



Current Report

Oklahoma Cooperative Extension Fact Sheets are also available on our website at:
www.osuextra.com

2015-2016 Small Grains Variety Performance Tests

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At the time of this report, 2016 Oklahoma wheat production is estimated to be approximately 132 million bushels, which is about 34 percent greater than our 2015 production (Table 1) and 277 percent greater than production in 2014. Although the estimated harvested acres is lower than 2015, the statewide average yield is projected at 40 bushels per acre, and this is a 14 bushels per acre (54 percent) increase, compared to 2015 (Table 1). Based on these projections, this would be the largest wheat production since 2012, but the average yield would be a new state record.

Table 1. Oklahoma wheat production for 2014 and 2015 as estimated by OK NASS, July 2016.

	2015	2016
Harvested Acres	3.7 million	3.3 million
Yield (bu/ac)	26	40
Total bushels	98.8 million	132 million

The 2015-2016 wheat growing season was unlike most years in Oklahoma, characterized by periods of plentiful rainfall and near optimal growing conditions at critical times. Most wheat was sown into soil with adequate moisture, allowing it to emerge rapidly. The sufficient rainfall and mild temperatures allowed for good fall growth and bumper forage yields. Plants in many non-grazed fields were abnormally large and phenologically advanced going into winter, causing some concern about winter-kill. With mild temperatures continuing into the winter months, this concern proved to be largely unfounded and most plants moved to spring green-up without injury.

Similar to 2014 and 2015, January and February were dry months for the Southern Great Plains, and the ample forage growth quickly wicked moisture from the soil. As the wheat crop was coming out of dormancy, there was considerable concern that the dry conditions would quickly reduce yield potential. Fortunately, rain fell during early to mid-March as the crop was greening up. This also helped provide grazed wheat the extra boost it needed to recover from grazing injury.

As the wheat crop progressed from green-up to flowering, rain continued to fall, but warmer than normal temperatures moved the crop along quickly, and at the time, most thought harvest would come earlier than normal. With the transition into grain fill, temperatures stayed at more ideal levels, favoring kernel filling.

Most wheat was mature in southwestern Oklahoma and in the central part of the state by the end of May. Widespread rainfall at the end of May delayed most producers from beginning harvest until the first week in June. Dry weather during June allowed much of the wheat crop to be harvested quickly. Unfortunately, some areas of southwestern Oklahoma were plagued by regular and heavy rainfall events that delayed harvest towards the end of the month. Overall, harvest was pretty well finished in the state by the end of June.

Yields throughout Oklahoma were very good overall, with field averages of 30 to 60 bushels per acre being the norm. Field averages in the range of 60 to 90 bushels per acre were not uncommon, and there were even isolated cases of fields averaging more than 100 bushels per acre. Some producers expressed they would never see yields this high again in their lifetime, and let's hope they are wrong. Test weights throughout harvest remained at or above 60 pounds per bushel for early-harvested fields and did not drop much below the upper 50s toward the end of harvest. This was a much welcomed change from the low test weights of 2015.

Other than bird cherry oat aphids and wheat curl mites, there were few widespread insect problems in 2015-2016. Aphids were not really a concern of most producers until numbers ballooned in mid-March. As a result, it was not hard to find barley yellow dwarf (BYD) as flag leaves and heads started to emerge. While there was quite a bit of purpling associated with BYD, there was not as much stunting as sometimes observed with early-season transmission of the virus. Wheat streak mosaic (WSM) was not as wide spread as in 2015, but it was still a significant issue for many producers in 2016. The favorable growing conditions likely reduced the impact of both BYD and WSM, and yield reductions were not as severe as they might have been in a more drought stressed environment.

Similar to 2015, stripe rust was the major foliar disease impacting wheat production in 2016. The devastation caused by the 2015 stripe rust epidemic had many producers more open to the idea of applying foliar fungicide to susceptible varieties. Many fields throughout the state received at least one fungicide application, and anecdotal evidence from agricultural retailers indicates that Oklahoma wheat acres treated with a foliar fungicide in 2016 was more than double that treated in 2015. Variety trial results from Apache, Chickasha and Lahoma indicate that producers were well justified in spraying many of these acres. Grain yield of the popular variety Ruby Lee, for example, was increased by 68 bushels per acre at Chickasha when treated twice with a foliar fungicide. Our results at Chickasha also show the power of genetic resistance to disease in varieties such as Billings which maintained an 83 bushels per acre grain yield without the assistance of a foliar fungicide. In addition to stripe rust, leaf rust was present, but it was at low levels in isolated areas and was not widespread throughout the state.

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 fungicide seed treatment, 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 six-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 59 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-block 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. All other locations were sown at 60 pounds per acre. Grazing pressure, 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 Kincaid or Winterstieger Delta small plot combine. When sample size allowed for grain moisture measurement on individual plots, grain yields were corrected to 12 percent moisture. Grain moisture at all sites was generally below 11 percent, and maximum and minimum

grain moisture for all plots at a location typically ranged no more than 2 percent. Balko plots were not harvested due to severe hail damage in early May. Kingfisher plots were harvested but not reported due to harvest equipment malfunctions. The Keyes plots were also harvested, but data are not reported as the coefficient of variation (c.v.) exceeded 25.

Additional information on the Web

A copy of this publication as well as additional variety information and more information on wheat management can be found at:

Website: www.wheat.okstate.edu

Blog: www.osuwheat.com



YouTube OSU Small Grains

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Sincere thanks to variety trial cooperators for donation of land, time and resources. Variety trial cooperators not otherwise listed in this document include:

Corey Frantz, Balko, OK
J.B. Stewart, Keyes, OK
Rodney Mueggenborg, Kingfisher, OK

Participating Seed Companies

AGSECO, Inc.

Steve Ahring
P.O. Box 7
Girard, KS 66743
Phone: 800-962-5429
Email: steve@delangeseed.com
www.agseco.com
Varieties: AG Robust, TAM 114

Colorado Wheat Research Foundation (PlainsGold)

Kim Warner
4026 S. Timberline Rd. Ste. 100
Fort Collins, CO 80525
Phone: (970) 449-6994
Email: kwarner@coloradowheat.org
www.coloradowheat.org
Varieties: Avery, Brawl CL Plus, Byrd

Dyna-Gro Seed

Ryan Klamforth
(419) 310-6370
www.dynagroseed.com
Varieties: Long Branch

Kansas Wheat Alliance (KWA)

Daryl Strouts
1990 Kimball Ave.
Manhattan, KS 66502
Phone: (785) 320-4080
Email: kwa@kansas.net
www.kswheatalliance.org
Varieties: 1863, Everest, Joe, KanMark, Larry, Oakley CL, Tatanka, Zenda

Limagrain Cereal Seeds (LCS)

Drew Hendricker
2040 SE Frontage Rd.
Fort Collins, CO 80525
Phone: (970) 498-2218
Email: drew.hendricker@limagrains.com
www.limagraincerealseeds.com
Varieties: LCS Chrome, LCS Mint, LCS Pistol, LCS Wizard, T158

Monsanto/WestBred

John Fenderson
1616 E. Glencoe Rd.
Stillwater, OK 74075
Phone: (620) 243-4263
Email: john.m.fenderson@monsanto.com
www.westbred.com
Varieties: WB4303, WB4458, WB4515, WB4721, WB-Cedar, WB-Grainfield, Winterhawk

Oklahoma Genetics Inc. (OGI)

Mark Hodges
P.O. Box 2113
Stillwater, OK 74076
Phone: (405) 744-7741
www.okgenetics.com
Varieties: Bentley, Billings, Doublestop CL Plus, Duster, Gallagher, Iba, NF 101, OK Rising, Ruby Lee, Stardust

Oklahoma Foundation Seed Services (OSU)

Jeff Wright
2902 W. 6th Ave.
Stillwater, OK 74074
Phone: (405) 744-7741
www.ofss.okstate.edu
Varieties: Endurance

Syngenta Seeds

Greg Gungoll
1517 Osage Ave.
Enid, OK 73703
Phone: (405) 714-2839
Email: greg.gungoll@syngenta.com
www.agriprowheat.com
Varieties: SY Drifter, SY Flint, SY Grit, SY Llano, SY Monument, SY Razor, SY Wolf

Watley Seed

Andy Watley
Box 51
Spearman, TX 79081
Phone: (806) 659-3838
Email: watleyseed@valornet.com
www.watleyseed.com
Varieties: TAM 112, TAM 204

Wheat protein data are available in Extension Current Report CR-2135 Protein Content of Winter Wheat Varieties in Oklahoma-2016.

2015-2016 Oklahoma Wheat Variety Performance Tests Summary.

