.05)	9	8	7	1.6	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. No irrigation water was applied during the season due to adequate rainfall. Very low foliar disease pressure observed throughout grain-fill.

Homestead Wheat Variety Trial

Planting & harvest dates: 10/23/18 & 6/14/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Fallow
 Soil type: Canadian fine sandy loam
 Soil test: pH = 6.4, P = 43, K = 355

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
AgriPro	Bob Dole	45	-	-	58.7	2
WestBred	WB4269	70	-	-	57.3	2
WestBred	WB4303	70	43	-	54.6	1
OGI	Doublestop CL Plus	69	41	45	61.3	1
OGI	Green Hammer	68	39	40	58.8	3
KWA	Joe	68	41	45	57.3	2
OGI	Ruby Lee	66	39	45	56.4	2
AgriPro	SY Monument	66	41	46	55.1	1
LCS	LCS Chrome	66	38	44	56.9	1
OGI	Gallagher	65	41	45	56.3	2
AGSECO	AG Icon	64	-	-	57.1	2
OGI	Smith's Gold	64	40	42	56.5	2
OGI	Bentley	63	39	43	55.2	2
OGI	Spirit Rider	62	39	-	54.0	2
OGI	Showdown	60	37	40	55.4	2
AgriPro	SY Rugged	60	-	-	55.8	2
OGI	Iba	59	40	44	57.1	2
WestBred	WB4515	59	38	-	57.1	2
AgriPro	SY Achieve CL2	56	35	-	54.9	1
WestBred	WB-Grainfield	55	32	40	53.6	2
OGI	Duster	52	33	39	53.3	3
CROPLAN	CP7826	50	-	-	52.8	2
AgriMAXX	AM Eastwood	48	-	-	53.3	2
OGI	Stardust	48	32	36	55.3	2
KWA	Larry	47	29	35	52.6	2
AgriPro	SY Grit	47	30	-	52.5	1
AgriPro	SY Flint	47	31	35	52.7	3
AgriPro	SY Benefit	45	31	-	55.2	2
Watley	TAM 204	42	28	34	51.5	2
Dyna-Gro	Long Branch	41	-	-	50.1	1
OSU Experimentals						
	OCW04S717T-6W	66	37	-	58.4	1
	OK14P212	59	37	-	54.5	2
Mean		59	37	41	55.3	2
LSD (0.05)		7	7	5	1.8	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Moderate leaf rust and low to moderate Septoria disease pressure observed during grain-fill.

Hooker Wheat Variety Trial

Planting & harvest dates: 9/26/18 & 6/26/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Fallow
 Soil type: Dalhart fine sandy loam
 Soil test: pH = 6.7, P = 60, K = 703

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year †		
-----bu/ac-----						
PlainsGold	Langin	65	55	-	55.8	1
KWA	Joe	60	49	-	55.6	1
OGI	Bentley	59	49	52	54.0	1
OGI	Showdown	58	47	-	53.7	2
WestBred	WB-Grainfield	56	48	55	56.1	1
OGI	Lonerider	55	45	47	55.3	1
LCS	LCS Chrome	55	44	-	52.9	1
Dyna-Gro	Long Branch	55	49	-	52.0	1
OGI	Baker's Ann	55	45	-	57.5	1
AgriMAXX	AM Eastwood	54	-	-	53.9	1
Watley	TAM 204	53	40	46	50.4	1
AgriPro	SY Rugged	53	42	-	51.5	2
OGI	Iba	52	43	44	55.5	1
Watley	TAM 112	51	43	42	55.3	2
OGI	Ruby Lee	50	44	44	54.3	1
KWA	Larry	50	43	-	53.8	1
OGI	Doublestop CL Plus	49	42	46	56.2	1
OGI	Smith's Gold	49	41	-	54.4	1
WestBred	WB4269	49	-	-	53.1	1
OGI	Duster	47	41	46	50.2	1
AGSECO	TAM 114	46	39	39	55.7	1
WestBred	WB4303	45	38	-	49.3	1
AgriPro	SY Grit	44	37	-	51.6	1
AGSECO	AG Icon	43	-	-	52.8	1
AgriPro	SY Monument	42	41	41	52.7	1
CROPLAN	CP7826	39	-	-	50.5	1
AGSECO	AG Gallant	39	-	-	53.8	1
OGI	Gallagher	34	32	36	50.4	1
OSU Experimentals						
	OK168512	63	-	-	58.1	1
	OK14P736W	55	-	-	56.0	1
	OK14P212	46	41	-	53.3	1
Mean		51	43	45	53.7	1
LSD (0.05)		7	5	6	1.4	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Low Septoria disease pressure observed during grain-fill.

† Three-year results are the average of 2019, 2018, and 2016. Data was not reported in 2017 due to excessive variability.

