



Current Report

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

2016-2017 Small Grains Variety Performance Tests

David Marburger
Small Grains Extension Specialist

Robert Calhoun
Senior Agriculturalist

Tracy Beedy
OSU Area Agronomist – OPREC

Brett Carver
Wheat Breeder

Bob Hunger
Extension Plant Pathologist

Branden Watson
Graduate Research Assistant

Christopher Gillespie
Graduate Research Assistant

At the time of writing this report, 2017 Oklahoma wheat production is estimated to be approximately 89.1 million bushels, which is about 35% less than 2016 production (Table 1) and 9% less than 2015 production. The lower total grain production is the result of fewer wheat acres planted in the state this year. The 4.5 million planted acres were down 10% compared to the previous year, and with low wheat prices during the season, harvested acres were down as well. The number of harvested acres is estimated at 2.7 million, which is 23% less than in 2016 (Table 1). Despite the lower harvested acres, the statewide average yield is projected at 33 bu/ac. This is 6 bu/ac (18%) less than the record-tying 2016 state average but 4 bu/ac (12%) greater than the previous ten-year average.

Table 1. Oklahoma wheat production for 2016 and 2017 as estimated by OK NASS, June 2017.

	2016	2017
Harvested Acres	35 million	2.7 million
Yield (bu/ac)	39	33
Total bushels	136.5 million	89.1 million

The 2016-2017 wheat growing season can be characterized overall by periods of rainfall and near optimal growing conditions at critical times. The growing season got an early start with rainfall in late August, prompting producers interested in targeting fall forage to begin planting. Planting continued to move rapidly during early September, and most of the wheat at this time was sown into adequate soil moisture and emerged rapidly. Wheat intended for grain-only was sown during the average timeframe of early- to mid-October. A majority of the wheat sown at this time also had adequate soil moisture for good establishment, but most of the Northwest and Panhandle regions of the state were not as fortunate. Dry soil conditions in those regions resulted in suboptimal stands or no germination at all. After mid-October, little precipitation fell throughout the state for the remainder of the fall, and temperatures were above normal. Crop conditions during the early part of the growing season were rated mostly good, but with the lack of rainfall during the latter part of fall, crop conditions began deteriorating by the end of November. Fortunately, most of the wheat that was sown into adequate soil moisture was able to

establish adequate above- and below-ground growth before going into winter dormancy.

Warmer than normal temperatures continued throughout much of the winter. January and February are normally very dry months for the southern Great Plains. Fortunately, much of the state received two to four inches of precipitation during mid-January. While some of the precipitation came in the form of ice in the Woodward area, it did not do much damage to the crop. It also provided the soil moisture needed for some wheat to germinate in the Northwest and Panhandle regions that had been sown in dry conditions.

With the above-average temperatures during the winter, plants broke winter dormancy ahead of normal, and spring green-up advanced quickly. The first hollow stem growth stage was reached for many varieties before the end of February, almost two weeks ahead of normal. Another round of widespread showers fell across much of the Wheat Belt on February 20, excluding the Panhandle and northeastern parts of the state. For some areas, this provided a boost to help plants recover from grazing injury. Other areas, especially south central Oklahoma, did not receive as much of this needed rainfall, and as a result, some grazed wheat pastures did not recover as well. Considering the warm temperatures during spring green-up, the prevailing thought was that much of the wheat would be mature and harvested by mid-May. However, temperatures returned to normal and slightly below normal during mid- to late-March. Many areas received another round of rainfall at the end of March, providing adequate soil moisture as the wheat crop transitioned into reproductive growth. Cool temperatures and adequate soil moisture persisted throughout heading and grain fill, favoring kernel filling. One abnormal weather event that occurred this year was a foot of snow that accumulated in the Panhandle on the last weekend in April. This did result in lodged plants and lower test weight values, but the overall effect on yield was not as detrimental as expected at the time.

Most wheat was mature in southwestern Oklahoma by the middle of May and by the end of May in the central part of the state. Producers, for the most part, were not delayed by rainfall events, and with the dry weather during June, much of the wheat was harvested timely and quickly. Overall, harvest was almost complete in the state by late June.

Yields throughout Oklahoma were variable depending on location but were above average overall. Part of this variability was due to overgrazing and/or rainfall variability. Rainfall

mostly occurred about every three to four weeks throughout the beginning of 2017. Field averages of 30 to 40 bu/ac were the norm across much of the state, but higher averages, even into the 60 to 70 bu/ac range, were not uncommon in some areas. Test weights throughout harvest remained at or above 60 lb/bu for early-harvested fields and did not drop much below the upper 50's towards the end of harvest.

Different insect pressures were a concern at times during the growing season, but few were widespread, overlapped, or season long. Some of the wheat planted in late August into early September was hit hard by fall armyworm, and some fields had to be replanted. Dead tillers on varieties susceptible to Hessian fly showed up on early planted wheat in areas of southwest Oklahoma during mid-fall, but only a couple reports of Hessian fly were documented during the spring. The dry weather in northwest Oklahoma through the winter provided ideal conditions for winter grain mite and brown wheat mite to thrive on wheat plants coming out of winter dormancy. Aphids were not really on the radar of most producers until mid-March, but this turned out as not as big of a problem as had been observed in other previous years. Despite the low aphid numbers, 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 and yellowing associated with BYD, there was not as much stunting as sometimes observed with early-season transmission of the virus. Wheat Streak Mosaic (WSM), transmitted by the wheat curl mite, was a significant issue for producers around the state, but the majority of the affected areas seemed to be concentrated in southwestern and northwestern Oklahoma, as well as the Panhandle region. Yield reductions were very apparent in fields infected with WSM.

The warm temperatures and available moisture during the fall prompted the development of some foliar diseases, primarily leaf rust. Leaf rust spores were able to survive the winter due to mild conditions, but the disease was slowed by hot temperatures and lack of available moisture during spring green-up. However, when temperatures returned to normal during mid- to late-March, the abundant inoculum present allowed leaf rust to become one of the top diseases for producers across most of the state. The presence of leaf rust during 2017 was abnormal compared to previous years as it developed sooner and persisted through grain fill while also reaching a wider geographic area. In addition to leaf rust, stripe rust was present, but at low to moderate levels in isolated areas and not as widespread throughout the state as it was in 2015 and 2016. Because of the impact that both rusts have had over the past couple years, producers were more open to apply a foliar fungicide to susceptible varieties, with many fields throughout the state receiving at least one fungicide application. Variety trial results from Apache, Chickasha, and Lahoma indicated again this year that producers were well justified in spraying many of these acres. This year, grain yield of the variety Bentley, for example, resulted in a 27 bu/ac increase at Lahoma when treated once with a foliar fungicide at flag leaf emergence. Our results at Lahoma also showed the power of genetic resistance to disease in varieties such as Doublestop CL Plus in which the fungicide treated plots only resulted in a 1 bu/ac increase in yield over the non-treated plots.

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 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 30 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-block arrangement of a randomized complete block with four replications where whole plots were fungicide treated or non-treated, and subplots were wheat variety.

Conventional till plots received 50 lb/ac of 18-46-0 in-furrow at planting. No-till plots received 5 gal/ac of 10-34-0 at planting. The Marshall dual-purpose trial, Union City, Walters, and forage trials were sown at 120 lb/ac. All other locations were sown at 60 lb/ac. 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 Hege or Winterstieger Delta small plot combine. When sample size allowed for grain moisture measurement on individual plots, grain yields were corrected to 12% moisture. Grain moisture at all sites was generally below 12%, and maximum and minimum grain moisture for all plots at a location typically ranged no more than 2%. Keyes plots were not harvested due to severe hail damage in late June, and the Lamont plots were not harvested due to severe Italian ryegrass pressure. The Hooker plots were harvested, but data are not reported as the trial 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



@OSU_smallgrains



OSU Small Grains



OSU Small Grains

Funding provided by:

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

Area Extension Staff

Brian Pugh OSU Area Agronomist – Northeast District
Josh Bushong OSU Area Agronomist – Northwest District
Heath Sanders OSU Area Agronomist – Southwest District

County Extension Staff

Thomas Puffinbarger, Alfalfa County Extension Educator
Loren Sizelove, Beaver County Extension Educator
David Nowlin, Caddo and Grady County Extension Educator
Kyle Worthington, Canadian County Extension Educator
Wyatt Kirwan, Cotton County Extension Educator
Sug Farrington, Cimarron County Extension Educator
Ron Wright, Custer County Extension Educator
Rick Nelson, Garfield County Extension Educator
Kassie Junghanns, Grant County Extension Educator
Darrell McBee, Harper County Extension Educator
Gary Strickland, Jackson and Greer County Extension Educator
Corbin Dewitt, Kay County Extension Educator
Zack Meyer, Kingfisher County Extension Educator
Troy Gosney, Major County Extension Educator
Courtney May, Ottawa County Extension Educator
Katie Hughes, Texas County Extension Educator
Greg Highfill, Woods County Extension Educator

Station Superintendents

Erich Wehrenberg, Agronomy Research Station, Stillwater
Richard Austin, North Central Research Station, Lahoma
Cameron Murley, Oklahoma Panhandle Research and Extension Center, Goodwell
Michael Pettijohn, South Central Research Station, Chickasha
Rocky Thacker, Southwest Research and Extension Center, Altus

Student Workers

Warren Gaucher

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

Dan & Ernest Herald, Hooker, OK
J.B. Stewart, Keyes, OK
Don and Roger Kirby, Lamont, 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, Hot Rod, TAM 114

Colorado Wheat Research Foundation (PlainsGold)

Brad Erker
4026 S. Timberline Rd. Ste. 100
Fort Collins, CO 80525
Phone: (970) 449-6994
www.coloradowheat.org
Varieties: Avery, Brawl CL Plus, Byrd, Langin

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: Joe, KS061193K-2 (Bob Dole), KS080448C*-102 (AG Icon), Larry, Tatanka, Zenda

Limagrain Cereal Seeds (LCS)

Drew Hendricker
2040 SE Frontage Rd.
Fort Collins, CO 80525
Phone: (970) 498-2218
Email: drew.hendricker@limagrain.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: WB4269, 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, Lonerider, NF 101, Ruby Lee, Smith's Gold, Spirit Rider, 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.agriproheat.com
Varieties: SY Achieve CL2, SY Benefit, SY Drifter, SY Flint, SY Grit, SY Llano, SY Monument, SY Razor, SY Rugged

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, 2016-2017.