Source	Variety	grain yield (bu/ac)									
		Afton	Altus	Alva	Apache	Apache Fungicide	Buffalo	Cherokee	Chickasha	IWM	Goodwell Irrigated
KWA	1863	-	44	-	-	-	-	-	73	84	73
AGSECO	AG Robust	-	44	-	-	-	-	-	80	94	63
PlainsGold	Avery	-	33	60	-	-	72	65	27	82	77
OGI	Bentley	42	48	61	77	80	82	71	54	84	83
OGI	Billings	46	35	-	-	-	-	-	83	94	91
PlainsGold	Brawl CL Plus	-	44	48	-	-	79	65	42	87	82
PlainsGold	Byrd	-	34	60	-	-	80	68	26	91	84
OGI	Doublestop CL Plus	40	39	56	61	68	73	62	56	75	66
OGI	Duster	43	51	58	39	49	73	68	56	67	87
OSU	Endurance	41	34	56	50	57	75	68	47	74	79
KWA	Everest	36	22	-	-	-	-	-	25	85	76
OGI	Gallagher	44	42	56	63	68	65	57	73	93	86
OGI	Iba	42	51	57	61	76	79	71	60	81	91
KWA	Joe	-	52	-	-	-	-	-	76	75	94
KWA	KanMark	-	44	55	57	76	73	59	61	87	83
KWA	Larry	-	48	-	-	-	-	-	77	84	88
LCS	LCS Chrome	-	55	-	-	-	-	-	75	84	88
LCS	LCS Mint	-	45	61	-	-	71	62	40	79	88
LCS	LCS Pistol	41	33	52	51	60	66	58	47	70	83
LCS	LCS Wizard	43	31	55	48	70	77	54	36	87	77
Dyna-Gro	Long Branch	-	49	-	-	-	-	-	52	55	90
OGI	NF 101	-	23	-	-	-	-	-	49	77	73
KWA	Oakley CL	-	60	-	-	-	-	-	66	69	90
OGI	OK Rising	-	39	-	-	-	-	-	57	80	71
OGI	Ruby Lee	42	23	50	37	75	60	53	23	92	85
OGI	Stardust	-	-	-	-	-	-	-	-	-	-
Syngenta	SY Drifter	39	48	-	56	66	-	-	64	84	89
Syngenta	SY Flint	37	52	51	68	69	74	64	74	91	90
Syngenta	SY Grit	-	43	-	-	-	-	-	61	95	81
Syngenta	SY Llano	35	32	-	64	66	-	-	72	85	65
Syngenta	SY Monument	-	50	56	-	-	80	70	71	80	87
Syngenta	SY Razor	-	39	-	-	-	-	-	60	73	77
Syngenta	SY Wolf	-	-	-	-	-	-	-	-	-	85
LCS	T158	-	55	-	64	68	-	-	71	89	75
Watley	TAM 112	-	29	59	-	-	60	64	33	72	75
AGSECO	TAM 114	-	42	49	-	-	76	54	72	90	87
Watley	TAM 204	45	45	55	67	79	69	67	68	101	90
KWA	Tatanka	-	60	-	-	-	-	-	74	82	86
WestBred	WB4303	-	44	-	-	-	-	-	62	103	80
WestBred	WB4458	32	47	-	84	90	-	-	72	103	77
WestBred	WB4515	-	47	-	-	-	-	-	70	91	79
WestBred	WB4721	-	51	-	-	-	-	-	65	72	87
WestBred	WB-Cedar	33	37	51	-	-	63	39	69	96	74
WestBred	WB-Grainfield	43	49	57	74	88	86	74	60	75	85
WestBred	Winterhawk	-	52	55	62	78	77	74	60	90	84
KWA	Zenda	-	48	-	-	-	-	-	70	85	85
OSU Experiments											
	OK09915C-1	38	46	45	66	77	65	64	69	77	74
	OK10126	-	-	-	-	-	-	-	-	-	94
	OK1059060-3	-	-	-	-	-	-	-	-	-	-
	OK11231	31	-	-	-	-	-	-	-	-	-
	OK118036R/W	-	-	-	-	-	-	-	-	-	-
	OK11D25056	-	55	47	-	-	-	-	75	84	84
	OK12621	-	-	53	-	-	-	-	-	-	65
	OK12716R/W	-	67	53	67	72	-	76	-	-	96
	OK12912C	-	-	47	-	-	76	60	78	90	76
	OK12DP22002-042	-	-	-	-	-	-	-	-	-	95
Mean		40	44	54	61	72	73	64	60	84	82
LSD (0.05)		7	6	7	7	11	8	7	7	9	15

2015-2016 Oklahoma Wheat Variety Performance Tests Summary. (cont'd)

Source	Variety	grain yield (bu/ac)											
		Homestead	Hooker	Kildare	Lahoma	Fungicide	Lamont	Dual-Purpose	Marshall Dual- Only	Marshall Grain- Only	Union Thomas	Union City	Union Walters
KWA	1863	-	-	-	76	85	-	-	-	-	-	-	-
AGSECO	AG Robust	-	-	-	71	82	-	-	-	-	-	-	-
PlainsGold	Avery	-	53	-	42	84	-	-	-	-	-	-	-
OGI	Bentley	92	60	59	69	87	86	50	51	81	66	35	
OGI	Billings	86	-	49	64	75	52	38	51	68	52	-	
PlainsGold	Brawl CL Plus	-	59	-	67	90	-	-	-	-	-	-	
PlainsGold	Byrd	-	43	-	37	88	-	-	-	-	-	-	
OGI	Doublestop CL Plus	74	56	53	62	73	69	48	48	66	57	36	
OGI	Duster	80	57	49	56	72	60	51	54	66	57	43	
OSU	Endurance	73	60	48	57	77	63	51	47	69	66	27	
KWA	Everest	64	-	57	55	75	64	40	30	-	-	-	
OGI	Gallagher	92	42	48	66	80	61	48	57	75	63	40	
OGI	Iba	88	47	61	65	76	69	51	58	70	62	32	
KWA	Joe	-	-	-	82	92	-	-	-	-	-	-	
KWA	KanMark	89	49	60	59	79	68	40	50	78	53	23	
KWA	Larry	-	-	-	77	84	-	-	-	-	-	-	
LCS	LCS Chrome	-	-	-	81	82	-	-	-	-	-	-	
LCS	LCS Mint	76	56	41	65	88	73	25	42	77	73	-	
LCS	LCS Pistol	78	54	41	54	72	58	41	39	69	57	31	
LCS	LCS Wizard	74	48	59	52	80	71	32	28	64	53	30	
Dyna-Gro	Long Branch	-	-	-	59	62	-	-	-	-	-	-	
OGI	NF 101	-	-	-	57	67	-	-	-	-	-	-	
KWA	Oakley CL	-	-	-	79	81	-	-	-	-	-	-	
OGI	OK Rising	-	-	-	54	67	-	-	-	-	-	-	
OGI	Ruby Lee	65	42	67	51	83	52	29	25	52	53	25	
OGI	Stardust	-	-	-	70	81	70	-	-	-	-	-	
Syngenta	SY Drifter	-	-	-	63	72	-	-	-	69	50	24	
Syngenta	SY Flint	87	46	47	69	77	54	45	57	63	58	43	
Syngenta	SY Grit	-	-	-	75	89	-	-	-	-	-	-	
Syngenta	SY Llano	75	-	44	64	70	46	32	52	37	50	24	
Syngenta	SY Monument	88	40	53	74	83	72	53	62	-	-	-	
Syngenta	SY Razor	-	-	-	77	76	-	-	-	-	-	-	
Syngenta	SY Wolf	-	50	-	-	-	-	-	-	-	-	-	
LCS	T158	-	-	-	67	87	-	-	-	-	-	37	
Watley	TAM 112	-	36	-	43	83	-	-	-	-	-	-	
AGSECO	TAM 114	-	38	-	75	90	-	-	-	-	-	-	
Watley	TAM 204	91	62	64	70	85	82	31	45	75	60	31	
KWA	Tatanka	-	-	-	71	84	-	-	-	-	-	-	
WestBred	WB4303	-	-	-	70	90	-	-	-	-	-	-	
WestBred	WB4458	88	-	59	73	84	76	38	51	62	50	27	
WestBred	WB4515	-	-	-	65	76	-	-	-	-	-	-	
WestBred	WB4721	-	-	-	78	85	-	-	-	-	-	-	
WestBred	WB-Cedar	64	45	41	67	74	65	43	47	48	55	26	
WestBred	WB-Grainfield	93	82	50	71	82	81	50	59	74	58	27	
WestBred	Winterhawk	-	54	-	66	79	-	-	-	-	-	-	
KWA	Zenda	-	-	-	80	82	-	-	-	-	-	-	
OSU Experiments		-	-	-	-	-	-	-	-	-	-	-	
OK09915C-1		77	50	49	66	71	70	47	48	66	57	41	
OK10126		-	-	55	-	-	81	-	-	-	-	-	
OK1059060-3		-	-	52	-	-	78	-	-	-	-	-	
OK11231		-	-	-	53	66	-	29	40	-	-	-	
OK118036R/W		-	50	-	-	-	-	-	-	-	-	-	
OK11D25056		-	-	-	74	83	-	-	-	75	60	-	
OK12621		-	-	-	-	-	-	51	56	-	61	-	
OK12716R/W		84	-	50	73	88	68	50	59	-	72	-	
OK12912C		79	-	48	69	75	80	45	51	-	49	-	
OK12DP22002-042		-	53	-	-	-	-	-	-	-	-	-	
Mean		81	51	52	66	80	68	42	48	67	58	32	
LSD (0.05)		11	14	10	8	7	11	8	7	12	8	7	

Afton Wheat Variety Trial

Cooperator: Greg Leonard

Planting & harvest dates: 9/30/15 & 6/20/16

Management: Grain-only

Tillage Minimum-till

Previous crop: Corn

Soil type: Parsons silt loam

Soil test: pH = 7.3, P = 122, K = 398

Source	Variety	Grain Yield			Test Weight 2015-16
		2015-16	2-Year	3-Year	
-----bu/ac-----				--lb/bu--	
OGI	Billings	46	60	61	60.6
Watley	TAM 204	45	-	-	57.8
OGI	Gallagher	44	54	52	59.2
LCS	LCS Wizard	43	48	50	58.6
OGI	Duster	43	49	54	57.9
WestBred	WB-Grainfield	43	-	-	58.5
OGI	Bentley†	42	51	-	57.1
OGI	Ruby Lee	42	59	57	57.4
OGI	Iba	42	50	53	58.4
OSU	Endurance	41	53	51	58.1
LCS	LCS Pistol	41	49	-	57.7
OGI	Doublestop CL Plus	40	52	55	60.3
Syngenta	SY Drifter	39	-	-	59.4
Syngenta	SY Flint	37	-	-	58.3
KWA	Everest	36	52	52	60.7
Syngenta	SY Llano	35	-	-	59.6
WestBred	WB-Cedar	33	50	51	58.5
WestBred	WB4458	32	54	55	57.9
Experimentals					
	OK09915C-1	38	-	-	61.7
	OK11231	31	38	-	59.5
Mean		40	51	54	58.8
LSD (0.05)		7	7	6	1.8

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. A freeze event occurred at the end of March.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Altus Wheat Variety Trial

Cooperator: SW Res. & Ext. Center Extension
 Planting & harvest dates: 10/29/15 & 6/8/16
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Gary Strickland
 Previous crop: Wheat
 Soil type: Hollister silty clay loam
 Soil test: pH = 7.1, P = 63, K = 940

Source	Variety	Grain Yield			Test Weight 2015-16
		2015-16	2-Year	3-Year	
		<i>-bu/ac-</i>			<i>--lb/bu--</i>
KWA	Tatanka	60	-	-	63.6
KWA	Oakley CL	60	54	-	59.5
LCS	LCS Chrome†	55	54	-	57.6
LCS	T158	55	50	37	58.3
WestBred	Winterhawk	52	51	39	62.1
KWA	Joe	52	-	-	56.7
Syngenta	SY Flint†	52	52	-	57.6
WestBred	WB4721	51	-	-	60.1
OGI	Iba	51	50	38	59.3
OGI	Duster	51	47	37	58.9
Syngenta	SY Monument	50	45	-	57.7
WestBred	WB-Grainfield	49	46	38	59.8
Dyna-Gro	Long Branch	49	-	-	55.4
OGI	Bentley†	48	52	42	56.3
KWA	Larry	48	-	-	57.3
KWA	Zenda	48	-	-	59.5
Syngenta	SY Drifter†	48	48	-	62.1
WestBred	WB4515	47	-	-	58.4
WestBred	WB4458	47	45	34	57.4
Watley	TAM 204	45	44	-	56.4
LCS	LCS Mint	45	43	35	59.0
AGSECO	AG Robust	44	-	-	57.8
PlainsGold	Brawl CL Plus	44	44	35	60.1
WestBred	WB4303	44	-	-	55.0
KWA	1863	44	45	-	58.9
KWA	KanMark	44	50	-	60.4
Syngenta	SY Grit	43	-	-	59.8
AGSECO	TAM 114	42	43	-	57.0
OGI	Gallagher	42	44	32	58.7
OGI	Doublestop CL Plus	39	45	38	59.4
OGI	OK Rising	39	39	-	54.7
Syngenta	SY Razor	39	-	-	57.3
WestBred	WB-Cedar	37	44	32	57.7
OGI	Billings	35	40	30	56.9
OSU	Endurance	34	40	34	57.3
PlainsGold	Byrd	34	35	29	58.6
LCS	LCS Pistol	33	40	-	59.3
PlainsGold	Avery†	33	34	-	55.7
Syngenta	SY Llano	32	29	-	60.0
LCS	LCS Wizard	31	33	28	60.7
Watley	TAM 112	29	31	-	57.6
OGI	Ruby Lee	23	32	25	58.1
OGI	NF 101	23	32	-	57.1
KWA	Everest	22	33	24	58.5
Experimentals					
	OK12716R/W	67	-	-	58.4
	OK11D25056	55	51	-	59.2
	OK09915C-1	46	-	-	58.5
Mean		44	43	34	58.4
LSD (0.05)		6	7	5	4.2

Notes: Three-year results are average of 2016, 2015, and 2013. Data was not collected in 2014 due to severe drought. Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Heavy stripe rust pressure throughout grain fill.