Keyes Wheat Variety Trial

Planting & harvest dates: 9/27/18 & 7/1/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Fallow
 Soil type: Sherm clay loam
 Soil test: pH = 7.6, P = 166, K = 1,283

Licensee	Variety	Grain Yield		Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year		
<i>bu/ac</i>					
PlainsGold	Langin	94	63	59.0	1
OGI	Bentley	91	63	58.5	1
OGI	Duster	89	60	59.7	1
WestBred	WB-Grainfield	89	61	59.4	1
AGSECO	AG Icon	88	-	60.0	1
Watley	TAM 112	87	61	60.4	1
KWA	Joe	87	61	60.9	1
AgriPro	SY Rugged	86	58	58.9	1
LCS	LCS Chrome	85	54	58.8	1
KWA	Larry	85	57	59.3	1
OGI	Showdown	85	58	59.0	1
OGI	Lonerider	84	56	59.3	1
OGI	Iba	83	56	61.5	1
AgriMAXX	AM Eastwood	82	-	57.9	1
Dyna-Gro	Long Branch	82	58	57.1	1
AgriPro	SY Monument	81	57	58.4	1
OGI	Gallagher	81	54	58.7	1
WestBred	WB4269	80	-	59.1	1
Watley	TAM 204	79	50	55.3	1
OGI	Smith's Gold	77	52	59.4	1
OGI	Doublestop CL Plus	76	54	60.3	1
CROPLAN	CP7826	76	-	57.5	1
WestBred	WB4303	75	50	54.9	1
OGI	Ruby Lee	73	50	58.5	1
AgriPro	SY Grit	71	49	56.3	1
AGSECO	TAM 114	71	50	59.8	1
AGSECO	AG Gallant	70	-	58.3	1
OSU Experimentals					
	OK168512	90	-	61.0	1
	OK14P212	86	60	59.9	1
	OK14P736W	77	-	59.8	1
Mean		82	56	58.9	1
LSD (0.05)		10	6	0.7	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Very low foliar disease pressure observed during grain-fill.

Kildare Wheat Variety Trial

Planting & harvest dates: 10/23/18 & 6/27/19
 Management: Grain-only
 Tillage: No-till

Previous crop: Wheat
 Soil type: Tabler silt loam
 Soil test: pH = 7.1, P = 82, K = 381

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
<i>bu/ac</i>						
OGI	Bentley	77	59	58	55.5	3
AgriPro	Bob Dole	76	56	-	56.3	3
KWA	Zenda	75	52	-	58.3	2
WestBred	WB4515	74	-	-	57.9	3
AgriPro	SY Grit	73	-	-	56.1	3
AgriMAXX	AM Eastwood	73	-	-	56.9	3
AgriPro	SY Achieve CL2	72	53	-	56.8	3
WestBred	WB4303	72	52	-	53.9	2
OGI	Showdown	70	54	54	53.7	4
OGI	Doublestop CL Plus	68	56	56	58.3	2
CROPLAN	CP7826	66	-	-	53.1	3
AgriPro	SY Rugged	65	-	-	54.8	4
OGI	Baker's Ann	65	-	-	56.1	3
OGI	Green Hammer	64	-	-	55.8	4
WestBred	WB4269	62	52	-	55.4	4
AGSECO	AG Icon	62	-	-	55.5	3
LCS	LCS Chrome	62	52	52	55.5	2
OGI	Stardust	61	48	-	55.7	4
OGI	Ruby Lee	61	49	49	56.1	4
OGI	Gallagher	61	44	44	55.6	4
KWA	Joe	59	51	53	54.4	3
OGI	Iba	59	47	50	55.4	4
OGI	Spirit Rider	58	46	47	51.4	3
OGI	Smith's Gold	55	43	43	55.3	3
OSU Experimentals						
	OK16D101089	72	-	-	56.5	4
Mean		66	51	51	55.6	3
LSD (0.05)		6	6	4	1.2	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Low to moderate Septoria disease pressure observed during grain-fill.

Kingfisher Wheat Variety Trial

Planting & harvest dates: 10/3/18 & 6/15/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Tillman silt loam
 Soil test: pH = 6.4, P = 46, K = 595