2016-2017 Oklahoma Wheat Variety Performance Tests Summary.

Source	Variety	grain yield (bu/ac)										
		Afton	Altus	Alva	Apache	Apache Fungicide	Balko	Buffalo	Cherokee	Chickasha	IWM	Goodwell Irrigated
AGSECO	AG Icon	-	31	-	-	-	-	-	-	30	41	43
AGSECO	AG Robust	-	27	-	-	-	-	-	-	26	36	41
PlainsGold	Avery	-	-	50	-	-	37	84	60	-	-	41
OGI	Bentley	32	25	56	60	72	29	75	75	18	47	52
OGI	Billings	32	28	-	-	-	-	-	-	25	44	55
Syngenta	Bob Dole	-	38	-	-	-	-	-	-	37	49	45
PlainsGold	Brawl CL Plus	-	-	61	-	-	31	76	72	-	-	45
PlainsGold	Byrd	-	-	51	-	-	35	74	67	-	-	47
OGI	Doublestop CL Plus	29	32	64	58	61	33	84	75	33	48	46
OGI	Duster	33	34	52	57	61	32	75	59	37	56	52
OSU	Endurance	32	24	58	60	64	31	67	66	29	41	42
OGI	Gallagher	32	32	57	72	76	26	66	71	28	48	45
AGSECO	Hot Rod	-	29	-	-	-	-	-	-	45	54	50
OGI	Iba	33	32	62	70	68	35	82	77	30	53	50
KWA	Joe	26	39	68	-	-	49	89	89	34	50	55
PlainsGold	Langin	-	-	55	-	-	35	-	73	-	-	42
KWA	Larry	24	20	60	-	-	30	75	72	16	42	49
LCS	LCS Chrome	20	26	66	68	72	33	76	77	29	39	42
LCS	LCS Mint	28	22	64	51	68	36	71	62	14	32	43
LCS	LCS Pistol	30	27	55	59	64	42	75	64	27	48	48
LCS	LCS Wizard	-	26	-	-	-	-	-	-	30	47	48
OGI	Lonerider	35	-	54	-	-	32	-	-	-	-	54
Dyna-Gro	Long Branch	-	32	-	-	-	-	-	-	24	45	48
OGI	NF 101	-	23	-	-	-	-	-	-	36	52	46
OGI	Ruby Lee	41	27	59	67	73	23	74	74	33	49	44
OGI	Smith's Gold	-	34	55	66	66	30	-	66	34	54	46
OGI	Spirit Rider	-	-	-	-	-	20	-	71	-	-	39
OGI	Stardust	-	31	-	-	-	-	-	-	18	39	43
Syngenta	SY Achieve CL2	-	34	-	-	-	-	-	-	27	53	45
Syngenta	SY Benefit	44	24	-	-	-	-	-	-	22	50	43
Syngenta	SY Drifter	-	30	-	-	-	-	-	-	32	41	51
Syngenta	SY Flint	35	26	-	51	59	-	-	-	21	46	49
Syngenta	SY Grit	-	25	-	-	-	-	-	-	20	48	42
Syngenta	SY Llano	30	30	-	45	60	-	-	-	27	43	-
Syngenta	SY Monument	33	-	64	-	-	36	73	78	-	-	40
Syngenta	SY Razor	-	29	-	60	56	-	-	-	33	42	-
Syngenta	SY Rugged	-	27	-	-	-	-	-	-	27	42	55
LCS	T158	-	31	-	-	-	-	-	-	26	56	57
Watley Seed	TAM 112	-	-	50	-	-	27	72	60	-	-	38
AGSECO	TAM 114	-	33	-	-	-	-	-	-	39	61	43
Watley Seed	TAM 204	30	-	45	64	71	31	-	66	14	42	57
KWA	Tatanka	30	30	55	-	-	49	-	73	25	49	52
WestBred	WB4269	-	39	-	-	-	-	-	-	38	57	53
WestBred	WB4303	-	28	-	-	-	-	-	-	29	51	46
WestBred	WB4458	31	28	-	70	76	-	-	-	20	45	58
WestBred	WB4515	-	30	-	-	-	-	-	-	33	58	42
WestBred	WB4721	-	36	-	-	-	-	-	-	29	52	49
WestBred	WB-Cedar	36	31	50	-	-	24	-	64	40	58	46
WestBred	WB-Grainfield	31	-	66	68	85	37	81	84	30	61	49
WestBred	Winterhawk	-	34	55	76	83	36	76	83	30	58	54
KWA	Zenda	-	32	-	-	-	-	-	-	36	46	58
OSU Experimentals												
	OK11755W-9W	-	28	-	-	-	-	-	-	-	-	51
	OK11D25005	-	-	-	-	-	-	-	78	-	-	-
	OK12206-2	37	-	61	-	-	-	-	64	-	-	56
	OK12621	46	-	-	-	-	-	-	-	-	-	-
	OK12716R/W	29	28	62	62	63	29	-	84	27	54	46
	OK12912C-2	-	32	65	60	60	-	-	-	-	-	-
	OK12D22002-077	24	24	55	53	61	28	-	-	19	43	46
	OK12D22004-016	38	-	-	-	-	-	-	-	-	-	61
	OK13209	31	30	63	66	63	-	-	-	34	48	-
	OK13621	-	33	-	-	-	-	-	-	29	54	52
	OK14319	28	-	-	-	-	-	-	74	-	-	-
	Mean	32	30	58	62	67	33	76	72	29	48	48
	LSD (0.05)	6	6	5	11	12	6	12	7	7	7	8

Notes: Shaded values are not statistically different from the highest value within a column.

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

Source	Variety	grain yield (bu/ac)										
		Homestead	Kildare	Kingfisher	Lahoma	Lahoma Fungicide	Marshall Dual-Purpose	Marshall Grain-Only	Thomas	Union City	Walters	
AGSECO	AG Icon	-	-	-	65	67	-	-	-	-	-	
AGSECO	AG Robust	-	-	-	65	75	-	-	-	-	-	
PlainsGold	Avery	-	-	-	37	67	-	-	-	-	-	
OGI	Bentley	52	57	20	53	79	20	26	58	42	19	
OGI	Billings	43	34	18	54	66	20	20	66	26	-	
Syngenta	Bob Dole	-	-	-	70	75	-	-	-	-	-	
PlainsGold	Brawl CL Plus	-	-	-	66	83	-	-	-	-	-	
PlainsGold	Byrd	-	-	-	48	80	-	-	-	-	-	
OGI	Doublestop CL Plus	53	56	23	62	63	-	32	58	40	20	
OGI	Duster	51	46	26	50	64	24	38	63	34	19	
OSU	Endurance	44	45	19	48	63	24	33	56	31	15	
OGI	Gallagher	51	45	24	67	76	22	30	71	36	17	
AGSECO	Hot Rod	-	-	-	83	92	-	-	-	-	-	
OGI	Iba	52	55	21	56	71	-	40	65	32	19	
KWA	Joe	53	57	-	72	77	36	44	68	-	-	
PlainsGold	Langin	-	-	-	60	84	-	-	-	-	-	
KWA	Larry	45	51	17	43	77	-	16	50	-	-	
LCS	LCS Chrome	55	52	32	58	66	16	34	61	40	21	
LCS	LCS Mint	51	40	-	40	58	14	17	54	34	12	
LCS	LCS Pistol	50	46	-	49	72	11	20	56	36	20	
LCS	LCS Wizard	-	-	-	51	69	-	-	-	-	-	
OGI	Lonerider	53	-	-	-	-	-	-	74	-	-	
Dyna-Gro	Long Branch	-	-	-	45	67	-	-	-	-	-	
OGI	NF 101	-	-	-	62	75	-	-	-	-	-	
OGI	Ruby Lee	56	49	19	64	77	20	29	53	26	19	
OGI	Smith's Gold	47	44	25	64	78	28	28	64	47	17	
OGI	Spirit Rider	-	50	-	-	-	-	-	-	-	-	
OGI	Stardust	42	-	-	45	62	14	21	-	-	-	
Syngenta	SY Achieve CL2	-	-	-	65	82	-	-	-	-	-	
Syngenta	SY Benefit	-	-	-	51	74	-	-	-	-	-	
Syngenta	SY Drifter	-	-	-	60	70	-	-	-	-	-	
Syngenta	SY Flint	43	54	22	56	70	19	27	52	42	17	
Syngenta	SY Grit	-	-	-	54	80	-	-	-	-	-	
Syngenta	SY Llano	36	35	18	58	71	14	-	52	33	15	
Syngenta	SY Monument	55	48	23	72	84	29	40	65	-	-	
Syngenta	SY Razor	-	-	-	-	-	-	-	-	44	12	
Syngenta	SY Rugged	-	-	-	62	74	-	-	-	-	-	
LCS	T158	-	-	-	55	83	-	-	-	-	-	
Watley Seed	TAM 112	-	-	-	36	67	-	-	-	-	-	
AGSECO	TAM 114	-	-	-	69	89	-	-	-	-	-	
Watley Seed	TAM 204	47	46	25	49	77	16	14	53	43	16	
KWA	Tatanka	53	51	-	53	77	14	22	57	-	-	
WestBred	WB4269	-	-	-	78	88	-	-	-	-	-	
WestBred	WB4303	-	-	-	69	80	-	-	-	-	-	
WestBred	WB4458	49	47	16	59	75	21	27	54	35	12	
WestBred	WB4515	-	-	-	67	88	-	-	-	-	-	
WestBred	WB4721	-	-	-	64	82	-	-	-	-	-	
WestBred	WB-Cedar	42	37	23	62	72	34	31	63	38	-	
WestBred	WB-Grainfield	56	62	26	64	88	17	31	60	32	15	
WestBred	Winterhawk	-	-	-	64	82	-	-	-	-	19	
KWA	Zenda	-	-	-	67	82	-	-	-	-	-	
OSU Experimentals												
	OK11755W-9W	-	-	-52	78	-	-	-	-	-	-	
	OK11D25005	-	-	-	-	-	-	29	-	22	21	
	OK12206-2	-	-	-	61	78	17	28	-	-	-	
	OK12621	-	-	-	-	-	21	35	-	-	-	
	OK12716R/W	48	56	27	61	77	21	27	59	49	22	
	OK12912C-2	44	-	21	70	67	-	-	-	-	-	
	OK12D22002-077	39	44	18	48	62	-	-	-	-	-	
	OK12D22004-016	-	-	-	69	84	-	-	-	-	-	
	OK13209	43	-	17	77	77	-	-	-	-	-	
	OK13621	-	-	-	68	78	-	-	-	-	-	
	OK14319	-	-	-	-	-	28	40	-	43	-	
Mean		48	48	22	59	75	21	29	60	37	17	
LSD (0.05)		8	7	5	8	8	6	8	7	7	2	