† Varieties tested and reported as experimental lines in previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Alva Wheat Variety Trial

Cooperator: Wes Mallory & Jared Bradt
 Planting & harvest dates: 10/21/15 & 6/22/16
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Greg Highfill
 Previous crop: Wheat
 Soil type: Grant silt loam
 Soil test: pH = 5.7, P = 60, K = 545

Source	Variety	Grain Yield		Test Weight 2015-16
		2015-16	2-Year	
-----bu/ac-----				
OGI	Bentley†	61	58	58.6
LCS	LCS Mint	61	56	60.0
PlainsGold	Avery	60	-	60.0
PlainsGold	Byrd	60	54	59.9
Watley	TAM 112	59	48	60.0
OGI	Duster	58	50	59.8
WestBred	WB-Grainfield	57	-	60.5
OGI	Iba	57	53	61.0
OGI	Doublestop CL Plus	56	52	60.7
Syngenta	SY Monument	56	-	59.9
OSU	Endurance	56	51	60.1
OGI	Gallagher	56	50	59.6
WestBred	Winterhawk	55	57	60.9
KWA	KanMark	55	50	59.6
LCS	LCS Wizard	55	-	59.3
Watley	TAM 204	55	54	58.9
LCS	LCS Pistol	52	49	59.2
Syngenta	SY Flint	51	-	58.7
WestBred	WB-Cedar	51	48	58.0
OGI	Ruby Lee	50	46	59.8
AGSECO	TAM 114	49	52	60.5
PlainsGold	Brawl CL Plus	48	46	60.0
Experimentals				
	OK12716R/W	53	-	59.7
	OK12621	53	-	58.5
	OK11D25056	47	-	60.8
	OK12912C	47	-	60.2
	OK09915C-1	45	-	61.4
Mean		54	52	59.8
LSD (0.05)		7	7	1.3

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. All plots received 20 lb/ac nitrogen todress on 1/28/2016.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Apache Wheat Variety Trial

Cooperator: Bryan Vail

Planting & harvest dates: 10/13/15 & 6/9/16

Management: Grain-only

Tillage: No-till

Extension Educator: David Nowlin

Previous crop: Wheat

Soil type: Hollister silt loam

Soil test: pH = 4.9, P = 126, K = 546

Source	Variety	Grain Yield		Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year		
		bu/ac		---lb/bu---	1-5
WestBred	WB4458	84	68	58.3	1
OGI	Bentley†	77	65	56.5	2
WestBred	WB-Grainfield	74	66	57.0	1
Syngenta	SY Flint	68	-	56.8	2
Watley	TAM 204	67	-	56.7	1
LCS	T158	64	-	56.3	2
Syngenta	SY Llano	64	55	58.6	3
OGI	Gallagher	63	56	56.2	3
WestBred	Winterhawk	62	54	59.0	2
OGI	Iba	61	53	57.7	2
OGI	Doublestop CL Plus	61	54	59.5	3
KWA	KanMark	57	-	55.8	4
Syngenta	SY Drifter	56	-	58.0	1
LCS	LCS Pistol	51	45	55.3	4
OSU	Endurance	50	44	54.5	2
LCS	LCS Wizard	48	-	57.4	1
OGI	Duster	39	36	55.2	4
OGI	Ruby Lee	37	39	49.7	2
Experimentals					
	OK12716R/W	67	-	56.5	3
	OK09915C-1	66	-	60.3	3
Mean		61	53	56.7	2
LSD (0.05)		7	6	2.0	

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

† Variety tested and reported as experimental line OK09125 in last year's trial.

Apache Fungicide Wheat Variety Trial

Cooperator: Brian Vail

Planting & harvest dates: 10/13/15 & 6/9/16

Management: Grain-only

Tillage: No-till

Fungicide: 9 oz/ac Twinline at heading on 4/01/2016

Extension Educator: David Nowlin

Previous crop: Wheat

Soil type: Hollister silt loam

Soil test: pH = 4.9, P = 126, K = 546

Source	Variety	Grain Yield		Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year		
		-----bu/ac-----		---lb/bu---	
					1-5
WestBred	WB4458	90	73	59.5	1
WestBred	WB-Grainfield	88	78	58.4	4
OGI	Bentley†	80	73	58.0	3
Watley	TAM 204	79	-	57.5	3
WestBred	Winterhawk	78	70	60.0	4
KWA	KanMark	76	-	58.3	5
OGI	Iba	76	69	59.0	2
OGI	Ruby Lee	75	65	58.5	1
LCS	LCS Wizard	70	-	59.3	2
Syngenta	SY Flint	69	-	57.7	4
LCS	T158	68	-	57.2	4
OGI	Doublestop CL Plus	68	64	61.1	2
OGI	Gallagher	68	65	57.4	3
Syngenta	SY Drifter	66	-	59.1	3
Syngenta	SY Llano	66	61	58.3	3
LCS	LCS Pistol	60	61	56.4	5
OSU	Endurance	57	54	56.8	1
OGI	Duster	49	48	55.0	5
Experimentals					
	OK09915C-1	77	-	61.4	2
	OK12716R/W	72	-	57.9	3
Mean		72	65	58.3	3
LSD (0.05)		11	7	1.4	

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

† Variety tested and reported as experimental line OK09125 in last year's trial.

Apache Wheat Variety Trial - Fungicide vs. No Fungicide Comparison

Cooperator: Brian Vail
 Planting & harvest dates: 10/13/15 & 6/9/16
 Management: Grain-only, no-till

Extension Educator: David Nowlin
 Previous crop: Wheat
 Fungicide: 9 oz/ac Twinline at heading on 4/01/2016

Soil type: Hollister silt loam
 Soil test: pH = 4.9, P = 126, K = 546

Source	Variety	Grain Yield						Test Weight		
		2015-16			2-Year			2015-16		
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.
bu/ac										
WestBred	WB4458	84	90	6	68	73	6	58.3	59.5	1.2
OGL	Bentley†	77	80	3	65	73	7	56.5	58.0	1.5
WestBred	WB-Grainfield	74	88	14	66	78	12	57.0	58.4	1.3
Syngenta	SY Flint	68	69	1	-	-	-	56.8	57.7	0.9
Watley	TAM 204	67	79	13	-	-	-	56.7	57.5	0.8
LCS	T158	64	68	4	-	-	-	56.3	57.2	0.9
Syngenta	SY Llano	64	66	2	55	61	6	58.6	58.3	-0.3
OGL	Gallagher	63	68	5	56	65	9	56.2	57.4	1.2
WestBred	Winterhawk	62	78	16	54	70	15	59.0	60.0	1.1
OGL	Iba	61	76	15	53	69	17	57.7	59.0	1.3
OGL	Doublestop CL Plus	61	68	7	54	64	10	59.5	61.1	1.6
KWA	KanMark	57	76	19	-	-	-	55.8	58.3	2.5
Syngenta	SY Drifter	56	66	10	-	-	-	58.0	59.1	1.1
LCS	LCS Pistol	51	60	9	45	61	16	55.3	56.4	1.1
OSU	Endurance	50	57	8	44	54	10	54.5	56.8	2.3
LCS	LCS Wizard	48	70	22	-	-	-	57.4	59.3	2.0
OGL	Duster	39	49	10	36	48	12	55.2	55.0	-0.2
OGL	Ruby Lee	37	75	38	39	65	26	49.7	58.5	8.9
Experimentals										
OK12716RW		67	72	5	-	-	-	56.5	57.9	1.4
OK09915C-1		66	77	11	-	-	-	60.3	61.4	1.1
Mean		61	72	11	53	65	13	56.7	58.3	1.6
LSD (0.05)		7	11	10	6	7	11	2.0	1.4	1.9

Notes: Grain yields adjusted to 12% 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. Heavy stripe rust pressure throughout grain fill.
 † Variety tested and reported as experimental line OK09125 in last year's trial.