Licensee	Variety	Grain Yield			Test Weight 2017-18	Lodging 2017-18
		2017-18	2-Year	3-Year		
-----bu/ac-----						
WestBred	WB4303	85	46	-	56.4	2
WestBred	WB4269	83	-	-	57.1	3
AgriPro	SY Achieve CL2	78	44	-	57.1	3
OGI	Iba	75	44	36	58.2	4
AgriPro	SY Rugged	73	42	-	57.0	4
LCS	LCS Chrome	73	43	39	57.7	2
KWA	Joe	72	41	36	57.3	3
AgriMAXX	AM Eastwood	72	-	-	57.3	3
OGI	Bentley	71	46	37	55.8	3
OGI	Ruby Lee	70	44	36	58.0	3
AgriPro	Bob Dole	69	-	-	58.2	3
OGI	Duster	68	40	35	57.8	4
OGI	Showdown	68	39	35	58.0	3
AgriPro	SY Flint	67	38	32	56.7	4
KWA	Larry	66	39	32	57.9	2
OGI	Green Hammer	66	38	30	58.9	3
AGSECO	AG Icon	66	-	-	57.5	2
OGI	Gallagher	65	40	34	58.5	3
AgriPro	SY Benefit	65	37	-	57.2	3
OGI	Smith's Gold	64	37	33	58.7	4
WestBred	WB-Grainfield	63	36	32	55.8	3
AgriPro	SY Monument	60	35	31	57.0	3
OGI	Doublestop CL Plus	60	34	30	60.7	2
CROPLAN	CP7826	60	-	-	55.0	3
Watley	TAM 204	58	35	32	53.5	3
WestBred	WB4515	58	34	-	58.2	2
AgriPro	SY Grit	57	31	-	56.1	2
Dyna-Gro	Long Branch	49	-	-	53.9	3
OSU Experimentals						
	OK16D101089	65	-	-	57.6	4
	OCW04S717T-6W	64	35	-	57.9	1
	OK149132C	61	-	-	58.2	3
Mean	67	39	34		57.2	3
LSD (0.05)	8	5	4		1.2	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Moderate Septoria and leaf rust disease pressure observed during grain-fill.

Lahoma Regional Wheat Variety Trial

Planting & harvest dates: 11/2/18 & 6/24/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 6.1, P = 64, K = 442

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
		bu/ac		lb/bu		
AgriPro	Bob Dole	59	39	50	52.4	3
OGI	Green Hammer	52	42	54	52.4	3
WestBred	WB4792	52	-	-	51.9	2
KWA	KS Venada	52	-	-	53.1	2
OGI	Baker's Ann	50	41	50	50.4	3
KWA	Zenda	48	37	47	53.3	2
OGI	Skydance	48	-	-	53.7	4
WestBred	WB4699	47	-	-	49.2	2
KWA	Joe	46	39	50	51.5	3
OGI	Gallagher	45	40	49	50.6	2
AGSECO	AG Icon	44	39	48	50.8	2
OGI	Doublestop CL Plus	44	39	47	51.9	3
WestBred	WB4303	44	36	47	46.0	2
KWA	KS080093K-18	43	-	-	49.8	3
OGI	Ruby Lee	43	44	51	50.9	2
OGI	NF 101	43	32	42	53.1	3
LCS	LCS Chrome	42	38	45	51.2	2
AgriPro	SY Monument	41	33	46	49.7	3
AgriPro	SY Rugged	41	34	44	46.8	3
WestBred	WB4595	40	-	-	50.7	3
LCS	LCH15ACC7-7	40	-	-	51.7	2
WestBred	WB4269	40	44	55	50.7	3
OGI	Smith's Gold	39	37	46	51.0	3
AGSECO	TAM 114	38	33	45	49.8	3
CROPLAN	CP7909	38	-	-	49.2	4
PlainsGold	Crescent AX	37	-	-	49.9	4
OGI	Spirit Rider	37	35	-	45.5	3
OGI	Bentley	36	42	46	46.0	3
WestBred	WB4418	36	-	-	48.0	2
OGI	Iba	35	32	40	49.0	3
PlainsGold	Langin	35	37	45	49.2	3
AgriPro	SY Achieve CL2	35	31	42	50.0	3
LCS	LCS Pistol	34	35	40	47.8	3
OGI	Duster	34	30	37	47.6	3
AGSECO	AG Gallant	34	38	-	49.6	3
CROPLAN	CP7869	33	-	-	48.3	4
OGI	Showdown	31	31	41	45.3	3
CROPLAN	CP7826	30	36	-	46.5	3
AgriPro	SY Flint	28	28	37	46.6	4
AgriPro	SY Benefit	27	30	37	48.5	3
KWA	Larry	26	28	33	45.8	3
OGI	Lonerider	25	28	-	49.0	4
WestBred	WB4515	24	30	42	45.5	3
AgriPro	SY Grit	24	23	33	43.4	2
Dyna-Gro	Long Branch	22	30	35	44.1	3
OGI	Stardust	21	29	34	45.5	3
PlainsGold	Canvas	20	-	-	42.7	4
WestBred	WB-Grainfield	19	24	37	43.2	4
Watley	TAM 112 [†]	12	26	29	-	4
AgriMAXX	AM Eastwood [†]	12	19	-	-	4
Watley	TAM 204 [†]	10	21	30	-	4
OSU Experimentals						
	OK16D101089	56	-	-	54.7	3
	OK16729W	51	-	-	53.5	3
	OCW04S717T-6W	50	37	-	55.6	2
	OK15MASBx7 8-1	40	-	-	46.4	3
	OK149132C	29	-	-	47.1	3
Mean		37	34	43	49.2	3
LSD (0.05)		4	9	7	1.9	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Moderate to severe leaf rust disease pressure observed during grain-fill.