Notes: Shaded values are not statistically different from the highest value within a column.

Afton Wheat Variety Trial

Cooperator: Greg Leonard
 Planting & harvest dates: 10/4/16 & 6/9/17
 Management: Grain-only
 Tillage: Minimum-till

Extension Educator: Courtney May
 Previous crop: Corn
 Soil type: Parsons silt loam
 Soil test: pH = 6.1, P = 39, K = 147

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			--lb/bu--	1 - 5
Syngenta	SY Benefit†	44	-	-	55.4	3
OGI	Ruby Lee	41	42	53	56.9	3
WestBred	WB-Cedar	36	34	45	55.0	3
OGI	Lonerider‡	35	-	-	53.2	2
Syngenta	SY Flint	35	36	-	55.5	3
Syngenta	SY Monument	33	-	-	54.5	1
OGI	Iba	33	38	44	54.2	4
OGI	Duster	33	38	44	52.9	5
OGI	Bentley	32	37	45	53.9	2
OGI	Billings	32	39	51	53.8	3
OSU	Endurance	32	37	46	55.3	2
OGI	Gallagher	32	38	47	53.8	3
WestBred	WB4458	31	31	46	53.9	1
WestBred	WB-Grainfield	31	37	-	52.8	1
LCS	LCS Pistol	30	36	43	54.6	1
Watley	TAM 204	30	38	-	53.9	1
KWA	Tatanka	30	-	-	55.3	3
Syngenta	SY Llano	30	32	-	56.0	2
OGI	Doublestop CL Plus	29	34	45	56.3	1
LCS	LCS Mint	28	-	-	53.9	2
KWA	Joe	26	-	-	54.3	2
KWA	Larry	24	-	-	54.9	1
LCS	LCS Chrome	20	-	-	53.7	1
Experimentals						
	OK12621	46	-	-	57.1	1
	OK12D22004-016	38	-	-	55.8	1
	OK12206-2	37	-	-	55.7	1
	OK13209	31	-	-	55.3	2
	OK12716R/W	29	-	-	53.6	1
	OK14319	28	-	-	55.3	1
	OK12D22002-077	24	-	-	54.2	2
Mean		32	36	46	54.7	2
LSD (0.05)		6	5	5	2.1	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Low to moderate leaf rust pressure during grain fill. Fusarium head blight also present during grain fill.

† Variety entered into the 2016-17 trials as experimental line: SY Benefit = 06BC362-8.

‡ Variety tested and reported as an experimental line in previous trial(s): Lonerider = OK12DP22002-042.

Altus Wheat Variety Trial

Cooperator: OSU Southwest Research & Extension Center
 Planting & harvest dates: 10/20/16 & 6/1/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Gary Strickland
 Previous crop: Wheat
 Soil type: Hollister silty clay loam
 Soil test: pH = 7.1, P = 113, K = 907

Source	Variety	Hail Injury	Grain Yield			Test Weight	Lodging	
			2016-17	2-Year	3-Year	2016-17	2016-17	
			-----bu/ac-----			--lb/bu--	1 - 5	
WestBred	WB4269†	4	39	-	-	58.2	1	
KWA	Joe	3	39	45	-	59.7	2	
Syngenta	Bob Dole†	4	38	-	-	59.4	2	
WestBred	WB4721	4	36	44	-	61.4	1	
OGI	Smith's Gold‡	4	34	45	45	59.6	2	
Syngenta	SY Achieve CL2†	4	34	-	-	58.9	2	
WestBred	Winterhawk	4	34	43	46	60.1	3	
OGI	Duster	2	34	42	43	59.1	4	
AGSECO	TAM 114	4	33	38	40	59.2	2	
OGI	Iba	3	32	42	44	58.8	3	
OGI	Gallagher	4	32	37	40	60.9	2	
OGI	Doublestop CL Plus	4	32	36	40	61.3	2	
Dyna-Gro	Long Branch	4	32	41	-	55.2	3	
KWA	Zenda	4	32	40	-	59.9	2	
OGI	Stardust	3	31	-	-	57.4	3	
LCS	T158	4	31	43	43	58.0	3	
AGSECO	AG Icon†	4	31	-	-	58.8	2	
WestBred	WB-Cedar	3	31	34	39	58.9	1	
Syngenta	SY Llano	4	30	31	30	57.8	2	
Syngenta	SY Drifter	4	30	39	42	60.5	1	
KWA	Tatanka	4	30	45	-	57.5	3	
WestBred	WB4515	3	30	38	-	58.7	3	
AGSECO	Hot Rod	4	29	-	-	58.6	1	
Syngenta	SY Razor	4	29	34	-	61.5	2	
WestBred	WB4303	3	28	36	-	54.7	2	
OGI	Billings	4	28	32	36	61.3	2	
WestBred	WB4458	2	28	37	39	57.0	2	
Syngenta	SY Rugged†	4	27	-	-	53.3	3	
AGSECO	AG Robust	4	27	36	-	58.9	3	
OGI	Ruby Lee	4	27	25	31	59.6	3	
LCS	LCS Pistol	4	27	30	36	57.9	4	
Syngenta	SY Flint	2	26	39	43	59.8	3	
LCS	LCS Chrome	4	26	41	45	55.8	2	
LCS	LCS Wizard	5	26	28	31	59.3	2	
OGI	Bentley	4	25	37	43	54.6	2	
Syngenta	SY Grit	5	25	34	-	56.9	3	
Syngenta	SY Benefit†	3	24	-	-	58.3	3	
OSU	Endurance	4	24	29	35	58.4	3	
OGI	NF 101	3	23	23	29	59.7	2	
LCS	LCS Mint	4	22	34	36	58.1	3	
KWA	Larry	4	20	34	-	57.6	3	
Experimentals								
	OK13621	3	33	-	-	60.1	2	
	OK12912C-2	3	32	-	-	60.0	2	
	OK13209	4	30	-	-	59.4	2	
	OK12716R/W	4	28	48	-	57.3	2	
	OK11755W-9W	4	28	-	-	59.4	3	
	OK12D22002-077	3	24	-	-	59.5	2	
Mean			4	30	37	39	58.6	2
LSD (0.05)				6	6	5	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. A storm with hail causing stem injury occurred on 5/10/17. Hail injury rated on a 0 - 10 scale with 0 representing no broken stems and 10 representing complete stem breakage. Limited seed shattering due to the hail injury was observed. Severe leaf rust and moderate stripe rust pressure throughout grain fill. Data for varieties TAM 204 and WB-Grainfield were not reported as the coefficient of variation (c.v.) exceeded 30.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Alva Wheat Variety Trial

Cooperator: Jerad Bradt & Wes Mallory
 Planting & harvest dates: 10/14/16 & 6/12/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Greg Highfill
 Previous crop: Wheat
 Soil type: Grant silt loam
 Soil test: pH = 6.0, P = 76, K = 535