Buffalo Wheat Variety Trial

Cooperator: NRCS

Planting & harvest dates: 10/12/15 & 6/17/16

Management: Grain-only

Tillage: No-till

Extension Educator: Darrell McBee

Previous crop: Wheat

Soil type: St. Paul silt loam

Soil test: pH = 7.2, P = 59, K = 604

Source	Variety	Grain Yield		Test Weight 2015-16 ---lb/bu---
		2015-16	2-Year	
-----bu/ac-----				
WestBred	WB-Grainfield	86	-	57.7
OGI	Bentley†	82	60	55.2
PlainsGold	Byrd	80	56	56.0
Syngenta	SY Monument	80	-	56.5
PlainsGold	Brawl CL Plus	79	56	58.1
OGI	Iba	79	63	57.4
WestBred	Winterhawk	77	60	56.8
LCS	LCS Wizard	77	-	56.1
AGSECO	TAM 114	76	54	58.4
OSU	Endurance	75	60	56.0
Syngenta	SY Flint	74	-	56.2
OGI	Doublestop CL Plus	73	60	58.5
KWA	KanMark	73	51	57.3
OGI	Duster	73	58	56.7
PlainsGold	Avery	72	-	54.8
LCS	LCS Mint	71	54	57.2
Watley	TAM 204	69	56	55.7
LCS	LCS Pistol	66	54	55.3
OGI	Gallagher	65	55	54.5
WestBred	WB-Cedar	63	40	55.9
OGI	Ruby Lee	60	48	54.9
Watley	TAM 112	60	55	56.8
Experimentals				
	OK12912C	76	-	56.5
	OK09915C-1	65	-	58.9
Mean		73	55	56.5
LSD (0.05)		8	7	1.3

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. All plots received 20 lb/ac nitrogen broadcast on 1/28/2016.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Cherokee Wheat Variety Trial

Cooperator: Kenneth Failes
 Planting & harvest dates: 10/5/15 & 6/14/16
 Management: Dual-purpose
 Tillage: Conventional

Extension Educator: Tommy Puffinbarger
 Previous crop: Wheat
 Soil type: Dale silt loam
 Soil test: pH = 6.9, P = 45, K = 696

Source	Variety	Grain Yield		Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year		
		-----bu/ac-----		---lb/bu---	
WestBred	WB-Grainfield	74	-	59.0	2
WestBred	Winterhawk	74	60	61.3	2
OGI	Bentley†	71	60	58.6	2
OGI	Iba	71	63	60.2	1
Syngenta	SY Monument	70	-	58.1	1
OSU	Endurance	68	60	58.7	1
OGI	Duster	68	58	59.0	2
PlainsGold	Byrd	68	56	58.8	1
Watley	TAM 204	67	56	57.3	1
PlainsGold	Avery	65	-	58.7	1
PlainsGold	Brawl CL Plus	65	56	60.7	1
Watley	TAM 112	64	55	61.2	1
Syngenta	SY Flint	64	-	58.8	1
OGI	Doublestop CL Plus	62	60	61.1	1
LCS	LCS Mint	62	54	58.2	1
KWA	KanMark	59	51	57.6	1
LCS	LCS Pistol	58	54	57.7	2
OGI	Gallagher	57	55	58.9	2
LCS	LCS Wizard	54	-	58.7	1
AGSECO	TAM 114	54	54	60.2	1
OGI	Ruby Lee	53	48	59.6	2
WestBred	WB-Cedar	39	40	58.2	1
Experimentals					
	OK12716R/W	76	-	58.1	1
	OK09915C-1	64	-	61.5	1
	OK12912C	60	-	60.3	1
Mean		64	55	59.2	1
LSD (0.05)		7	7	1.7	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a 1 - 5 scale with 1 indicating no lodging. All plots received 30 lb/ac nitrogen topdress on 2/19/2016 and 5.5 oz/ac Prosaro fungicide on 4/15/2016.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Chickasha Regional Wheat Variety Trial

Cooperator: OSU South Central Research Station
 Planting & harvest dates: 10/20/15 & 6/10/16
 Soil test: pH = 6.7, P = 51, K = 396
 Soil type: Dale silt loam

Previous crop: Austrian winter pea
 Management: Grain-only, conventional tillage
 Nitrogen: 141 lb/ac soil test + 9 lb/ac at planting

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----						
OGI	Billings	83	41	61	58.5	2
AGSECO	AG Robust	80	23	-	59.4	2
KWA	Larry	77	-	-	58.0	2
KWA	Joe	76	-	-	57.0	4
LCS	LCS Chrome†	75	68	-	55.5	3
KWA	Tatanka	74	-	-	58.5	4
Syngenta	SY Flint†	74	67	-	59.9	2
KWA	1863	73	63	-	60.0	3
OGI	Gallagher	73	54	58	59.3	2
AGSECO	TAM 114	72	62	-	59.8	4
Syngenta	SY Llano	72	65	55	60.7	2
WestBred	WB4458	72	67	61	58.8	2
Syngenta	SY Monument	71	65	-	57.1	2
LCS	T158	71	59	52	59.4	4
WestBred	WB4515	70	-	-	57.9	3
KWA	Zenda	70	-	-	59.7	2
WestBred	WB-Cedar	69	67	61	57.7	2
Watley	TAM 204	68	61	-	56.8	4
KWA	Oakley CL	66	59	-	56.4	2
WestBred	WB4721	65	-	-	56.9	1
Syngenta	SY Drifter†	64	55	-	60.0	3
WestBred	WB4303	62	-	-	55.8	1
KWA	KanMark	61	54	-	57.3	5
Syngenta	SY Grit	61	-	-	56.2	2
WestBred	Winterhawk	60	54	51	58.2	4
WestBred	WB-Grainfield	60	57	52	54.0	2
OGI	Iba	60	-	52	57.1	4
Syngenta	SY Razor	60	-	-	61.6	2
OGI	OK Rising	57	47	45	56.0	2
OGI	Duster	56	42	49	56.6	4
OGI	Doublestop CL Plus	56	49	45	59.1	2
OGI	Bentley†	54	71	47	53.1	3
Dyna-Gro	Long Branch	52	-	-	50.2	3
OGI	NF 101	49	47	-	58.2	3
LCS	LCS Pistol	47	41	-	56.5	1
OSU	Endurance	47	28	42	55.0	3
PlainsGold	Brawl CL Plus	42	21	43	54.0	2
LCS	LCS Mint	40	34	38	53.3	3
LCS	LCS Wizard	36	34	39	57.3	2
Watley	TAM 112	33	28	34	52.3	4
PlainsGold	Avery†	27	46	-	52.8	3
PlainsGold	Byrd	26	48	30	53.4	3
KWA	Everest	25	65	35	58.8	1
OGI	Ruby Lee	23	24	31	54.8	2
Experimentals						
	OK12912C	78	-	-	57.6	3
	OK11D25056	75	62	-	59.5	2
	OK09915C-1	69	-	-	60.1	3
Mean		60	51	47	57.1	3
LSD (0.05)		7	6	8	2.1	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a 1 - 5 scale with 1 indicating no lodging. Severe stripe rust pressure during grain fill.

† Varieties tested and reported as experimental lines in previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Chickasha Intensive Wheat Management Variety Trial

Cooperator: OSU South Central Research Station

Planting & harvest dates: 10/20/15 & 6/10/16 Previous crop: Austrian winter pea

Soil type: Dale silt loam

Management: Grain-only, conventional tillage

Soil test: pH = 6.7, P = 51, K = 396

Nitrogen: 141 lb/ac soil test + 9 lb/ac at planting + 40 lb/ac topdress 3/03/16

Fungicide: 4 oz/ac Tilt at jointing on 3/04/16 + 6.8 oz/ac Aproach Prima at heading on 4/08/16

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----						
WestBred	WB4303	103	-	-	57.5	1
WestBred	WB4458	103	91	74	60.7	2
Watley	TAM 204	101	85	-	57.9	3
WestBred	WB-Cedar	96	88	75	59.4	2
Syngenta	SY Grit	95	-	-	59.3	2
OGI	Billings	94	79	70	59.8	2
AGSECO	AG Robust	94	68	-	58.7	2
OGI	Gallagher	93	77	69	59.9	3
OGI	Ruby Lee	92	78	68	60.7	2
WestBred	WB4515	91	-	-	60.2	2
PlainsGold	Byrd	91	68	64	59.6	3
Syngenta	SY Flint†	91	83	-	59.5	3
AGSECO	TAM 114	90	85	-	60.9	3
WestBred	Winterhawk	90	77	67	60.2	3
LCS	T158	89	84	69	58.9	4
PlainsGold	Brawl CL Plus	87	73	68	59.8	3
LCS	LCS Wizard	87	77	67	59.9	2
KWA	KanMark	87	80	-	58.9	3
KWA	Everest	85	84	70	58.7	2
Syngenta	SY Llano	85	77	63	60.4	3
KWA	Zenda	85	-	-	60.6	2
KWA	Larry	84	-	-	58.1	2
LCS	LCS Chrome†	84	80	-	55.4	3
Syngenta	SY Drifter†	84	74	-	59.3	2
OGI	Bentley†	84	86	68	54.9	3
KWA	1863	84	81	-	59.1	3
KWA	Tatanka	82	-	-	57.9	3
PlainsGold	Avery†	82	79	-	56.0	3
OGI	Iba	81	-	66	59.0	4
Syngenta	SY Monument	80	77	-	53.6	3
OGI	OK Rising	80	74	63	56.2	2
LCS	LCS Mint	79	74	65	58.1	3
OGI	NF 101	77	69	-	60.3	2
KWA	Joe	75	-	-	57.6	3
OGI	Doublestop CL Plus	75	63	60	60.4	3
WestBred	WB-Grainfield	75	74	64	54.9	3
OSU	Endurance	74	81	61	59.0	3
Syngenta	SY Razor	73	-	-	60.7	2
Watley	TAM 112	72	66	58	57.5	4
WestBred	WB4721	72	-	-	56.9	2
LCS	LCS Pistol	70	68	-	56.0	2
KWA	Oakley CL	69	68	-	56.0	2
OGI	Duster	67	69	58	55.6	5
Dyna-Gro	Long Branch	55	-	-	51.3	3
Experimentals						
	OK12912C	90	-	-	61.6	3
	OK11D25056	84	75	-	58.7	3
	OK09915C-1	77	-	-	60.2	3
Mean		84	77	66	58.4	3
LSD (0.05)		9	7	7	2.5	

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

† Varieties tested and reported as experimental lines in previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Chickasha Standard vs. Intensive Wheat Management Comparison

Cooperator: OSU South Central Research Station

Planting & harvest dates: 10/20/15 & 6/10/16

Management: Grain-only, conventional tillage

Previous crop: Austrian winter pea

Soil test: pH = 6.7, P = 51, K = 396

Soil type: Dale silt loam

All plots had 150 lb/ac N available at planting. Intensive Wheat Management (IWM) plots received 40 lb/ac additional N at jointing, 4 oz/ac Tilt at jointing, and 6.8 oz/ac Approach Prima at heading