[†] Grain samples were too small to measure test weight.

Lahoma Regional Wheat Variety Trial - Fungicide Treated

Planting & harvest dates: 11/2/18 & 6/24/19
 Management: Grain-only, conventional tillage
 Fungicide: 4 fl oz/ac TebuStar at heading on 5/5/19

Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 6.1, P = 64, K = 442

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
		-----bu/ac-----		---lb/bu---		
AgriPro	Bob Dole	73	44	54	56.5	2
KWA	Zenda	72	51	61	58.4	2
OGI	Baker's Ann	71	51	60	57.1	2
KWA	KS Venada	71	-	-	57.4	1
WestBred	WB4699	70	-	-	54.0	2
WestBred	WB4792	70	-	-	56.0	2
WestBred	WB4303	67	47	58	51.1	2
OGI	Gallagher	67	51	59	56.2	2
OGI	Skydance	67	-	-	58.7	3
WestBred	WB4595	66	-	-	56.7	2
OGI	Ruby Lee	66	56	63	57.4	3
CROPLAN	CP7909	66	-	-	55.9	3
OGI	Green Hammer	66	49	58	57.0	3
OGI	Bentley	65	57	64	53.6	2
OGI	Spirit Rider	65	50	-	53.2	2
OGI	Smith's Gold	65	50	59	56.0	2
LCS	LCH15ACC7-7	65	-	-	57.2	2
AGSECO	TAM 114	64	47	61	56.6	2
PlainsGold	Langin	64	52	63	55.5	3
KWA	KS080093K-18	64	-	-	55.6	2
AgriPro	SY Monument	64	43	57	54.9	2
LCS	LCS Pistol	64	47	56	55.3	3
OGI	Iba	64	46	54	56.3	2
PlainsGold	Crescent AX	63	-	-	55.8	3
OGI	Doublestop CL Plus	63	48	54	57.6	2
AGSECO	AG Icon	62	46	53	55.0	2
AgriPro	SY Achieve CL2	62	43	56	55.6	3
WestBred	WB4269	62	58	68	55.0	2
OGI	Lonerider	62	44	-	57.7	2
KWA	Joe	61	48	58	55.3	2
CROPLAN	CP7826	61	50	-	54.5	2
LCS	LCS Chrome	60	45	52	54.4	1
OGI	NF 101	60	42	53	56.8	3
CROPLAN	CP7869	60	-	-	55.0	2
AGSECO	AG Gallant	59	51	-	55.4	2
OGI	Showdown	57	43	54	52.2	2
AgriPro	SY Rugged	56	41	52	52.1	2
WestBred	WB4418	56	-	-	52.8	2
WestBred	WB4515	54	43	58	54.6	2
OGI	Duster	53	39	47	52.7	3
AgriPro	SY Flint	53	37	48	53.7	3
Dyna-Gro	Long Branch	53	49	55	51.7	2
KWA	Larry	53	40	52	52.3	2
AgriPro	SY Benefit	51	42	53	55.9	2
OGI	Stardust	50	39	47	52.9	2
Watley	TAM 204	50	39	51	48.7	2
AgriPro	SY Grit	50	34	49	51.8	2
PlainsGold	Canvas	49	-	-	50.4	2
Watley	TAM 112	48	44	52	54.0	3
WestBred	WB-Grainfield	48	37	54	52.0	2
AgriMAXX	AM Eastwood	43	35	-	50.1	2
OSU Experimentals						
	OK16D101089	72	-	-	57.8	2
	OK16729W	71	-	-	58.2	2
	OK15MASBx7 8-1	66	-	-	53.8	2
	OCW04S717T-6W	62	43	-	56.2	2
	OK149132C	57	-	-	53.7	2
Mean		61	46	56	54.8	2
LSD (0.05)		5	7	6	1.4	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging.