Source	Variety	Grain Yield			Test Weight
		2016-17	2-Year	3-Year	2016-17
		-----bu/ac-----			---lb/bu---
KWA	Joe	68	-	-	59.9
WestBred	WB-Grainfield	66	62	-	58.2
LCS	LCS Chrome	66	-	-	58.8
Syngenta	SY Monument	64	60	-	57.9
LCS	LCS Mint	64	63	59	58.8
OGI	Doublestop CL Plus	64	60	56	61.2
OGI	Iba	62	59	56	57.6
PlainsGold	Brawl CL Plus	61	54	51	59.0
KWA	Larry	60	-	-	57.6
OGI	Ruby Lee	59	54	50	57.1
OSU	Endurance	58	57	53	55.9
OGI	Gallagher	57	56	53	57.0
OGI	Bentley	56	59	58	55.7
LCS	LCS Pistol	55	54	51	56.0
KWA	Tatanka	55	-	-	56.6
OGI	Smith's Gold†	55	51	-	57.1
PlainsGold	Langin	55	-	-	56.6
WestBred	Winterhawk	55	55	56	59.6
OGI	Lonerider†	54	-	-	53.4
OGI	Duster	52	55	51	55.2
PlainsGold	Byrd	51	55	53	56.0
PlainsGold	Avery	50	55	-	54.6
WestBred	WB-Cedar	50	50	49	56.2
Watley	TAM 112	50	54	49	54.8
Watley	TAM 204	45	50	51	51.3
Experimentals					
	OK12912C-2	65	-	-	60.5
	OK13209	63	-	-	59.5
	OK12716R/W	62	58	-	58.2
	OK12206-2	61	-	-	55.6
	OK12D22002-077	55	-	-	56.4
	Mean	58	56	53	57.1
	LSD (0.05)	5	6	5	1.0

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column.
 Low leaf and stripe rust pressure during late grain fill. All plots received 1 pint/ac Yuma 4E on 3/9/17.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056; Lonerider = OK-12DP22002-042.

Apache Wheat Variety Trial

Cooperator: Bryan Vail
 Planting & harvest dates: 10/10/16 & 5/31/17
 Management: Grain-only
 Tillage: No-till

Extension Educator: David Nowlin
 Previous crop: Canola
 Soil type: Hollister silt loam
 Soil test: pH = 6.9, P = 132, K = 400

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			---lb/bu---	1-5
WestBred	Winterhawk	76	69	62	61.2	3
OGI	Gallagher	72	67	61	61.0	3
WestBred	WB4458	70	77	68	59.2	3
OGI	Iba	70	66	58	60.8	3
WestBred	WB-Grainfield	68	71	67	58.0	3
LCS	LCS Chrome	68	-	-	59.2	2
OGI	Ruby Lee	67	52	48	59.9	3
OGI	Smith's Gold†	66	-	-	59.9	3
Watley	TAM 204	64	65	-	57.1	2
Syngenta	SY Razor	60	-	-	59.9	4
OGI	Bentley	60	69	64	55.9	3
OSU	Endurance	60	55	50	59.1	3
LCS	LCS Pistol	59	55	50	57.6	3
OGI	Doublestop CL Plus	58	59	55	60.9	2
OGI	Duster	57	48	43	58.1	4
LCS	LCS Mint	51	-	-	59.6	3
Syngenta	SY Flint	51	59	-	57.5	2
Syngenta	SY Llano	45	55	52	58.1	4
Experimentals						
	OK13209	66	-	-	59.4	2
	OK12716R/W	62	65	-	58.8	3
	OK12912C-2	60	-	-	59.8	2
	OK12D22002-077	53	-	-	57.6	2
Mean		62	62	56	59.0	3
LSD (0.05)		11	9	7	1.5	

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. Moderate to severe leaf rust pressure throughout grain fill.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Apache Fungicide Wheat Variety Trial

Cooperator: Bryan Vail
 Planting & harvest dates: 10/10/16 & 5/31/17
 Management: Grain-only
 Tillage: No-till
 Fungicide: 6.8 oz/ac Approach Prima at heading on 3/27/17

Extension Educator: David Nowlin
 Previous crop: Canola
 Soil type: Hollister silt loam
 Soil test: pH = 6.9, P = 132, K = 400

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			---lb/bu---	1-5
WesWestBred	WB-Grainfield	85	86	81	59.8	1
WestBred	Winterhawk	83	80	74	61.3	2
OGI	Gallagher	76	72	69	61.6	3
WestBred	WB4458	76	83	74	59.7	2
OGI	Ruby Lee	73	74	67	60.7	3
OGI	Bentley	72	76	72	58.3	2
LCS	LCS Chrome	72	-	-	60.9	2
Watley	TAM 204	71	74	-	57.9	1
OGI	Iba	68	72	69	60.2	2
LCS	LCS Mint	68	-	-	61.2	2
OGI	Smith's Gold†	66	-	-	60.2	2
OSU	Endurance	64	61	57	59.5	3
LCS	LCS Pistol	64	62	62	58.6	3
OGI	Doublestop CL Plus	61	65	63	61.4	2
OGI	Duster	61	55	52	58.7	4
Syngenta	SY Llano	60	63	61	59.6	4
Syngenta	SY Flint	59	64	-	59.7	3
Syngenta	SY Razor	56	-	-	60.0	4
Experimentals						
	OK13209	63	-	-	58.9	1
	OK12716	63	67	-	58.9	2
	OK12D22002-077	61	-	-	59.1	1
	OK12912C-2	60	-	-	59.5	2
Mean		67	70	67	59.8	2
LSD (0.05)		12	8	6	1.7	

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: Bryan Vail Previous crop: Canola Extension Educator: David Nowlin
 Planting & harvest dates: 10/10/16 & 5/31/17 Fungicide: 6.8 oz/ac Approach Prima at heading on 3/27/17 Soil type: Hollister silt loam
 Management: Grain-only, no-till Soil test: pH = 6.9, P = 132, K = 400

Source	Variety	Grain Yield						Test Weight					
		2016-17		2-Year		3-Year							
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.		No Fungicide	Fungicide	Diff.		
WestBred	Winterhawk	76	83	7	69	80	11	62	74	12	61.2	61.3	0.1
OGI	Gallagher	72	76	4	67	72	5	61	69	8	61.0	61.6	0.6
WestBred	WB4458	70	76	6	77	83	6	68	74	6	59.2	59.7	0.5
OGI	Iba	70	68	-2	66	72	6	58	69	10	60.8	60.2	-0.6
WestBred	WB-Grainfield	68	85	17	71	86	15	67	81	14	58.0	59.8	1.8
LCS	LCS Chrome	68	72	4	-	-	-	-	-	-	59.2	60.9	1.6
OGI	Ruby Lee	67	73	6	52	74	22	48	67	19	59.9	60.7	0.8
OGI	Smith's Gold†	66	66	0	-	-	-	-	-	-	59.9	60.2	0.3
Watley	TAM 204	64	71	6	65	74	9	-	-	-	57.1	57.9	0.7
Syngenta	SY Razor	60	56	-5	-	-	-	-	-	-	59.9	60.0	0.1
OGI	Bentley	60	72	12	69	76	8	64	72	9	55.9	58.3	2.4
OSU	Endurance	60	64	4	55	61	6	50	57	8	59.1	59.5	0.4
LCS	LCS Pistol	59	64	5	55	62	7	50	62	12	57.6	58.6	1.0
OGI	Doublestop CL Plus	58	61	4	59	65	5	55	63	8	60.9	61.4	0.6
OGI	Duster	57	61	4	48	55	7	43	52	9	58.1	58.7	0.6
LCS	LCS Mint	51	68	16	-	-	-	-	-	-	59.6	61.2	1.6
Syngenta	SY Flint	51	59	9	59	64	5	-	-	-	57.5	59.7	2.2
Syngenta	SY Liano	45	60	15	55	63	8	52	61	9	58.1	59.6	1.5
Experimentals					0.0								
	OK13209	66	63	-3	-	-	-	-	-	-	59.4	58.9	-0.5
	OK12716R/W	62	63	065	67	2	-	-	-	-	58.8	58.9	0.1
	OK12912C-2	60	60	0-	-	-	-	-	-	-	59.8	59.5	-0.3
	OK12D22002-077	53	61	8	-	-	-	-	-	-	57.6	59.1	1.5
Mean		62	67	5	62	70	9	56	67	10	59.0	59.8	0.7
LSD (0.05)		11	12	11	9	8	9	7	6	9	1.5	1.7	1.6

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. Moderate to severe leaf rust pressure throughout grain fill.

† Variety tested and reported as an experimental line in previous trial(s); Smith's Gold = OK11D25056.