Source	Variety	2016 Grain Yield			2016 Test Weight		
		Standard	IWM	Diff.	Standard	IWM	Diff.
		-----bu/ac-----			-----lb/bu-----		
OGI	Billings	83	94	12	58.5	59.8	1.2
AGSECO	AG Robust	80	94	14	59.4	58.7	-0.8
KWA	Larry	77	84	7	58.0	58.1	0.1
KWA	Joe	76	75	-1	57.0	57.6	0.6
LCS	LCS Chromet†	75	84	9	55.5	55.4	-0.1
KWA	Tatanka	74	82	8	58.5	57.9	-0.6
Syngenta	SY Flint†	74	91	17	59.9	59.5	-0.3
KWA	1863	73	84	10	60.0	59.1	-0.9
OGI	Gallagher	73	93	21	59.3	59.9	0.6
AGSECO	TAM 114	72	90	18	59.8	60.9	1.0
Syngenta	SY Llano	72	85	13	60.7	60.4	-0.3
WestBred	WB4458	72	91	20	58.8	60.2	1.4
Syngenta	SY Monument	71	80	10	57.1	53.6	-3.5
LCS	T158	71	89	18	59.4	58.9	-0.5
WestBred	WB4515	70	103	33	57.9	60.7	2.8
KWA	Zenda	70	85	15	59.7	60.6	1.0
WestBred	WB-Cedar	69	96	27	57.7	59.4	1.7
Watley	TAM 204	68	101	33	56.8	57.9	1.1
KWA	Oakley CL	66	69	2	56.4	56.0	-0.4
WestBred	WB4721	65	72	6	56.9	56.9	0.0
Syngenta	SY Drifter†	64	84	20	60.0	59.3	-0.7
WestBred	WB4303	62	103	41	55.8	57.5	1.7
KWA	KanMark	61	87	26	57.3	58.9	1.6
Syngenta	SY Grit	61	95	35	56.2	59.3	3.1
WestBred	Winterhawk	60	90	29	58.2	60.2	2.1
WestBred	WB-Grainfield	60	75	14	54.0	54.9	0.9
OGI	Iba	60	81	20	57.1	59.0	1.9
Syngenta	SY Razor	60	73	13	61.6	60.7	-0.9
OGI	OK Rising	57	80	23	56.0	56.2	0.2
OGI	Duster	56	67	11	56.6	55.6	-1.0
OGI	Doublestop CL Plus	56	75	19	59.1	60.4	1.3
OGI	Bentley†	54	84	30	53.1	54.9	1.8
Dyna-Gro	Long Branch	52	55	3	50.2	51.3	1.1
OGI	NF 101	49	77	28	58.2	60.3	2.2
LCS	LCS Pistol	47	70	23	56.5	56.0	-0.5
OSU	Endurance	47	74	28	55.0	59.0	4.0
PlainsGold	Brawl CL Plus	42	87	45	54.0	59.8	5.8
LCS	LCS Mint	40	79	39	53.3	58.1	4.8
LCS	LCS Wizard	36	87	51	57.3	59.9	2.6
Watley	TAM 112	33	72	40	52.3	57.5	5.3
PlainsGold	Avery†	27	82	55	52.8	56.0	3.1
PlainsGold	Byrd	26	91	65	53.4	59.6	6.2
KWA	Everest	25	85	61	58.8	58.7	-0.1
OGI	Ruby Lee	23	92	68	54.8	60.7	5.8
Experimentals							
	OK12912C	78	90	12	57.6	61.6	4.0
	OK11D25056	75	84	9	59.5	58.7	-0.8
	OK09915C-1	69	77	9	60.1	60.2	0.1
Mean		60	84	24	57.1	58.4	1.3
LSD (0.05)		7	9	9	2.1	2.5	2.4

Notes: Grain yields adjusted to 12% 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 standard and IWM averages for that variety. Severe stripe rust pressure during grain fill.

† Varieties tested and reported as experimental lines in previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Goodwell Irrigated Regional Wheat Variety Trial

Cooperator: Oklahoma Panhandle Research & Extension Center

Cooperator: OK Panhandle Research & Extension Center

Previous crop: Fallow

Soil type: Gruver clay loam

Tillage: Planting & harvest dates: 10/13/16 & 6/27/16

Management: Grain-only

Tillage: Conventional

Source	Variety	Grain Yield			Test Weight	Lodging
		2015-16	2-Year	3-Year	2015-16	2015-16
		bu/ac			--lb/bu--	1 - 5
KWA	Joe	94	-	-	58.9	1
OGI	Iba	91	79	77	59.3	1
OGI	Billings	91	78	75	58.5	1
Dyna-Gro	Long Branch	90	-	-	57.9	1
KWA	Oakley CL	90	85	-	59.3	1
Watley	TAM 204	90	87	-	57.4	1
Syngenta	SY Flint†	90	84	-	57.2	1
Syngenta	SY Drifter†	89	79	-	58.4	1
KWA	Larry	88	-	-	57.6	1
LCS	LCS Mint	88	62	61	57.1	2
LCS	LCS Chrome†	88	77	-	57.6	1
OGI	Duster	87	73	72	58.8	2
WestBred	WB4721	87	-	-	58.8	1
AGSECO	TAM 114	87	71	-	59.5	1
Syngenta	SY Monument	87	83	-	57.1	1
OGI	Gallagher	86	84	75	57.1	1
KWA	Tatanka	86	-	-	58.0	1
KWA	Zenda	85	-	-	58.6	1
Syngenta	SY Wolf	85	-	-	57.2	1
WestBred	WB-Grainfield	85	82	76	58.7	1
OGI	Ruby Lee	85	68	64	57.2	1
PlainsGold	Byrd	84	61	61	57.2	1
WestBred	Winterhawk	84	74	73	57.8	1
LCS	LCS Pistol	83	75	-	58.0	1
KWA	KanMark	83	76	-	58.2	1
OGI	Bentley†	83	-	-	55.9	2
PlainsGold	Brawl CL Plus	82	74	75	57.9	1
Syngenta	SY Grit	81	-	-	56.4	1
WestBred	WB4303	80	-	-	53.8	1
WestBred	WB4515	79	-	-	55.8	1
OSU	Endurance	79	66	64	57.9	1
LCS	LCS Wizard	77	65	65	56.7	1
Syngenta	SY Razor	77	-	-	57.5	1
PlainsGold	Avery†	77	57	-	55.3	2
WestBred	WB4458	77	85	78	56.0	1
KWA	Everest	76	73	68	58.7	1
LCS	T158	75	71	72	57.7	1
Watley	TAM 112	75	53	60	54.5	2
WestBred	WB-Cedar	74	69	68	54.5	1
KWA	1863	73	74	-	56.6	1
OGI	NF 101	73	62	-	57.1	2
OGI	OK Rising	71	66	64	56.3	1
OGI	Doublestop CL Plus	66	64	63	58.5	1
Syngenta	SY Llano	65	-	-	58.5	1
AGSECO	AG Robust	63	-	-	56.7	1
Experimentals						
	OK12716R/W	96	-	-	57.6	1
	OK12DP22002-042	95	-	-	58.2	1
	OK10126	94	81	78	58.0	2
	OK11D25056	84	77	-	59.4	1
	OK12912C	76	-	-	56.8	1
	OK09915C-1	74	-	-	58.1	1
	OK12621	65	69	-	56.3	1
Mean		82	73	69	57.5	1
LSD (0.05)		15	12	10	1.9	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 - 5 with 1 indicating no lodging. A significant freeze event occurred between March 18 and 20 with 19 hours spent below 28° F during that time. Stripe rust was present.

† Variety tested and reported as experimental lines in previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Homestead Wheat Variety Trial

Cooperator: Brook Strader

Planting & harvest dates: 10/8/15 & 6/15/16

Previous crop: Fallow

Management: Grain-only

Soil type: Canadian fine sandy loam

Tillage: No-till

Soil test: pH = 6.0, P = 63, K = 453

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-2016
		2015-16	2-Year	3-Year		
-----bu/ac-----						
WestBred	WB-Grainfield	93	-	-	57.7	1
OGI	Bentley†	92	62	52	57.6	2
OGI	Gallagher	92	58	47	59.1	2
Watley	TAM 204	91	-	-	58.1	2
KWA	KanMark	89	-	-	58.8	1
WestBred	WB4458	88	59	49	57.9	1
Syngenta	SY Monument	88	-	-	58.3	2
OGI	Iba	88	57	47	60.0	2
Syngenta	SY Flint	87	-	-	59.7	1
OGI	Billings	86	56	45	58.5	1
OGI	Duster	80	51	42	58.2	3
LCS	LCS Pistol	78	50	-	59.0	2
LCS	LCS Mint	76	53	46	58.4	3
Syngenta	SY Llano	75	-	-	58.7	1
OGI	Doublestop CL Plus	74	52	44	59.4	2
LCS	LCS Wizard	74	49	41	59.7	2
OSU	Endurance	73	49	41	58.1	2
OGI	Ruby Lee	65	47	41	59.0	1
KWA	Everest	64	45	39	59.6	1
WestBred	WB-Cedar	64	46	40	56.8	1
Experimentals						
	OK12716R/W	84	-	-	56.8	3
	OK12912C	79	-	-	58.8	1
	OK09915C-1	77	-	-	60.9	2
Mean		81	52	44	58.6	2
LSD (0.05)		11	8	6	1.6	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column.

Lodging on a 1 - 5 scale with 1 indicating no lodging. Low disease pressure throughout grain fill.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Hooker Wheat Variety Trial

Cooperator: Dan & Ernest Herald
 Planting & harvest dates: 9/28/16 & 6/24/16
 Management: Grain-only
 Tillage: No-till

Previous crop: Fallow
 Soil type: Dalhart fine sandy loam
 Soil test: pH = 7.8, P = 36, K = 722

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----					--lb/bu--	
WestBred	WB-Grainfield	82	62	54	49.8	1
Watley	TAM 204	62	61	-	55.2	1
OGI	Bentley†	60	-	-	54.1	2
OSU	Endurance	60	56	50	55.1	1
PlainsGold	Brawl CL Plus	59	58	51	55.8	1
OGI	Duster	57	54	50	55.8	1
LCS	LCS Mint	56	55	51	52.7	1
OGI	Doublestop CL Plus	56	55	48	57.2	1
LCS	LCS Pistol	54	47	-	53.5	3
WestBred	Winterhawk	54	57	51	55.0	1
PlainsGold	Avery	53	-	-	53.1	1
Syngenta	SY Wolf	50	-	-	54.0	1
KWA	KanMark	49	56	-	54.7	1
LCS	LCS Wizard	48	-	-	55.1	1
OGI	Iba	47	49	47	55.3	1
Syngenta	SY Flint	46	-	-	56.1	2
WestBred	WB-Cedar	45	-	-	53.0	1
PlainsGold	Byrd	43	51	47	53.0	1
OGI	Gallagher	42	44	38	54.9	3
OGI	Ruby Lee	42	43	41	51.0	2
Syngenta	SY Monument	40	-	-	55.4	1
AGSECO	TAM 114	38	40	-	56.4	1
Watley	TAM 112	36	40	38	53.9	2
Experimentals						
	OK12DP22002-042	53	-	-	53.7	1
	OK118036	50	-	-	52.8	1
	OK09915C-1	50	-	-	55.8	1
Mean		51	52	47	54.3	1
LSD (0.05)		14	10	7	NS	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column.