Lahoma - Fungicide vs. No Fungicide Comparison

Planting & harvest dates: 11/2/18 & 6/24/19

Management: Grain-only, conventional tillage

Fungicide: 4 fl oz/ac TebuStar at heading on 5/5/19

Previous crop: Wheat

Soil type: Pond Creek silt loam

Soil test: pH = 6.1, P = 64, K = 442

Licensee	Variety	2018-19 Grain Yield			2018-19 Test Weight		
		No fungicide	Fungicide	Diff.	No fungicide	Fungicide	Diff.
-----bu/ac-----							
AgriPro	Bob Dole	59	73	14	52.4	56.5	4.1
OGI	Green Hammer	52	66	14	52.4	57.0	4.6
WestBred	WB4792	52	70	18	51.9	56.0	4.1
KWA	KS Venada	52	71	19	53.1	57.4	4.3
OGI	Baker's Ann	50	71	21	50.4	57.1	6.7
KWA	Zenda	48	72	24	53.3	58.4	5.1
OGI	Skydance	48	67	19	53.7	58.7	5.0
WestBred	WB4699	47	70	23	49.2	54.0	4.8
KWA	Joe	46	61	15	51.5	55.3	3.8
OGI	Gallagher	45	67	22	50.6	56.2	5.6
AGSECO	AG Icon	44	62	18	50.8	55.0	4.2
OGI	Doublestop CL Plus	44	63	19	51.9	57.6	5.7
WestBred	WB4303	44	67	23	46.0	51.1	5.1
KWA	KS080093K-18	43	64	21	49.8	55.6	5.8
OGI	Ruby Lee	43	66	23	50.9	57.4	6.5
OGI	NF 101	43	60	17	53.1	56.8	3.7
LCS	LCS Chrome	42	60	18	51.2	54.4	3.2
AgriPro	SY Monument	41	64	23	49.7	54.9	5.2
AgriPro	SY Rugged	41	56	15	46.8	52.1	5.3
WestBred	WB4595	40	66	26	50.7	56.7	6.0
LCS	LCH15ACC7-7	40	65	25	51.7	57.2	5.5
WestBred	WB4269	40	62	22	50.7	55.0	4.3
OGI	Smith's Gold	39	65	26	51.0	56.0	5.0
AGSECO	TAM 114	38	64	26	49.8	56.6	6.8
CROPLAN	CP7909	38	66	28	49.2	55.9	6.7
PlainsGold	Crescent AX	37	63	26	49.9	55.8	5.9
OGI	Spirit Rider	37	65	28	45.5	53.2	7.7
OGI	Bentley	36	65	29	46.0	53.6	7.6
WestBred	WB4418	36	56	20	48.0	52.8	4.8
OGI	Iba	35	64	29	49.0	56.3	7.3
PlainsGold	Langin	35	64	29	49.2	55.5	6.3
AgriPro	SY Achieve CL2	35	62	27	50.0	55.6	5.6
LCS	LCS Pistol	34	64	30	47.8	55.3	7.5
OGI	Duster	34	53	19	47.6	52.7	5.1
AGSECO	AG Gallant	34	59	25	49.6	55.4	5.8
CROPLAN	CP7869	33	60	27	48.3	55.0	6.7
OGI	Showdown	31	57	26	45.3	52.2	6.9
CROPLAN	CP7826	30	61	31	46.5	54.5	8.0
AgriPro	SY Flint	28	53	25	46.6	53.7	7.1
AgriPro	SY Benefit	27	51	24	48.5	55.9	7.4
KWA	Larry	26	53	27	45.8	52.3	6.5
OGI	Lonerider	25	62	37	49.0	57.7	8.7
WestBred	WB4515	24	54	30	45.5	54.6	9.1
AgriPro	SY Grit	24	50	26	43.4	51.8	8.4
Dyna-Gro	Long Branch	22	53	31	44.1	51.7	7.6
OGI	Stardust	21	50	29	45.5	52.9	7.4
PlainsGold	Canvas	20	49	29	42.7	50.4	7.7
WestBred	WB-Grainfield	19	48	29	43.2	52.0	8.8
Watley	TAM 112	12	48	36	-	54.0	-
AgriMAXX	AM Eastwood	12	43	31	-	50.1	-
Watley	TAM 204	10	50	40	-	48.7	-
OSU Experimentals							
	OK16D101089	56	72	16	54.7	57.8	3.1
	OK16729W	51	71	20	53.5	58.2	4.7
	OCW04S717T-6W	50	62	12	55.6	56.2	0.6
	OK15MASBx7 8-1	40	66	26	46.4	53.8	7.4
	OK149132C	29	57	28	47.1	53.7	6.6
	Mean	37	61	24	49.2	54.8	5.9
	LSD (0.05)	4	5	5	1.9	1.4	1.6

Notes: Grain yields adjusted to 12 percent moisture. Shaded values are not statistically different from the highest value within a column. Boldfaced values in the "Diff." column represent a statistical difference between the fungicide vs. no fungicide averages for that variety. Moderate to severe leaf rust disease pressure observed during grain-fill.

Lamont Wheat Variety Trial

Planting & harvest dates: 10/31/18 & 6/27/19
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 6.1, P = 55, K = 344