Balko Wheat Variety Trial

Cooperator: Kenton Patzkowsky
 Planting & harvest dates: 10/8/16 & 6/22/17
 Management: Grain-only
 Tillage: No-till

Ext. Educator: Loren Sizelove
 Previous crop: Fallow/Wheat
 Soil type: Bippus clay loam
 Soil test: pH = 7.6, P = 49, K = 1,171

Source	Variety	Grain Yield			Test Weight
		2016-17	2-Year†	3-Year‡	2016-17
		-----bu/ac-----			---lb/bu---
KWA	Tatanka	49	-	-	51.0
KWA	Joe	49	-	-	55.6
LCS	LCS Pistol	42	59	-	53.2
WestBred	WB-Grainfield	37	59	45	55.7
PlainsGold	Avery	37	-	-	56.3
LCS	LCS Mint	36	57	44	55.9
WestBred	Winterhawk	36	54	41	55.0
Syngenta	SY Monument	36	-	-	52.5
OGI	Iba	35	55	42	55.3
PlainsGold	Byrd	35	52	39	55.1
PlainsGold	Langin	35	-	-	55.2
LCS	LCS Chrome	33	-	-	53.8
OGI	Doublestop CL Plus	33	51	39	51.7
OGI	Lonerider‡	32	-	-	52.4
OGI	Duster	32	54	41	54.2
OSU	Endurance	31	50	39	55.5
Watley	TAM 204	31	52	-	51.4
PlainsGold	Brawl CL Plus	31	50	37	55.4
KWA	Larry	30	-	-	54.0
OGI	Smith's Gold‡	30	-	-	54.3
OGI	Bentley	29	-	-	53.0
Watley	TAM 112	27	44	34	56.4
OGI	Gallagher	26	50	38	51.5
WestBred	WB-Cedar	24	-	-	52.7
OGI	Ruby Lee	23	39	30	51.5
OGI	Spirit Rider‡	20	-	-	52.9
Experimentals					
	OK12716R/W	29	-	-	51.6
	OK12D22002-077	28	-	-	52.8
Mean	33	52	39	53.8	
LSD (0.05)	6	6	4	2.0	

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Precipitation from planting to harvest totaled 15.2 inches with 10.4 inches received after March 1 (data from the Slapout Mesonet station). A snow event occurred during the last weekend in April. This caused some minor lodging and likely contributed to the lower test weight values.

† Two-year results are the average of 2017 and 2015. Three-year results are the average of 2017, 2015, and 2014. Data was not collected in 2016 due to severe hail damage in early May.

‡ Variety tested and reported as an experimental line in previous trial(s): Lonerider = OK12DP22002-042; Smith's Gold = OK11D25056; Spirit Rider = OK10126.

Buffalo Wheat Variety Trial

Cooperator: NRCS
 Planting & harvest dates: 10/13/16 & 6/13/17
 Management: Grain-only
 Tillage: No-till

Extension Educator: Darrell McBee
 Previous crop: Wheat
 Soil type: St. Paul silt loam
 Soil test: pH = 6.8, P = 58, K = 518

Source	Variety	Grain Yield			Test Weight
		2016-17	2-Year†	3-Year†	2016-17
		-----bu/ac-----			---lb/bu---
KWA	Joe	89	-	-	62.3
OGI	Doublestop CL Plus	84	78	72	62.9
PlainsGold	Avery	84	77	-	59.1
OGI	Iba	82	80	74	61.3
WestBred	WB-Grainfield	81	84	-	59.8
WestBred	Winterhawk	76	77	74	60.9
LCS	LCS Chrome	76	-	-	59.8
PlainsGold	Brawl CL Plus	76	78	73	60.3
OGI	Duster	75	74	69	61.0
LCS	LCS Pistol	75	70	67	59.4
PlainsGold	Langin	75	-	-	58.5
OGI	Bentley	75	79	74	59.6
OGI	Ruby Lee	74	66	60	60.2
PlainsGold	Byrd	74	78	74	59.0
Syngenta	SY Monument	73	77	-	59.8
Watley	TAM 112	72	65	61	60.8
LCS	LCS Mint	71	71	68	61.9
OSU	Endurance	67	71	68	59.9
OGI	Gallagher	66	66	60	60.7
Mean		76	74	69	60.4
LSD (0.05)		12	7	5	1.1

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Drought conditions present from October through mid-January. Prior to planting, 0.3" of precipitation fell on 10/9/16, and only 0.9" was received from planting until mid-January. This resulted in suboptimal for some varieties, and as a result, six varieties were not included in the analysis: Larry, Lonerider (OK12DP22002-042), OK12716R/W, TAM 204, Tatanka, and WB-Cedar. All plots received 1 pint/ac Yuma 4E on 3/9/17.

Cherokee Wheat Variety Trial

Cooperator: Kenneth Failes
 Planting & harvest dates: 10/18/16 & 6/13/17
 Management: Grain-only
 Tillage: Conventional

Ext. Educator: Tommy Puffinbarger
 Previous crop: Wheat
 Soil type: Dale silt loam
 Soil test: pH = 6.7, P = 41, K = 562

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			--lb/bu--	1 - 5
KWA	Joe	89	-	-	57.2	2
WestBred	WB-Grainfield	84	79	-	56.6	3
WestBred	Winterhawk	83	78	68	59.1	3
Syngenta	SY Monument	78	74	-	56.6	3
LCS	LCS Chrome	77	-	-	55.5	2
OGI	Iba	77	74	68	58.3	2
OGI	Bentley	75	73	65	55.0	2
OGI	Doublestop CL Plus	75	68	65	59.9	1
OGI	Ruby Lee	74	64	57	57.9	2
PlainsGold	Langin	73	-	-	56.5	2
KWA	Tatanka	73	-	-	56.6	4
PlainsGold	Brawl CL Plus	72	69	61	58.1	2
KWA	Larry	72	-	-	56.1	2
OGI	Gallagher	71	64	60	57.7	3
OGI	Spirit Rider†	71	-	-	58.1	2
PlainsGold	Byrd	67	67	60	56.1	2
OGI	Smith's Gold†	66	-	-	56.6	2
Watley	TAM 204	66	66	59	51.5	3
OSU	Endurance	66	67	62	54.8	2
LCS	LCS Pistol	64	61	58	56.2	4
WestBred	WB-Cedar	64	51	48	57.4	1
LCS	LCS Mint	62	62	57	57.7	3
PlainsGold	Avery	60	63	-	54.8	3
Watley	TAM 112	60	62	56	57.4	4
OGI	Duster	59	64	58	54.5	4
Experimentals						
	OK12716R/W	84	80	-	57.2	2
	OK11D25005	78	-	-	58.1	2
	OK14319	74	-	-	57.5	1
	OK12206-2	64	-	-	54.4	1
Mean		72	68	60	56.7	2
LSD (0.05)		7	7	6	1.0	

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. All plots received 1 pint/ac Yuma 4E on 3/9/17 and 5 oz/ac Prosaro 421 SC fungicide on 4/27/17.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056; Spirit Rider = OK10126.

Chickasha Regional Wheat Variety Trial

Cooperator: OSU South Central Research Station Previous crop: Austrian winter pea Extension Educator: David Nowlin
 Planting & harvest dates: 10/21/16 & 6/5/17 Soil type: Dale silt loam Soil test: pH = 7.0, P = 69, K = 403
 Management: Grain-only, conventional tillage Nitrogen: 85 lb/ac soil test + 9 lb/ac at planting

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			--lb/bu--	0 - 5
AGSECO	Hot Rod	45	-	-	53.8	1
WestBred	WB-Cedar	40	55	58	56.1	2
AGSECO	TAM 114	39	56	55	55.1	2
WestBred	WB4269†	38	-	-	55.8	2
Syngenta	Bob Dole‡	37	-	-	55.2	3
OGI	Duster	37	47	45	54.6	3
KWA	Zenda	36	53	-	56.1	2
OGI	NF 101	36	42	43	54.7	2
OGI	Smith's Gold‡	34	54	53	55.2	3
KWA	Joe	34	55	-	53.9	2
Syngenta	SY Razor	33	47	-	56.5	2
OGI	Doublestop CL Plus	33	44	43	56.2	2
OGI	Ruby Lee	33	28	27	55.6	2
WestBred	WB4515	33	52	-	55.3	2
Syngenta	SY Drifter	32	48	48	56.4	3
WestBred	Winterhawk	30	45	46	54.6	2
LCS	LCS Wizard	30	33	33	54.7	3
WestBred	WB-Grainfield	30	45	48	53.5	2
AGSECO	AG Icon‡	30	-	-	53.9	3
OGI	Iba	30	45	46	54.2	3
WestBred	WB4303	29	46	-	52.5	3
WestBred	WB4721	29	47	-	55.0	2
OSU	Endurance	29	38	38	53.9	3
LCS	LCS Chrome	29	52	55	49.2	3
OGI	Gallagher	28	50	53	54.8	2
Syngenta	SY Llano	27	50	52	56.1	3
LCS	LCS Pistol	27	37	36	53.6	2
Syngenta	SY Rugged‡	27	-	-	52.8	3
Syngenta	SY Achieve CL2†	27	-	-	53.1	2
LCS T158	26		48	48	52.6	3
AGSECO	AG Robust	26	53	-	53.6	3
KWA	Tatanka	25	50	-	53.0	3
OGI	Billings	25	54	56	54.2	3
Dyna-Gro	Long Branch	24	38	-	48.8	2
Syngenta	SY Benefit†	22	-	-	52.8	3
Syngenta	SY Flint	21	48	52	54.0	2
WestBred	WB4458	20	46	52	51.5	2
Syngenta	SY Grit	20	40	-	52.9	2
OGI	Bentley	18	36	37	50.0	2
OGI	Stardust	18	-	-	50.4	3
KWA	Larry	16	47	-	51.0	1
Watley	TAM 204	14	41	45	50.8	4
LCS	LCS Mint	14	27	27	51.6	3
Experimentals						
	OK13209	34	-	-	56.4	1
	OK13621	29	-	-	53.5	2
	OK12716R/W	27	-	-	51.7	2
	OK12D22002-077	19	-	-	52.0	3
Mean		29	46	46	53.7	2
LSD (0.05)		7	9	7	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. Severe leaf rust and low stripe rust pressure during grain fill. Wheat streak mosaic and barley yellow dwarf were also present during grain fill. All plots were treated with 3.8 oz/ac lambda-cyhalothrin on 3/14/17.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Chickasha Intensive Wheat Management Variety Trial