Lodging on a 1 - 5 scale with 1 indicating no lodging. Wheat streak mosaic was present. NS = not significant.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Kildare Wheat Variety Trial

Cooperator: Don Schieber
 Planting & harvest dates: 10/6/15 & 6/13/16
 Management: Grain-only
 Tillage: No-till

Extension Educator: Corbin Dewitt
 Previous crop: Wheat
 Soil type: Tabler silt loam
 Soil test: pH = 6.4, P = 113, K = 340

Source	Variety	Grain Yield		Test Weight 2015-16 ---lb/bu---
		2015-16	2-Year	
-----bu/ac-----				
OGI	Ruby Lee	67	53	58.4
Watley	TAM 204	64	-	54.8
OGI	Iba	61	53	56.5
KWA	KanMark	60	-	55.9
WestBred	WB4458	59	54	56.2
LCS	LCS Wizard	59	49	55.4
OGI	Bentley†	59	56	54.4
KWA	Everest	57	50	59.9
OGI	Doublestop CL Plus	53	50	59.4
Syngenta	SY Monument	53	-	57.8
WestBred	WB-Grainfield	50	-	52.2
OGI	Duster	49	45	53.1
OGI	Billings	49	40	57.1
OSU	Endurance	48	44	52.4
OGI	Gallagher	48	45	56.7
Syngenta	SY Flint	47	-	55.9
Syngenta	SY Llano	44	-	58.7
WestBred	WB-Cedar	41	40	58.1
LCS	LCS Mint	41	43	53.1
LCS	LCS Pistol	41	40	53.2
Experimentals				
	OK10126	55	-	60.5
	OK105906-3	52	-	57.2
	OK12716R/W	50	-	54.3
	OK09915C-1	49	-	60.4
	OK12912C	48	-	58.3
Mean		52	47	56.4
LSD (0.05)		10	8	2.5

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Low disease pressure during grain fill.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Lahoma Regional Wheat Variety Trial

Cooperator: North Central Research Station
 Planting & harvest dates: 10/27/15 & 6/16/16
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.6, P = 47, K = 428

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----						
KWA	Joe	82	-	-	60.7	3
LCS	LCS Chromet†	81	74	-	58.1	2
KWA	Zenda	80	-	-	61.5	2
KWA	Oakley CL	79	69	-	60.2	3
WestBred	WB4721	78	-	-	61.0	1
KWA	Larry	77	-	-	59.9	2
Syngenta	SY Razor	77	-	-	62.0	2
KWA	1863	76	69	-	60.0	4
AGSECO	TAM 114	75	69	-	61.4	2
Syngenta	SY Grit	75	-	-	58.3	2
Syngenta	SY Monument	74	69	-	59.4	1
WestBred	WB4458	73	66	62	58.4	1
AGSECO	AG Robust	71	-	-	60.8	3
WestBred	WB-Grainfield	71	68	59	57.4	2
KWA	Tatanka	71	-	-	59.9	4
Watley	TAM 204	70	62	-	57.1	2
WestBred	WB4303	70	-	-	55.9	1
OGI	Stardust†	70	61	58	57.4	3
OGI	Bentley†	69	63	59	55.7	3
Syngenta	SY Flint†	69	62	-	59.9	3
WestBred	WB-Cedar	67	64	60	57.2	2
PlainsGold	Brawl CL Plus	67	59	53	57.9	2
LCS	T158	67	59	55	58.3	3
OGI	Gallagher	66	64	61	59.2	3
WestBred	Winterhawk	66	57	55	58.3	3
WestBred	WB4515	65	-	-	60.0	1
OGI	Iba	65	60	55	59.1	3
LCS	LCS Mint	65	56	51	58.6	2
OGI	Billings	64	60	55	58.7	3
Syngenta	SY Llano	64	58	56	58.8	3
Syngenta	SY Drifter†	63	55	-	60.6	2
OGI	Doublestop CL Plus	62	58	53	60.7	2
Dyna-Gro	Long Branch	59	-	-	54.1	3
KWA	KanMark	59	52	-	57.9	3
OGI	NF 101	57	57	-	58.1	3
OSU	Endurance	57	53	50	55.7	3
OGI	Duster	56	50	49	57.8	3
KWA	Everest	55	49	47	58.5	3
LCS	LCS Pistol	54	50	-	56.9	3
OGI	OK Rising	54	50	50	57.1	2
LCS	LCS Wizard	52	43	45	56.4	1
OGI	Ruby Lee	51	49	49	53.7	3
Watley	TAM 112	43	39	42	52.1	3
PlainsGold	Avery†	42	33	-	52.0	3
PlainsGold	Byrd	37	35	40	52.3	2
Experimentals						
	OK11D25056	74	64	-	58.5	3
	OK12716R/W	73	-	-	57.8	2
	OK12912C	69	-	-	60.5	2
	OK09915C-1	66	-	-	61.5	1
	OK11231	53	50	-	56.7	2
Mean		66	57	53	58.2	2
LSD (0.05)		8	6	6	2.1	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a 1 - 5 scale with 1 indicating no lodging. Heavy stripe rust pressure during mid- to late-grain fill.

† Varieties tested and reported as experimental lines in the previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; Stardust = OK10728W; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Lahoma Regional Wheat Variety Trial - Fungicide Treated

Cooperator: North Central Research Station

Planting & harvest dates: 10/27/15 & 6/16/16

Management: Grain-only, conventional tillage

Fungicide = 9 oz/ac Twinline at GS 9 on 4/12/16

Extension Educator: Rick Nelson

Previous crop: Wheat

Soil type: Pond Creek silt loam

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----						
KWA	Joe	92	-	-	62.4	2
AGSECO	TAM 114	90	81	-	61.7	2
PlainsGold	Brawl CL Plus	90	80	66	62.0	1
WestBred	WB4303	90	-	-	58.8	1
Syngenta	SY Grit	89	-	-	60.9	2
LCS	LCS Mint	88	77	65	61.0	3
PlainsGold	Byrd	88	79	70	60.4	2
LCS	T158	87	74	65	61.1	3
OGI	Bentley†	87	80	69	59.5	2
WestBred	WB4721	85	-	-	62.1	1
Watley	TAM 204	85	81	-	59.3	2
KWA	1863	85	81	-	61.6	4
KWA	Tatanka	84	-	-	62.4	3
WestBred	WB4458	84	77	69	60.9	1
KWA	Larry	84	-	-	61.3	2
PlainsGold	Avery†	84	73	-	60.1	2
Watley	TAM 112	83	72	63	62.1	3
OGI	Ruby Lee	83	73	65	61.6	2
Syngenta	SY Monument	83	78	-	60.9	1
KWA	Zenda	82	-	-	61.3	2
LCS	LCS Chrome†	82	78	-	58.9	2
WestBred	WB-Grainfield	82	80	67	59.0	2
AGSECO	AG Robust	82	-	-	61.1	2
OGI	Stardust†	81	73	65	60.2	2
KWA	Oakley CL	81	76	-	60.9	3
LCS	LCS Wizard	80	70	62	62.0	1
OGI	Gallagher	80	76	67	60.8	2
KWA	KanMark	79	72	-	61.3	2
WestBred	Winterhawk	79	71	63	61.0	3
OSU	Endurance	77	72	61	58.4	2
Syngenta	SY Flint†	77	73	-	61.7	2
Syngenta	SY Razor	76	-	-	62.3	2
WestBred	WB4515	76	-	-	61.4	1
OGI	Iba	76	71	61	61.0	2
KWA	Everest	75	75	64	60.9	2
OGI	Billings	75	69	60	60.8	2
WestBred	WB-Cedar	74	71	62	59.9	1
OGI	Doublestop CL Plus	73	70	61	62.0	2
Syngenta	SY Drifter†	72	68	-	61.4	1
LCS	LCS Pistol	72	69	-	59.1	3
OGI	Duster	72	66	59	60.0	3
Syngenta	SY Llano	70	67	61	59.8	2
OGI	NF 101	67	68	-	59.5	2
OGI	OK Rising	67	66	60	59.6	1
Dyna-Gro	Long Branch	62	-	-	56.1	2
Experimentals						
	OK12716R/W	88	-	-	59.6	2
	OK11D25056	83	74	-	59.8	2
	OK12912C	75	-	-	61.1	2
	OK09915C-1	71	-	-	62.3	1
	OK11231	66	64	-	59.3	2
Mean		80	73	64	60.6	2
LSD (0.05)		7	6	5	1.4	

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

† Varieties tested and reported as experimental lines in the previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH-13DH-20-87; Stardust = OK10728W; SY Flint = 06BC722#25; SY Drifter = AP09T7631.

Lahoma - Fungicide vs. No Fungicide Comparison

Cooperator: North Central Research Station
 Planting & harvest dates: 10/27/15 & 6/16/16
 Management: Grain-only, conventional tillage
 Fungicide = 9 oz/ac Twinline at GS 9 on 4/12/16

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.6, P = 47, K = 428

Source	Variety	2016 Grain Yield			2016 Test Weight		
		No fungicide	Fungicide	Diff.	No fungicide	Fungicide	Diff.
-----bu/ac-----						-----lb/bu-----	
KWA	Joe	82	92	10	60.7	62.4	1.8
LCS	LCS Chromet†	81	82	1	58.1	58.9	0.8
KWA	Zenda	80	82	2	61.5	61.3	-0.2
KWA	Oakley CL	79	81	2	60.2	60.9	0.7
WestBred	WB4721	78	85	8	61.0	62.1	1.1
KWA	Larry	77	84	7	59.9	61.3	1.4
Syngenta	SY Razor	77	76	0	62.0	62.3	0.3
KWA	1863	76	85	9	60.0	61.6	1.6
AGSECO	TAM 114	75	90	15	61.4	61.7	0.3
Syngenta	SY Grit	75	89	13	58.3	60.9	2.6
Syngenta	SY Monument	74	83	8	59.4	60.9	1.5
WestBred	WB4458	73	84	11	58.4	60.9	2.5
AGSECO	AG Robust	71	82	11	60.8	61.1	0.4
WestBred	WB-Grainfield	71	82	11	57.4	59.0	1.6
KWA	Tatanka	71	84	13	59.9	62.4	2.5
Watley	TAM 204	70	85	15	57.1	59.3	2.2
WestBred	WB4303	70	90	20	55.9	58.8	2.8
OGI	Stardust†	70	81	12	57.4	60.2	2.8
OGI	Bentley†	69	87	17	55.7	59.5	3.7
Syngenta	SY Flint†	69	77	7	59.9	61.7	1.8
WestBred	WB-Cedar	67	74	7	57.2	59.9	2.7
PlainsGold	Brawl CL Plus	67	90	23	57.9	62.0	4.1
LCS	T158	67	87	20	58.3	61.1	2.8
OGI	Gallagher	66	80	14	59.2	60.8	1.6
WestBred	Winterhawk	66	79	13	58.3	61.0	2.8
WestBred	WB4515	65	76	11	60.0	61.4	1.4
OGI	Iba	65	76	11	59.1	61.0	1.9
LCS	LCS Mint	65	88	23	58.6	61.0	2.4
OGI	Billings	64	75	11	58.7	60.8	2.1
Syngenta	SY Llano	64	70	6	58.8	59.8	1.1
Syngenta	SY Drifter†	63	72	9	60.6	61.4	0.8
OGI	Doublestop CL Plus	62	73	11	60.7	62.0	1.3
Dyna-Gro	Long Branch	59	62	4	54.1	56.1	2.0
KWA	KanMark	59	79	20	57.9	61.3	3.4
OGI	NF 101	57	67	10	58.1	59.5	1.4
OSU	Endurance	57	77	20	55.7	58.4	2.7
OGI	Duster	56	72	16	57.8	60.0	2.2
KWA	Everest	55	75	20	58.5	60.9	2.4
LCS	LCS Pistol	54	72	18	56.9	59.1	2.3
OGI	OK Rising	54	67	13	57.1	59.6	2.5
LCS	LCS Wizard	52	80	29	56.4	62.0	5.7
OGI	Ruby Lee	51	83	32	53.7	61.6	7.9
Watley	TAM 112	43	83	40	52.1	62.1	10.0
PlainsGold	Avery†	42	84	42	52.0	60.1	8.2
PlainsGold	Byrd	37	88	50	52.3	60.4	8.1
Experimentals							
	OK11D25056	74	83	9	58.5	59.8	1.3
	OK12716R/W	73	88	15	57.8	59.6	1.8
	OK12912C	69	75	6	60.5	61.1	0.6
	OK09915C-1	66	71	6	61.5	62.3	0.8
	OK11231	53	66	13	56.7	59.3	2.6
Mean		66	80	14	58.2	60.6	2.5
LSD (0.05)		8	7	8	2.1	1.4	1.3

Notes: Grain yields adjusted to 12% 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. Heavy stripe rust pressure during mid- to late-grain fill.