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year†		
-----bu/ac-----						
AgriPro	Bob Dole	55	44	-	50.7	4
KWA	Zenda	43	36	-	51.4	4
OGI	Doublestop CL Plus	42	39	49	48.2	3
AgriPro	SY Rugged	40	-	-	43.7	4
OGI	Bentley	38	35	52	44.4	4
OGI	Baker's Ann	38	32	-	45.9	4
OGI	Green Hammer	37	35	-	45.5	4
WestBred	WB4303	37	34	-	42.0	3
OGI	Ruby Lee	37	34	40	46.3	3
KWA	Joe	35	33	-	48.0	4
AGSECO	AG Icon	35	-	-	46.6	4
OGI	Spirit Rider	35	30	47	44.9	4
AgriPro	SY Achieve CL2	35	31	-	45.2	4
AgriPro	SY Monument	33	31	44	47.1	3
OGI	Smith's Gold	32	28	-	46.7	4
WestBred	WB4269	32	34	-	47.1	4
LCS	LCS Chrome	30	31	-	46.5	3
CROPLAN	CP7826	30	-	-	43.4	4
AgriPro	SY Benefit	29	27	-	48.3	4
KWA	Larry	28	32	-	42.1	4
OGI	Showdown	28	26	40	41.3	4
OGI	Gallagher	27	23	36	44.1	4
AgriPro	SY Grit	27	28	-	43.0	3
AgriPro	SY Flint	25	29	37	43.9	4
WestBred	WB4515	24	30	-	42.6	4
OGI	Stardust	24	26	40	41.9	3
OGI	Iba	21	26	40	43.4	4
AgriMAXX	AM Eastwood	18	-	-	40.1	4
WestBred	WB-Grainfield	16	21	41	39.8	4
OGI	Duster	12	17	32	35.9	4
Mean		31	30	42	44.7	4
LSD (0.05)		5	6	7	2.7	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a 1 to 5 scale, with 1 indicating no lodging. Fusarium head blight observed during grain-fill and sooty mold observed prior to harvest.

† Three-year results are the average of 2019, 2018 and 2016. Data was not collected from this location in 2017.

Thomas Wheat Variety Trial

Planting & harvest dates: 10/2/18 & 6/14/19

Management: Grain-only

Tillage: Conventional

Previous crop: Wheat

Soil type: Pond Creek silt loam

Soil test: pH = 5.9, P = 32, K = 405

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
WestBred	WB4269	68	-	-	59.0	4
WestBred	WB4303	65	41	-	51.3	3
AGSECO	AG Icon	59	-	-	56.2	3
OGI	Green Hammer	57	37	-	55.6	3
LCS	LCS Chrome	55	35	44	54.6	3
OGI	Doublestop CL Plus	54	38	45	59.4	3
WestBred	WB4515	54	41	-	56.4	3
OGI	Smith's Gold	53	35	45	55.3	4
OGI	Ruby Lee	51	34	41	57.1	4
AgriPro	SY Rugged	50	34	-	53.6	4
AgriPro	SY Monument	49	33	44	52.9	4
OGI	Bentley	48	36	43	52.3	4
OGI	Gallagher	48	32	45	54.3	4
OGI	Showdown	45	31	40	53.5	3
OGI	Duster	43	28	39	52.6	4
CROPLAN	CP7826	42	-	-	51.6	4
AgriMAXX	AM Eastwood	38	-	-	49.9	4
OGI	Iba	37	26	39	54.4	4
KWA	Larry	36	26	34	52.2	4
AgriPro	SY Flint	36	23	33	53.0	4
Dyna-Gro	Long Branch	35	28	-	49.4	4
Watley	TAM 204	33	24	34	47.3	4
AgriPro	SY Grit	32	24	-	50.4	3
OSU Experimentals						
	OK16D101089	63	-	-	58.9	4
	OK149132C	51	-	-	58.4	3
	OK14P212	36	25	-	51.1	4
Mean		48	32	40	53.9	3
LSD (0.05)		10	7	5	2.7	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Moderate leaf and stripe rust and low to moderate Septoria disease pressure observed during grain-fill.

Union City Wheat Variety Trial

Planting & harvest dates: 11/5/18 & 7/5/19
 Management: Dual-purpose
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 7.3, P = 70, K = 283

Licensee	Variety	Grain Yield			Test Weight 2018-19	Lodging 2018-19
		2018-19	2-Year	3-Year		
-----bu/ac-----						
AGSECO	AG Icon	55	-	-	50.4	3
OGI	Doublestop CL Plus	55	41	40	53.2	3
OGI	Ruby Lee	52	35	31	49.6	3
WestBred	WB4269	52	-	-	50.4	4
AgriPro	SY Razor	51	-	-	54.5	4
AgriPro	SY Rugged	50	31	-	48.2	4
OGI	Smith's Gold	49	30	35	49.4	3
CROPLAN	CP7826	47	-	-	47.9	4
OGI	Green Hammer	46	31	-	47.2	4
OGI	Bentley	43	35	37	43.4	3
OGI	Showdown	42	30	36	42.5	3
OGI	Gallagher	41	26	29	44.5	3
LCS	LCS Chrome	41	31	34	48.0	3
WestBred	WB4303	40	27	-	41.6	3
OGI	Duster	40	27	29	47.1	4
OGI	Iba	39	30	30	47.7	4
AgriPro	SY Flint	38	28	33	45.1	4
Watley	TAM 204	38	24	31	42.7	4
OGI	NF 101	36	22	-	47.1	4
AgriPro	SY Grit	32	25	-	42.0	2
WestBred	WB4515	31	24	-	41.5	3
Dyna-Gro	Long Branch	31	-	-	40.9	4
AgriMAXX	AM Eastwood	22	-	-	35.1	3
OSU Experimentals						
	OK16D101089	62	-	-	51.7	4
	OK149132C	50	-	-	50.1	4
	OCW04S717T-6W	46	-	-	51.0	3
	OK14P212	31	26	-	41.7	4
Mean		43	29	33	46.5	3
LSD (0.05)		6	6	6	2.7	