Cooperator: OSU South Central Res. Station

Previous crop: Austrian winter pea

Extension Educator: David Nowlin

Planting & harvest dates: 10/21/16 & 6/5/17

Soil type: Dale silt loam

Management: Grain-only, conventional tillage

Soil test: pH = 7.0, P = 69, K = 403

Nitrogen: 85 lb/ac soil test + 9 lb/ac at planting + 40 lb/ac topdress 3/3/17

Fungicide: 4 oz/ac Tilt at jointing on 3/3/17 + 13 oz/ac Nexicor at heading on 4/6/17

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			-----lb/bu-----	1 - 5
AGSECO	TAM 114	61	76	77	57.0	2
WestBred	WB-Grainfield	61	68	70	56.6	1
WestBred	WB-Cedar	58	77	78	57.6	2
WestBred	Winterhawk	58	74	71	58.0	3
WestBred	WB4515	58	75	-	57.6	1
WestBred	WB4269†	57	-	-	56.7	2
LCS	T158	56	72	75	57.1	2
OGI	Duster	56	62	61	56.7	3
AGSECO	Hot Rod	54	-	-	54.2	1
OGI	Smith's Gold‡	54	69	69	58.0	2
OGI	Iba	53	67	69	57.3	3
Syngenta	SY Achieve CL2†	53	-	-	57.8	1
WestBred	WB4721	52	62	-	57.2	2
OGI	NF 101	52	64	64	56.3	2
WestBred	WB4303	51	77	-	55.2	2
Syngenta	SY Benefit†	50	-	-	57.3	4
KWA	Joe	50	63	-	56.1	2
OGI	Ruby Lee	49	70	68	57.0	2
KWA	Tatanka	49	66	-	57.2	2
Syngenta	Bob Dole†	49	-	-	56.4	3
LCS	LCS Pistol	48	59	61	56.0	1
OGI	Doublestop CL Plus	48	61	61	57.7	2
OGI	Gallagher	48	71	72	56.9	3
Syngenta	SY Grit	48	71	-	57.5	2
LCS	LCS Wizard	47	67	67	57.6	1
OGI	Bentley	47	65	68	55.6	2
KWA	Zenda	46	66	-	56.2	2
Syngenta	SY Flint	46	68	71	55.8	2
Dyna-Gro	Long Branch	45	50	-	52.3	1
WestBred	WB4458	45	74	76	55.7	2
OGI	Billings	44	69	72	56.6	2
Syngenta	SY Llano	43	64	66	58.3	2
Watley	TAM 204	42	72	71	53.2	2
Syngenta	SY Razor	42	58	-	58.0	2
Syngenta	SY Rugged†	42	-	-	55.4	2
KWA	Larry	42	63	-	56.3	1
AGSECO	AG Icon†	41	-	-	56.5	1
Syngenta	SY Drifter	41	63	63	57.1	2
OSU	Endurance	41	57	59	56.4	2
OGI	Stardust	39	-	-	56.1	1
LCS	LCS Chrome	39	61	66	51.4	2
AGSECO	AG Robust	36	64	-	55.4	3
LCS	LCS Mint	32	55	60	54.6	2
Experimentals						
	OK12716R/W	54	-	-	56.4	2
	OK13621	54	-	-	57.4	3
	OK13209	48	-	-	57.7	2
	OK12D22002-077	43	-	-	56.4	2
Mean		48	66	68	56.4	2
LSD (0.05)		7	9	6	1.3	

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 leaf rust and low stripe rust pressure during grain fill. Wheat streak mosaic and barley yellow dwarf were also present during grain fill. All plots were treated with 3.8 oz/ac lambda-cyhalothrin on 3/14/17.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Chickasha Standard vs. Intensive Wheat Management Comparison

Cooperator: OSU South Central Research Station Previous crop: Austrian winter pea Extension Educator: David Nowlin
 Planting & harvest dates: 10/21/16 & 6/5/17 Soil type: Dale silt loam
 Management: Grain-only, conventional tillage Soil test: pH = 6.7, P = 51, K = 396
 All plots had 94 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 13 oz/ac Nexicor at heading

Source	Variety	2016-17 Grain Yield			2016-17 Test Weight		
		Standard	IWM	Diff.	Standard	IWM	Diff.
		-----bu/ac-----			-----lb/bu-----		
AGSECO	Hot Rod	45	54	9	53.8	54.2	0.4
WestBred	WB-Cedar	40	58	18	56.1	57.6	1.5
AGSECO	TAM 114	39	61	22	55.1	57.0	1.9
WestBred	WB4269†	38	57	18	55.8	56.7	1.0
Syngenta	Bob Dole†	37	49	12	55.2	56.4	1.3
OGI	Duster	37	56	19	54.6	56.7	2.2
KWA	Zenda	36	46	10	56.1	56.2	0.2
OGI	NF 101	36	52	16	54.7	56.3	1.6
OGI	Smith's Gold‡	34	54	20	55.2	58.0	2.7
KWA	Joe	34	50	16	53.9	56.1	2.3
Syngenta	SY Razor	33	42	9	56.5	58.0	1.5
OGI	Doublestop CL Plus	33	48	15	56.2	57.7	1.5
OGI	Ruby Lee	33	49	16	55.6	57.0	1.4
WestBred	WB4515	33	58	25	55.3	57.6	2.3
Syngenta	SY Drifter	32	41	9	56.4	57.1	0.7
WestBred	Winterhawk	30	58	27	54.6	58.0	3.3
LCS	LCS Wizard	30	47	17	54.7	57.6	2.9
WestBred	WB-Grainfield	30	61	31	53.5	56.6	3.1
AGSECO	AG Icon†	30	41	11	53.9	56.5	2.7
OGI	Iba	30	53	23	54.2	57.3	3.1
WestBred	WB4303	29	51	21	52.5	55.2	2.7
WestBred	WB4721	29	52	23	55.0	57.2	2.2
OSU	Endurance	29	41	12	53.9	56.4	2.5
LCS	LCS Chrome	29	39	10	49.2	51.4	2.2
OGI	Gallagher	28	48	19	54.8	56.9	2.1
Syngenta	SY Llano	27	43	16	56.1	58.3	2.2
LCS	LCS Pistol	27	48	21	53.6	56.0	2.4
Syngenta	SY Rugged†	27	42	15	52.8	55.4	2.5
Syngenta	SY Achieve CL2†	27	53	26	53.1	57.8	4.7
LCS	T158	26	56	30	52.6	57.1	4.5
AGSECO	AG Robust	26	36	10	53.6	55.4	1.8
KWA	Tatanka	25	49	24	53.0	57.2	4.2
OGI	Billings	25	44	19	54.2	56.6	2.4
Dyna-Gro	Long Branch	24	45	21	48.8	52.3	3.5
Syngenta	SY Benefit†	22	50	28	52.8	57.3	4.5
Syngenta	SY Flint	21	46	24	54.0	55.8	1.8
WestBred	WB4458	20	45	25	51.5	55.7	4.2
Syngenta	SY Grit	20	48	28	52.9	57.5	4.6
OGI	Bentley	18	47	28	50.0	55.6	5.6
OGI	Stardust	18	39	22	50.4	56.1	5.7
KWA	Larry	16	42	26	51.0	56.3	5.3
Watley	TAM 204	14	42	28	50.8	53.2	2.5
LCS	LCS Mint	14	32	18	51.6	54.6	3.0
Experimentals							
	OK13209	34	48	14	56.4	57.7	1.3
	OK13621	29	54	25	53.5	57.4	3.9
	OK12716R/W	27	54	27	51.7	56.4	4.7
	OK12D22002-077	19	43	24	52.0	56.4	4.4
Mean		29	48	20	53.7	56.4	2.7
LSD (0.05)		7	7	7	2.0	1.3	1.6

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. Lodging on a 1 - 5 scale with 1 indicating no lodging. Severe leaf rust and low stripe rust pressure during grain fill. Wheat streak mosaic and barley yellow dwarf were also present during grain fill. All plots were treated with 3.8 oz/ac lambda-cyhalothrin on 3/14/17.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Goodwell Irrigated Regional Wheat Variety Trial

Cooperator: Oklahoma Panhandle Research and Extension Center
 Planting & harvest dates: 10/6/16 & 6/28/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Katie Hughes
 Previous crop: Fallow
 Soil type: Gruver clay loam
 Soil test: pH = 7.8, P = 17, K = 1,185