†Varieties tested and reported as experimental lines in the previous trial(s): Avery = CO11D174; Bentley = OK09125; LCS Chrome = LCH13DH-20-87; Stardust = OK10728W; SY Drifter = AP09T7631; SY Flint = 06BC722#25.

Lamont Wheat Variety Trial

Cooperator: Kirby Brothers

Planting & harvest dates: 10/6/15 & 6/13/16

Management: Grain-only

Tillage: Conventional

Extension Educator: Kassie Junghanns

Previous crop: Wheat

Soil type: Pond Creek silt loam

Soil test: pH = 5.7, P = 49, K = 417

Source	Variety	Grain Yield	Test Weight	Lodging
		2015-16 ---bu/ac---	2015-16 ---lb/bu---	2015-16 1 - 5
OGI	Bentley†	86	56.8	3
Watley	TAM 204	82	56.3	2
WestBred	WB-Grainfield	81	55.7	2
WestBred	WB4458	76	56.9	1
LCS	LCS Mint	73	56.7	3
Syngenta	SY Monument	72	56.9	1
LCS	LCS Wizard	71	58.5	1
OGI	Stardust†	70	57.2	1
OGI	Doublestop CL Plus	69	59.3	3
OGI	Iba	69	57.9	4
KWA	KanMark	68	59.4	2
WestBred	WB-Cedar	65	59.0	1
KWA	Everest	64	59.1	2
OSU	Endurance	63	56.6	1
OGI	Gallagher	61	57.5	2
OGI	Duster	60	55.9	2
LCS	LCS Pistol	58	53.5	3
Syngenta	SY Flint	54	57.6	1
OGI	Ruby Lee	52	58.9	1
OGI	Billings	52	58.1	1
Syngenta	SY Llano	46	55.4	3
Experimentals				
	OK10126	81	60.3	1
	OK12912C	80	58.8	1
	OK1059060-3	78	58.0	1
	OK09915C-1	70	60.4	1
	OK12716R/W	68	53.2	3
Mean		68	57.4	2
LSD (0.05)		11	2.5	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a 1 - 5 scale with 1 indicating no lodging. All plots received an application of 4 oz/ac Monsoon fungicide at GS 9 on 4/14/2016.

† Varieties tested and reported as experimental lines in the trial(s): Bentley = OK09125; Stardust = OK10728W.

Marshall Dual-Purpose Wheat Variety Trial

Cooperator: Fuxa Farms

Planting & harvest dates: 9/15/15 & 6/11/16

Management: Dual-purpose

Tillage: Conventional

Previous crop: Wheat

Soil type: Kirkland silt loam

Soil test: pH = 6.1, P = 58, K = 330

Source	Variety	Grain Yield			Test Weight 2015-16
		2015-16	2-Year	3-Year	
-----bu/ac-----					---lb/bu---
Syngenta	SY Monument	53	-	-	58.2
OGI	Iba	51	44	37	58.3
OGI	Duster	51	47	38	58.7
OSU	Endurance	51	44	35	57.3
WestBred	WB-Grainfield	50	-	-	56.5
OGI	Bentley†	50	42	36	55.3
OGI	Doublestop CL Plus	48	43	36	60.9
OGI	Gallagher	48	45	35	60.0
Syngenta	SY Flint	45	-	-	58.1
WestBred	WB-Cedar	43	44	35	58.0
LCS	LCS Pistol	41	38	-	54.5
KWA	KanMark	40	-	-	56.8
KWA	Everest	40	38	31	60.1
WestBred	WB4458	38	36	29	54.8
OGI	Billings	38	33	26	58.6
Syngenta	SY Llano	32	-	-	59.0
LCS	LCS Wizard	32	29	25	54.0
Watley	TAM 204	31	-	-	55.1
OGI	Ruby Lee	29	31	27	55.1
LCS	LCS Mint	25	26	23	56.3
Experimentals					
	OK12621	51	-	-	57.8
	OK12716R/W	50	-	-	54.5
	OK09915C-1	47	-	-	60.2
	OK12912C	45	-	-	57.6
	OK11231	29	-	-	55.6
Mean		42	39	32	57.2
LSD (0.05)		8	6	5	3.3

Notes: Cattle were removed when Duster reached first hollow stem. Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Moderate stripe rust pressure throughout grain fill.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Marshall Grain-only Wheat Variety Trial

Cooperator: Fuxa Farms

Planting & harvest dates: 10/15/15 & 6/11/16

Management: Grain-only

Tillage: Conventional

Previous crop: Wheat

Soil type: Kirkland silt loam

Soil test: pH = 6.1, P = 58, K = 330

Source	Variety	Grain Yield			Test Weight 2015-16
		2015-16	2-Year	3-Year	
		-----bu/ac-----		---lb/bu---	
Syngenta	SY Monument	62	-	-	58.2
WestBred	WB-Grainfield	59	-	-	57.0
OGI	Iba	58	52	42	57.9
Syngenta	SY Flint	57	-	-	58.0
OGI	Gallagher	57	50	39	57.7
OGI	Duster	54	45	40	56.8
Syngenta	SY Llano	52	-	-	59.8
WestBred	WB4458	51	49	40	55.8
OGI	Bentley†	51	46	38	57.1
OGI	Billings	51	46	37	58.6
KWA	KanMark	50	-	-	56.8
OGI	Doublestop CL Plus	48	42	36	59.0
OSU	Endurance	47	40	34	54.4
WestBred	WB-Cedar	47	50	40	56.2
Watley	TAM 204	45	-	-	56.6
LCS	LCS Mint	42	36	32	55.7
LCS	LCS Pistol	39	38	-	55.6
KWA	Everest	30	36	31	56.5
LCS	LCS Wizard	28	27	25	51.7
OGI	Ruby Lee	25	29	27	51.4
Experimentals					
	OK12716R/W	59	-	-	55.8
	OK12621	56	-	-	56.3
	OK12912C	51	-	-	57.2
	OK09915C-1	48	-	-	60.4
	OK11231	40	-	-	56.5
Mean		48	42	35	56.7
LSD (0.05)		7	7	6	2.4

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Moderate stripe rust pressure throughout grain fill.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Marshall Dual-Purpose vs. Grain-Only Comparison

Cooperator: Fuxa Farms
 Planting date: 9/15/15 (Dual-Purpose) & 10/15/15 (Grain-only)
 Harvest date: 6/11/16

Management: Dual-purpose, conventional tillage
 Previous crop: Wheat
 Soil type: Kirkland silt loam
 Soil test: pH = 6.1, P = 58, K = 330

Source	Variety	Grain Yield 2015-16				3-Year				Test Weight 2015-16		
		Dual-purpose	Grain-only	Diff.	Dual-purpose	Grain-only	Diff.	Dual-purpose	Grain-only	Dual-purpose	Grain-only	Diff.
bu/ac												
Syngenta	SY Monument	53	62	-9	-	-	-	-	-	-	-	0.0
OGI	Iba	51	58	-7	44	52	-8	37	42	-5	58.3	57.9
OGI	Duster	51	54	-3	47	45	2	38	40	-1	58.7	56.8
OSU	Endurance	51	47	4	44	40	4	35	34	1	57.3	54.4
WestBred	WB-Grainfield	50	59	-9	-	-	-	-	-	-	56.5	57.0
OGI	Bentley	50	51	-1	42	46	-4	36	38	-3	55.3	57.1
OGI	Doublestop CL Plus	48	48	1	43	42	1	36	36	0	60.9	59.0
OGI	Gallagher	48	57	-8	45	50	-5	35	39	-4	60.0	57.7
Syngenta	SY Flint	45	57	-12	-	-	-	-	-	-	58.1	58.0
WestBred	WB-Cedar	43	47	-4	44	50	-5	35	40	-5	58.0	56.2
LCS	LCS Pistol	41	39	2	38	38	0	-	-	-	54.5	55.6
KWA	KanMark	40	50	-10	-	-	-	-	-	-	56.8	56.8
KWA	Everest	40	30	10	38	36	2	31	31	0	60.1	56.5
WestBred	WB4458	38	51	-14	36	49	-13	29	40	-11	54.8	55.8
OGI	Billings	38	51	-13	33	46	-13	26	37	-11	58.6	58.6
Syngenta	SY Llano	32	52	-19	-	-	-	-	-	-	59.0	59.8
LCS	LCS Wizard	32	28	4	29	27	2	25	25	0	54.0	51.7
Watney	TAM 204	31	45	-13	-	-	-	-	-	-	55.1	56.6
OGI	Ruby Lee	29	25	4	31	29	2	27	27	0	55.1	51.4
LCS	LCS Mint	25	42	-18	26	36	-10	23	32	-9	56.3	55.7
Experiments												
		OK12621	51	56	-5	-	-	-	-	-	57.8	56.3
		OK12716R/W	50	59	-9	-	-	-	-	-	54.5	55.8
		OK09915C-1	47	48	-1	-	-	-	-	-	60.2	60.4
		OK12912C	45	51	-5	-	-	-	-	-	57.6	57.2
		OK11231	29	40	-11	-	-	-	-	-	55.6	56.5
		Mean	42	48	-6	39	42	-3	32	35	-4	57.2
		LSD (0.05)	8	7	11	6	7	7	5	6	6	3.3
												2.4
												3.0

Notes: Cattle were removed when Duster reached first hollow stem. Grain yields adjusted to 12% 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 dual-purpose vs. grain-only averages for that variety. Moderate stripe rust pressure throughout grain fill.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Thomas Wheat Variety Trial