Notes: Grain yields adjusted to 12 percent moisture content. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5 with 1 indicating no lodging. Plots were not grazed due to the delayed planting date. Low to moderate Septoria and leaf rust disease pressure observed throughout grain-fill. Harvest was extremely delayed due to rain.

Walters Wheat Variety Trial

Planting & harvest dates: 9/18/18 & 6/7/19
 Management: Dual-purpose
 Tillage: No-till

Previous crop: Canola
 Soil type: Foard silt loam
 Soil test: pH = 6.4, P = 28, K = 335

Licensee	Variety	2017-18	Grain Yield		Test Weight 2017-18	Lodging 2017-18
			2-Year	3-Year		
			-----bu/ac-----		---lb/bu---	
OGI	Showdown	38	53	43	58.5	3
OGI	Doublestop CL Plus	34	51	41	60.3	3
LCS	LCS Chrome	30	49	40	58.0	2
OGI	Duster	26	45	36	58.3	4
OGI	Ruby Lee	26	39	32	59.8	3
OGI	Green Hammer	25	42	-	58.9	4
AgriPro	SY Flint	23	41	33	59.0	3
OGI	Smith's Gold	22	42	34	58.8	3
OGI	Iba	21	44	36	58.5	3
CROPLAN	CP7826	20	-	-	57.1	2
OGI	Bentley	20	42	34	58.9	2
OGI	Gallagher	19	38	31	56.6	3
WestBred	WB4269	18	-	-	58.6	2
AgriPro	SY Grit	15	38	-	57.4	2
OGI	Skydance	15	-	-	59.1	3
AgriPro	SY Rugged	15	41	-	59.2	2
AgriPro	SY Benefit	15	32	-	58.3	2
OGI	NF 101	12	27	-	54.7	4
AgriMAXX	AM Eastwood	9	-	-	55.5	3
OSU Experimentals						
	OK14P212	24	-	-	58.4	3
	OK14P736W	18	-	-	57.0	4
	OK16D101089	17	-	-	58.3	3
Mean		21	42	36	58.1	3
LSD (0.05)		4	6	4	1.6	

Notes: Grain yields adjusted to 12 percent moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 to 5, with 1 indicating no lodging. Plots were grazed from 12/11/18 through 3/1/19 at a stocking rate of 310 pounds per acre (1.9 acres per head). Low stripe and leaf rust disease pressure observed throughout grain-fill. TAM 204, SY Razor and WB4303 were removed from the analysis due to wild hog damage.

2018-2019 Oklahoma wheat variety performance tests – heading date and plant height.