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			---lb/bu---	1 - 5
KWA	Zenda	58	71	-	53.7	5
WestBred	WB4458	58	68	76	48.6	3
Watley	TAM 204	57	74	77	49.7	4
LCS	T158	57	66	66	53.5	4
Syngenta	SY Rugged†	55	-	-	47.8	4
OGI	Billings	55	73	71	51.7	4
KWA	Joe	55	74	-	54.1	4
OGI	Lonerider‡	54	75	-	52.0	5
WestBred	Winterhawk	54	69	68	51.5	5
WestBred	WB4269†	53	-	-	54.0	4
OGI	Bentley	52	67	-	51.7	5
KWA	Tatanka	52	69	-	48.0	4
OGI	Duster	52	69	66	50.3	5
Syngenta	SY Drifter	51	70	70	53.1	4
AGSECO	Hot Rod	50	-	-	53.6	4
OGI	Iba	50	71	69	51.1	5
Syngenta	SY Flint	49	69	73	50.2	4
WestBred	WB-Grainfield	49	67	71	53.2	4
KWA	Larry	49	68	-	53.9	5
WestBred	WB4721	49	68	-	51.9	5
Dyna-Gro	Long Branch	48	69	-	50.3	4
LCS	LCS Wizard	48	63	59	52.5	4
LCS	LCS Pistol	48	66	66	51.6	4
PlainsGold	Byrd	47	66	55	52.2	3
WestBred	WB4303	46	63	-	48.0	4
OGI	Smith's Gold‡	46	65	67	54.8	4
OGI	NF 101	46	60	57	51.1	3
WestBred	WB-Cedar	46	60	61	53.5	4
OGI	Doublestop CL Plus	46	56	58	51.3	4
Syngenta	Bob Dole†	45	-	-	52.7	4
OGI	Gallagher	45	66	72	50.7	4
Syngenta	SY Achieve CL2†	45	-	-	53.9	4
PlainsGold	Brawl CL Plus	45	63	64	53.4	4
OGI	Ruby Lee	44	64	60	52.9	5
LCS	LCS Mint	43	65	56	51.8	5
Syngenta	SY Benefitt	43	-	-	49.9	4
AGSECO	AG Icon†	43	-	-	53.2	5
AGSECO	TAM 114	43	65	62	54.9	3
OGI	Stardust	43	-	-	54.1	4
Syngenta	SY Grit	42	62	-	49.6	2
PlainsGold	Langin	42	-	-	54.0	5
OSU	Endurance	42	61	58	54.0	4
LCS	LCS Chrome	42	65	65	53.7	4
WestBred	WB4515	42	60	-	48.9	4
PlainsGold	Avery	41	59	52	52.2	4
AGSECO	AG Robust	41	51	-	53.3	4
Syngenta	SY Monument	40	62	68	52.5	3
OGI	Spirit Rider‡	39	67	68	54.3	5
Watley	TAM 112	38	57	48	55.3	4
Experimentals						
	OK12D22004-016	61	-	-	54.0	4
	OK12206-2	56	-	-	50.2	2
	OK13621	52	-	-	55.9	5
	OK11755W-9W	51	-	-	55.3	4
	OK12716R/W	46	71	-	52.7	3
	OK12D22002-077	46	-	-	52.5	4
Mean		48	66	64	52.3	4
LSD (0.05)		8	9	9	3.0	

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 snow event occurred during the last weekend in April. This caused severe lodging and contributed to the lower yield and test weight values.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefitt = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Lonerider = OK12DP22002-042; Smith's Gold = OK11D25056; Spirit Rider = OK10126.

Homestead 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
		2016-17	2-Year	3-Year	2016-17
		-----bu/ac-----			--lb/bu--
OGI	Ruby Lee	56	61	50	58.5
WestBred	WB-Grainfield	56	74	-	56.7
Syngenta	SY Monument	55	71	-	57.3
LCS	LCS Chrome	55	-	-	54.8
KWA	Joe	53	-	-	57.5
KWA	Tatanka	53	-	-	58.6
OGI	Doublestop CL Plus	53	63	52	59.4
OGI	Bentley	52	72	59	55.9
OGI	Iba	52	70	56	58.2
OGI	Duster	51	66	51	56.5
OGI	Gallagher	51	72	56	58.6
LCS	LCS Mint	51	63	52	57.2
LCS	LCS Pistol	50	63	50	57.0
WestBred	WB4458	49	69	56	56.8
Watley	TAM 204	47	69	-	52.4
OGI	Smith's Gold†	47	-	-	58.0
KWA	Larry	45	-	-	56.4
OSU	Endurance	44	58	47	56.7
OGI	Billings	43	65	53	59.1
Syngenta	SY Flint	43	65	-	57.2
OGI	Stardust	42	-	-	57.2
WestBred	WB-Cedar	42	52	44	56.1
Syngenta	SY Llano	36	56	-	57.4
Experimentals					
OK12DP22002-042		53	-	-	54.7
	OK12716R/W	48	66	-	56.9
	OK12912C-2	44	61	-	56.5
	OK13209	43	-	-	57.4
	OK12D22002-077	39	-	-	57.4
Mean		48	65	52	57.0
LSD (0.05)		8	8	6	1.3

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

Low disease pressure throughout grain fill.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Kildare Wheat Variety Trial

Cooperator: Don Schieber
 Planting & harvest dates: 10/17/16 & 6/10/17
 Management: Grain-only
 Tillage: No-till

Extension Educator: Corbin DeWitt
 Previous crop: Wheat
 Soil type: Tabler silt loam
 Soil test: pH = 6.6, P = 77, K = 372

Source	Variety	Grain Yield			Test Weight
		2016-17	2-Year	3-Year	2016-17
		-----bu/ac-----			---lb/bu---
Westbred	WB-Grainfield	62	56	-	55.7
KWA	Joe	57	-	-	57.9
OGI	Bentley	57	58	56	54.4
OGI	Doublestop CL Plus	56	55	52	59.7
OGI	Iba	55	58	54	56.4
Syngenta	SY Flint	54	51	-	56.5
LCS	LCS Chrome	52	-	-	58.1
KWA	Larry	51	-	-	55.5
KWA	Tatanka	51	-	-	56.1
OGI	Spirit Ridert†	50	53	-	57.8
OGI	Ruby Lee	49	58	51	56.4
Syngenta	SY Monument	48	50	-	56.2
Westbred	WB4458	47	53	52	56.1
LCS	LCS Pistol	46	44	42	55.8
Watley	TAM 204	46	55	-	52.7
OGI	Duster	46	48	45	53.1
OSU	Endurance	45	47	44	55.4
OGI	Gallagher	45	46	45	54.1
OGI	Smith's Gold†	44	-	-	55.0
LCS	LCS Mint	40	40	42	57.9
Westbred	WB-Cedar	37	39	39	56.2
Syngenta	SY Llano	35	40	-	57.6
OGI	Billings	34	42	38	56.1
Experimentals					
	OK12716R/W	56	53	-	55.2
	OK12D22002-077	44	-	-	56.5
Mean		48	50	47	56.1
LSD (0.05)		7	7	6	1.1

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

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056; Spirit Rider = OK10126.

Kingfisher Wheat Variety Trial

Cooperator: Mueggenborg Family
 Planting & harvest dates: 10/3/16 & 6/6/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Zack Meyer
 Previous crop: Wheat
 Soil type: Tillman silt loam
 Soil test: pH = 6.2, P = 72, K = 422

Source	Variety	2016-17	
		Grain Yield -----bu/ac-----	Broken Stems 0 - 10
LCS	LCS Chrome	32	1
WestBred	WB-Grainfield	26	4
OGI	Duster	26	3
Watley	TAM 204	25	3
OGI	Smith's Gold†	25	2
OGI	Gallagher	24	2
Syngenta	SY Monument	23	2
WestBred	WB-Cedar	23	1
OGI	Doublestop CL Plus	23	2
Syngenta	SY Flint	22	2
OGI	Iba	21	2
OGI	Bentley	20	3
OSU	Endurance	19	3
OGI	Ruby Lee	19	2
OGI	Billings	18	4
Syngenta	SY Llano	18	2
KWA	Larry	17	2
WestBred	WB4458	16	3
Experimentals			
	OK12716R/W	27	3
	OK12912C-2	21	3
	OK12D22002-077	18	1
	OK13209	17	2
Mean		22	2
LSD (0.05)		5	

Notes: Shaded values are not statistically different from the highest value within a column. Grain samples were too small to collect a sufficient number of test weight samples for analyzing and reporting. Data for varieties Joe, LCS Mint, LCS Pistol, and Tatanka were not reported as the coefficient of variation (c.v.) exceeded 30. Broken stems were rated on a 0 - 10 scale with 0 representing no broken stems and 10 representing complete stem breakage. Broken stems were the result of Hessian fly, Fusarium foot rot, and hail injury during the spring. A storm with hail occurred on 5/11/17. Limited seed shattering (<10%) due to hail injury was observed. Moderate to severe leaf rust pressure was present during grain fill.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Lahoma Regional Wheat Variety Trial

Cooperator: OSU North Central Research Station
 Planting & harvest dates: 10/19/16 & 6/9/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.6, P = 53, K = 407