Cooperator: Bill Jackson & Keith Killer

Planting & harvest dates: 10/2/15 & 6/21/16

Management: Grain-only

Tillage: Conventional

Extension Educator: Ron Wright

Previous crop: Wheat

Soil type: Pond Creek silt loam

Soil test: pH = 5.3, P = 58, K = 490

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16		
		2015-16	2-Year	3-Year				
-----bu/ac-----						---lb/bu---		
						1 - 5		
OGI	Bentley†	81	62	47	58.7	1		
KWA	KanMark	78	-	-	61.0	3		
LCS	LCS Mint	77	-	-	60.1	2		
OGI	Gallagher	75	58	44	60.0	2		
Watley	TAM 204	75	57	-	59.0	1		
WestBred	WB-Grainfield	74	-	-	59.6	2		
OGI	Iba	70	49	37	60.3	2		
LCS	LCS Pistol	69	48	-	59.1	5		
OSU	Endurance	69	47	35	59.7	2		
Syngenta	SY Drifter	69	-	-	60.4	1		
OGI	Billings	68	52	38	60.0	1		
OGI	Doublestop CL Plus	66	51	39	60.7	2		
OGI	Duster	66	46	33	59.7	4		
LCS	LCS Wizard	64	43	34	59.9	1		
Syngenta	SY Flint	63	-	-	59.5	1		
WestBred	WB4458	62	52	40	58.2	1		
OGI	Ruby Lee	52	36	30	59.0	2		
WestBred	WB-Cedar	48	44	35	54.8	1		
Syngenta	SY Llano	37	38	-	60.6	1		
Experimentals								
	OK11D25056	75	-	-	60.0	3		
	OK09915C-1	66	-	-	60.8	1		
Mean		67	49	37	59.6	2		
LSD (0.05)		12	10	6	1.2			

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Lodging on a scale from 1 - 5 with 1 indicating no lodging. All plots were treated with 4 oz/ac tebuconazole and 16 oz/ac Lorsban on 4/4/16.

† Variety tested and reported as experimental line OK09125 in the two previous trials.

Union City Wheat Variety Trial

Cooperator: Bornemann Farms
 Planting & harvest dates: 10/1/15 & 6/7/16
 Management: Dual-purpose
 Tillage: Conventional

Extension Educator: Kyle Worthington
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 6.5, P = 109, K = 313

Source	Variety	Grain Yield		Test Weight 2015-16 ---lb/bu---
		2015-16	2-Year	
-----bu/ac-----				
LCS	LCS Mint	73	-	62.0
OGI	Bentley†	66	53	58.7
OSU	Endurance	66	48	60.1
OGI	Gallagher	63	56	59.4
OGI	Iba	62	51	60.5
Watley	TAM 204	60	53	57.3
Syngenta	SY Flint	58	-	59.0
WestBred	WB-Grainfield	58	-	59.5
LCS	LCS Pistol	57	46	59.7
OGI	Duster	57	47	59.3
OGI	Doublestop CL Plus	57	50	58.9
WestBred	WB-Cedar	55	53	58.9
OGI	Ruby Lee	53	44	56.4
KWA	KanMark	53	-	60.9
LCS	LCS Wizard	53	41	60.2
OGI	Billings	52	45	59.0
Syngenta	SY Llano	50	46	60.4
WestBred	WB4458	50	48	58.5
Syngenta	SY Drifter	50	-	58.8
Experimentals				
	OK12716R/W	72	-	60.0
	OK12621	61	-	59.6
	OK11D25056	60	-	60.8
	OK09915C-1	57	-	61.2
	OK12912C	49	-	58.8
Mean		58	49	59.5
LSD (0.05)		8	7	NS

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. NS = not significant.

† Variety tested and reported as experimental line OK09125 in last year's trial.

Walters Wheat Variety Trial

Cooperator: Kinder Farms

Planting & harvest dates: 9/11/15 & 6/7/16

Management: Dual-purpose

Tillage: No-till

Previous crop: Canola

Soil type: Tillman-Foard complex

Soil test: pH = 4.9, P = 100, K = 348

Source	Variety	Grain Yield			Test Weight 2015-16	Lodging 2015-16
		2015-16	2-Year	3-Year		
-----bu/ac-----						
					---lb/bu---	1 - 5
Syngenta	SY Flint	43	-	-	54.7	1
OGI	Duster	43	38	37	56.1	1
OGI	Gallagher	40	34	33	55.6	1
LCS	T158	37	-	-	57.7	3
OGI	Doublestop CL Plus	36	34	32	61.2	1
OGI	Bentley†	35	31	30	57.6	4
OGI	Iba	32	31	31	55.3	3
LCS	LCS Pistol	31	33	-	54.3	1
Watley	TAM 204	31	29	-	55.2	1
LCS	LCS Wizard	30	-	-	59.1	1
OSU	Endurance	27	26	27	53.4	3
WestBred	Winterhawk	27	32	32	55.1	3
WestBred	WB4458	27	26	26	54.2	2
WestBred	WB-Grainfield	26	30	29	48.2	4
OGI	Ruby Lee	25	23	28	53.1	2
Syngenta	SY Drifter	24	-	-	55.0	2
Syngenta	SY Llano	24	23	-		1
KWA	KanMark	23	-	-	53.9	3
Experimental						
	OK09915C-1	41	-	-	56.9	1
Mean		32	30	31	55.5	2
LSD (0.05)		7	6	5	5.5	

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

† Variety tested and reported as experimental line OK09125 in the two previous trials.

2015-2016 Oklahoma Wheat Variety Performance Tests -- Heading Date and Plant Height

Source	Variety	Altus	50% heading			Altus	Chickasha		Lahoma	Fungicide
			Chickasha	Lahoma	Stillwater		IWM			
-----50% heading-----										
KWA	1863	4/8	4/11	4/16	4/12	25	31	31	33	33
AGSECO	AG Robust	4/4	4/11	4/13	4/7	22	24	26	29	28
PlainsGold	Avery	4/9	4/14	4/19	4/13	22	22	31	30	31
OGI	Bentley	4/7	4/11	4/15	4/11	24	33	35	33	32
OGI	Billings	4/1	4/5	4/13	4/5	24	24	31	26	26
PlainsGold	Brawl CL Plus	4/8	4/11	4/15	4/10	26	22	31	34	33
PlainsGold	Byrd	4/6	4/11	4/17	4/11	20	26	28	31	30
OGI	Doublestop CL Plus	4/10	4/14	4/17	4/13	23	31	37	31	34
OGI	Duster	4/8	4/11	4/16	4/13	24	30	27	29	32
OSU	Endurance	4/10	4/13	4/16	4/13	23	28	33	33	33
KWA	Everest	4/3	4/7	4/12	4/7	17	22	28	27	27
OGI	Gallagher	4/4	4/9	4/15	4/9	22	28	31	28	31
OGI	Iba	4/9	4/11	4/16	4/11	24	29	33	30	31
KWA	Joe	4/9	4/13	4/16	4/12	24	35	31	33	33
KWA	KanMark	4/7	4/11	4/16	4/10	19	28	20	29	26
KWA	Larry	4/6	4/11	4/16	4/12	24	28	31	28	30
LCS	LCS Chrome	4/14	4/18	4/20	4/18	26	29	33	35	34
LCS	LCS Mint	4/12	4/14	4/18	4/13	24	26	33	33	32
LCS	LCS Pistol	4/3	4/13	4/15	4/12	20	31	30	31	29
LCS	LCS Wizard	4/11	4/14	4/17	4/18	18	24	28	30	27
Dyna-Gro	Long Branch	4/16	4/19	4/21	4/18	25	28	31	34	36
OGI	NF 101	4/2	4/7	4/13	4/9	20	26	28	26	31
KWA	Oakley CL	4/12	4/14	4/16	4/18	24	31	29	30	33
OGI	OK Rising	4/2	4/13	4/16	4/11	24	31	33	31	31
OGI	Ruby Lee	4/3	4/11	4/14	4/10	20	26	31	30	35
OGI	Stardust	-	-	4/15	4/9	-	-	-	33	31
Syngenta	SY Drifter	4/11	4/14	4/16	4/12	24	31	33	30	30
Syngenta	SY Flint	4/4	4/11	4/15	4/10	27	30	31	30	31
Syngenta	SY Grit	4/7	4/11	4/15	4/9	26	30	31	33	31
Syngenta	SY Llano	4/3	4/7	4/12	4/5	21	24	28	24	26
Syngenta	SY Monument	4/12	4/14	4/18	4/13	24	24	31	32	31
Syngenta	SY Razor	4/8	4/11	4/15	4/9	26	30	30	35	33
Syngenta	SY Wolf	-	-	-	-	-	-	-	-	-
LCS	T158	4/6	4/11	4/14	4/11	18	31	28	32	30
Watley	TAM 112	4/4	4/11	4/13	4/10	20	24	26	33	30
AGSECO	TAM 114	4/11	4/11	4/16	4/11	23	28	28	30	33
Watley	TAM 204	4/9	4/11	4/16	4/11	23	33	26	31	29
KWA	Tatanka	4/6	4/11	4/15	4/11	20	35	28	31	30
WestBred	WB4303	4/2	4/11	4/14	4/6	24	24	30	28	31
WestBred	WB4458	4/2	4/7	4/14	4/6	20	28	31	32	33
WestBred	WB4515	4/11	4/14	4/19	4/13	24	31	29	28	32
WestBred	WB4721	4/14	4/18	4/19	4/13	29	26	31	32	34
WestBred	WB-Cedar	3/31	4/4	4/12	4/6	20	28	30	26	28
WestBred	WB-Grainfield	4/13	4/18	4/18	4/13	24	29	33	31	32
WestBred	Winterhawk	4/8	4/11	4/15	4/11	21	31	30	29	30
KWA	Zenda	4/5	4/11	4/15	4/10	20	24	28	30	29
OSU Experimentals										
	OK09915C-1	4/11	4/18	4/18	4/18	26	28	31	32	33
	OK10126	-	-	-	4/13	-	-	-	-	-
	OK1059060-3	-	-	-	4/11	-	-	-	-	-
	OK11231	-	-	4/18	4/12	-	-	-	31	32
	OK118036R/W	-	-	-	4/5	-	-	-	-	-
	OK11D25056	4/6	4/11	4/15	4/11	24	26	31	31	28
	OK12621	-	-	-	4/9	-	-	-	-	-
	OK12716R/W	4/6	-	4/16	4/11	26	-	-	33	32
	OK12912C	-	4/11	4/15	4/13	-	29	31	35	34
	OK12DP22002-042	-	-	-	4/7	-	-	-	-	-
Mean						23	28	30	31	31

The Oklahoma Cooperative Extension Service

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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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