Licensee	Variety	Altus	Chickasha	Goodwell			Altus	Chickasha	Goodwell		
				Irrigated	Lahoma	Stillwater			Irrigated	Lahoma	Stillwater
-----50% heading-----											
AGSECO	AG Gallant	4/10	4/23	5/2	4/28	4/24	28	33	31	29	24
AGSECO	AG Icon	4/12	4/29	5/8	5/5	4/26	31	32	35	35	26
AgriMAXX	AM Eastwood	4/10	4/24	4/30	4/29	4/25	26	27	33	31	31
OGI	Baker's Ann	4/9	4/22	5/4	4/28	4/23	31	32	32	36	34
OGI	Bentley	4/12	4/25	5/7	5/2	4/23	34	28	37	39	28
AgriPro	Bob Dole	4/12	4/26	5/7	4/30	4/23	33	35	43	40	28
PlainsGold	Canvas	4/12	4/29	5/7	5/11	4/29	31	30	32	34	28
CROPLAN	CP7826	4/16	5/2	5/7	5/11	4/29	35	27	36	38	33
CROPLAN	CP7869	4/18	5/6	5/8	5/13	5/6	31	36	30	33	30
CROPLAN	CP7909	4/12	4/24	5/3	4/29	4/25	31	32	32	33	35
PlainsGold	Crescent AX	4/11	4/24	5/3	4/28	4/23	30	31	34	36	30
OGI	Doublestop CL Plus	4/16	4/29	5/9	5/8	4/28	35	31	36	37	30
OGI	Duster	4/16	4/25	5/8	5/2	4/24	31	28	33	33	24
OGI	Gallagher	4/16	4/25	5/8	5/2	4/24	31	24	32	33	23
OGI	Green Hammer	4/10	4/29	-	5/5	4/25	35	32	-	39	29
OGI	Iba	4/12	4/25	5/9	5/2	4/23	33	29	30	31	26
KWA	Joe	4/15	4/29	5/8	5/7	4/27	30	36	37	32	27
KWA	KS Venada	4/16	4/26	5/8	5/6	4/26	31	30	36	37	27
KWA	KS080093K-18	4/15	4/29	5/7	5/6	4/27	30	38	33	38	27
PlainsGold	Langin	4/10	4/23	4/30	4/28	4/23	27	28	30	32	28
KWA	Larry	4/12	4/25	5/10	5/7	4/26	32	31	35	36	28
LCS	LCH15ACC7-7	4/8	4/22	5/4	4/29	4/23	29	32	31	33	30
LCS	LCS Chrome	4/18	5/6	5/10	5/10	4/29	34	31	34	37	24
LCS	LCS Pistol	4/10	4/25	5/4	5/1	4/26	31	38	33	34	24
OGI	Lonerider	4/15	4/29	5/9	5/2	4/24	33	28	32	30	24
Dyna-Gro	Long Branch	4/17	5/6	5/8	5/11	4/30	35	30	36	34	30
OGI	NF 101	4/10	4/23	5/8	4/29	4/22	35	32	33	37	30
OGI	Ruby Lee	4/9	4/22	5/6	4/28	4/22	32	30	35	36	30
OGI	Showdown	4/11	4/29	5/7	5/6	4/26	34	30	37	36	36
OGI	Skydance	4/12	4/22	5/7	4/29	4/23	31	31	38	37	31
OGI	Smith's Gold	4/11	4/29	5/9	5/6	4/26	33	31	32	32	26
OGI	Spirit Rider	4/10	4/23	5/4	4/29	4/25	27	29	32	30	22
OGI	Stardust	4/15	4/29	5/2	5/2	4/22	30	33	35	33	26
AgriPro	SY Achieve CL2	4/9	4/26	5/3	4/30	4/22	29	35	33	36	21
AgriPro	SY Benefit	4/10	4/25	5/7	5/2	4/23	29	27	32	35	30
AgriPro	SY Flint	4/11	4/23	5/4	5/1	4/24	27	28	33	33	27
AgriPro	SY Grit	4/10	4/22	5/7	5/2	4/23	28	30	37	36	28
AgriPro	SY Monument	-	-	5/10	5/6	4/27	-	-	32	33	26
AgriPro	SY Razor	4/12	4/29	-	-	4/28	31	31	-	-	30
AgriPro	SY Rugged	4/9	4/26	5/8	5/2	4/25	29	35	32	31	28
Watley	TAM 112	4/7	4/25	5/3	5/3	4/24	29	31	32	34	30
AGSECO	TAM 114	4/11	4/26	5/7	5/5	4/28	30	30	34	36	27
Watley	TAM 204	4/11	4/29	5/7	5/9	4/27	30	29	31	32	26
WestBred	WB4269	4/8	4/29	5/3	5/6	4/23	29	35	28	33	24
WestBred	WB4303	4/10	4/25	5/8	5/1	4/21	31	32	31	33	28
WestBred	WB4418	4/11	4/25	5/8	5/1	4/26	31	33	31	30	26
WestBred	WB4515	4/17	4/29	5/8	5/5	4/27	32	28	32	33	25
WestBred	WB4595	4/12	4/25	5/9	5/5	4/26	34	30	33	33	26
WestBred	WB4699	4/16	4/29	5/8	5/7	4/27	27	32	29	29	30
WestBred	WB4792	4/12	4/29	5/9	5/6	4/26	33	24	36	34	30
WestBred	WB-Grainfield	4/16	4/30	5/7	5/6	4/28	33	30	35	35	25
KWA	Zenda	4/12	4/26	5/7	5/5	4/26	31	30	34	35	25
OSU Experimentals											
	OCW04S717T-6W	-	4/29	-	5/8	4/28	-	32	-	34	30
	OK149132C	4/8	4/22	5/3	4/28	4/24	31	35	35	33	23
	OK14P212	4/14	-	5/8	-	4/26	34	-	34	-	30
	OK14P736W	4/11	-	5/4	-	4/24	33	28	36	-	28
	OK15MASBx7 8-1	-	-	5/6	5/5	4/25	-	-	-	29	30
	OK16729W	4/15	4/26	5/7	5/5	4/23	30	-	35	37	28
	OK168512	-	-	-	-	4/23	-	-	30	-	29
	OK16D101089	4/14	4/25	-	4/29	4/25	30	33	-	33	27

Mean 4/12 4/26 5/6 5/3 4/25 31 31 34 34 28

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



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Wheat protein data are available in Extension Current Report CR-2135 Protein Content of Winter Wheat Varieties in Oklahoma, 2018-2019.

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Bringing the University to You!

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.

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