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			---lb/bu---	1 - 5
AGSECO	Hot Rod	83	-	-	55.9	1
WestBred	WB4269†	78	-	-	55.6	2
KWA	Joe	72	77	-	55.8	2
Syngenta	SY Monument	72	73	70	55.0	1
Syngenta	Bob Dole†	70	-	-	54.1	2
WestBred	WB4303	69	69	-	51.3	1
AGSECO	TAM 114	69	72	69	54.8	1
OGI	Gallagher	67	67	65	54.9	2
WestBred	WB4515	67	66	-	54.2	1
KWA	Zenda	67	74	-	55.0	1
PlainsGold	Brawl CL Plus	66	67	62	53.9	1
AGSECO	AG Robust	65	68	-	55.8	2
AGSECO	AG Icon†	65	-	-	52.9	1
Syngenta	SY Achieve CL2†	65	-	-	55.5	1
OGI	Ruby Lee	64	58	54	54.4	1
OGI	Smith's Gold‡	64	69	64	53.4	3
WestBred	Winterhawk	64	65	59	54.9	3
WestBred	WB4721	64	71	-	53.3	2
WestBred	WB-Grainfield	64	67	66	51.6	1
WestBred	WB-Cedar	62	65	64	57.1	1
Syngenta	SY Rugged†	62	-	-	52.7	1
OGI	Doublestop CL Plus	62	61	59	58.4	1
OGI	NF 101	62	60	59	55.0	3
PlainsGold	Langin	60	-	-	53.7	1
Syngenta	SY Drifter	60	61	57	55.9	1
WestBred	WB4458	59	66	64	55.5	2
LCS	LCS Chrome	58	69	69	51.5	2
Syngenta	SY Llano	58	61	58	56.1	4
OGI	Iba	56	60	59	55.0	1
Syngenta	SY Flint	56	62	60	54.5	3
LCS	T158	55	61	57	54.0	1
OGI	Billings	54	59	58	56.4	2
Syngenta	SY Grit	54	64	-	48.7	1
KWA	Tatanka	53	63	-	51.7	3
OGI	Bentley	53	61	59	50.1	1
LCS	LCS Wizard	51	51	46	53.7	1
Syngenta	SY Benefit†	51	-	-	53.0	3
OGI	Duster	50	53	50	52.2	1
LCS	LCS Pistol	49	52	50	52.9	1
Watley	TAM 204	49	60	58	45.3	2
OSU	Endurance	48	52	51	49.9	1
PlainsGold	Byrd	48	43	39	50.2	1
Dyna-Gro	Long Branch	45	52	-	47.8	1
OGI	Stardust	45	57	56	49.7	2
KWA	Larry	43	60	-	50.1	3
LCS	LCS Mint	40	52	50	51.5	2
PlainsGold	Avery	37	39	34	48.5	2
Watley	TAM 112	36	40	38	50.7	4
Experimentals						
	OK13209	77	-	-	56.9	1
	OK12912C-2	70	-	-	56.5	1
	OK12D22004-016	69	-	-	55.6	1
	OK13621	68	-	-	55.6	1
	OK12206-2	61	-	-	51.1	1
	OK12716R/W	61	67	-	52.8	1
	OK11755W-9W	52	-	-	52.2	1
	OK12D22002-077	48	-	-	51.4	1
	Mean	59	61	57	53.3	2
	LSD (0.05)	8	7	5	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 leaf rust pressure during mid- to late-grain fill.

† Variety entered into the 2016-17 trials as an experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Lahoma Regional Wheat Variety Trial - Fungicide Treated

Cooperator: OSU North Central Research Station
 Planting & harvest dates: 10/19/16 & 6/9/17
 Management: Grain-only, conventional tillage
 Fungicide = 6.8 oz/ac Approach Prima at GS 9 on 4/10/17

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.6, P = 53, K = 407

Source	Variety	Grain Yield			Test Weight	Lodging
		2016-17	2-Year	3-Year	2016-17	2016-17
		-----bu/ac-----			---lb/bu---	1 - 5
AGSECO	Hot Rod	92	-	-	56.6	1
AGSECO	TAM 114	89	90	84	58.0	2
WestBred	WB4269†	88	-	-	56.4	1
WestBred	WB-Grainfield	88	85	82	55.9	1
WestBred	WB4515	88	82	-	58.2	1
PlainsGold	Langin	84	-	-	56.4	1
Syngenta	SY Monument	84	83	80	55.6	1
PlainsGold	Brawl CL Plus	83	87	81	57.8	1
LCS	T158	83	85	77	57.8	2
WestBred	Winterhawk	82	81	75	57.6	1
WestBred	WB4721	82	84	-	57.0	1
Syngenta	SY Achieve CL2†	82	-	-	58.6	1
KWA	Zenda	82	81	-	57.7	1
PlainsGold	Byrd	80	84	79	56.6	2
Syngenta	SY Grit	80	84	-	55.0	1
WestBred	WB4303	80	85	-	53.2	2
OGI	Bentley	79	83	79	54.8	1
OGI	Smith's Gold‡	78	81	75	56.3	2
OGI	Ruby Lee	77	80	75	58.0	1
KWA	Joe	77	85	-	55.8	1
Watley	TAM 204	77	81	80	52.7	1
KWA	Larry	77	81	-	56.5	1
KWA	Tatanka	77	81	-	56.0	3
OGI	Gallagher	76	78	76	55.3	2
WestBred	WB4458	75	80	77	57.8	2
AGSECO	AG Robust	75	78	-	56.8	1
OGI	NF 101	75	71	70	55.7	3
Syngenta	Bob Dole†	75	-	-	54.5	2
Syngenta	SY Benefit†	74	-	-	57.0	2
Syngenta	SY Rugged†	74	-	-	54.9	1
LCS	LCS Pistol	72	72	70	55.5	2
WestBred	WB-Cedar	72	73	72	57.3	1
Syngenta	SY Llano	71	71	69	57.3	2
OGI	Iba	71	73	71	57.7	2
Syngenta	SY Flint	70	73	72	57.6	2
Syngenta	SY Drifter	70	71	69	57.3	2
LCS L	CS Wizard	69	74	69	56.9	1
Watley	TAM 112	67	75	71	57.0	2
AGSECO	AG Icon†	67	-	-	53.3	1
PlainsGold	Avery	67	76	71	54.7	2
Dyna-Gro	Long Branch	67	65	-	52.3	1
LCS	LCS Chrome	66	74	74	52.3	3
OGI	Billings	66	70	68	57.8	2
OGI	Duster	64	68	65	54.4	2
OSU	Endurance	63	70	69	53.8	2
OGI	Doublestop CL Plus	63	68	68	58.3	1
OGI	Stardust	62	72	69	54.5	1
LCS	LCS Mint	58	73	71	55.7	1
Experimentals						
	OK12D22004-016	84	-	-	58.6	1
	OK12206-2	78	-	-	53.8	2
	OK13621	78	-	-	57.2	1
	OK11755W-9W	78	-	-	56.8	1
	OK12716R/W	77	82	-	55.5	1
	OK13209	77	-	-	57.5	1
	OK12912C-2	67	-	-	55.7	1
	OK12D22002-077	62	-	-	54.7	1
Mean		75	78	74	56.1	1
LSD (0.05)		8	7	5	1.5	

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. Severe leaf rust pressure during mid- to late-grain fill.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Lahoma - Fungicide vs. No Fungicide Comparison

Cooperator: OSU North Central Research Station
 Planting & harvest dates: 10/19/16 & 6/9/17
 Management: Grain-only, conventional tillage
 Fungicide = 6.8 oz/ac Approach Prima at GS 9 on 4/10/17
 Tillage: Conventional

Extension Educator: Rick Nelson
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.6, P = 53, K = 407
 Soil test: pH = 5.7, P = 49, K = 417

Source	Variety	2016-17 Grain Yield			2016-17 Test Weight		
		No fungicide	Fungicide	Diff.	No fungicide	Fungicide	Diff.
		-----bu/ac-----			-----lb/bu-----		
AGSECO	Hot Rod	83	92	9	55.9	56.6	0.6
WestBred	WB4269†	78	88	11	55.6	56.4	0.8
KWA	Joe	72	77	5	55.8	55.8	0.0
Syngenta	SY Monument	72	84	12	55.0	55.6	0.6
Syngenta	Bob Dole†	70	75	4	54.1	54.5	0.4
WestBred	WB4303	69	80	11	51.3	53.2	1.9
AGSECO	TAM 114	69	89	20	54.8	58.0	3.2
OGI	Gallagher	67	76	8	54.9	55.3	0.4
WestBred	WB4515	67	88	21	54.2	58.2	4.0
KWA	Zenda	67	82	15	55.0	57.7	2.6
PlainsGold	Brawl CL Plus	66	83	17	53.9	57.8	3.9
AGSECO	AG Robust	65	75	10	55.8	56.8	1.0
AGSECO	AG Icon†	65	67	2	52.9	53.3	0.4
Syngenta	SY Achieve CL2†	65	82	17	55.5	58.6	3.1
OGI	Ruby Lee	64	77	13	54.4	58.0	3.6
OGI	Smith's Gold‡	64	78	14	53.4	56.3	2.9
WestBred	Winterhawk	64	82	18	54.9	57.6	2.7
WestBred	WB4721	64	82	18	53.3	57.0	3.7
WestBred	WB-Grainfield	64	88	24	51.6	55.9	4.2
WestBred	WB-Cedar	62	72	10	57.1	57.3	0.3
Syngenta	SY Rugged†	62	74	12	52.7	54.9	2.2
OGI	Doublestop CL Plus	62	63	1	58.4	58.3	-0.1
OGI	NF 101	62	75	12	55.0	55.7	0.7
PlainsGold	Langin	60	84	24	53.7	56.4	2.7
Syngenta	SY Drifter	60	70	10	55.9	57.3	1.4
WestBred	WB4458	59	75	16	55.5	57.8	2.3
LCS	LCS Chrome	58	66	9	51.5	52.3	0.9
Syngenta	SY Llano	58	71	14	56.1	57.3	1.2
OGI	Iba	56	71	15	55.0	57.7	2.7
Syngenta	SY Flint	56	70	15	54.5	57.6	3.1
LCS	T158	55	83	28	54.0	57.8	3.8
OGI	Billings	54	66	12	56.4	57.8	1.4
Syngenta	SY Grit	54	80	26	48.7	55.0	6.3
KWA	Tatanka	53	77	24	51.7	56.0	4.3
OGI	Bentley	53	79	27	50.1	54.8	4.7
LCS	LCS Wizard	51	69	17	53.7	56.9	3.1
Syngenta	SY Benefit†	51	74	24	53.0	57.0	4.0
OGI	Duster	50	64	14	52.2	54.4	2.2
LCS	LCS Pistol	49	72	23	52.9	55.5	2.7
Watley	TAM 204	49	77	28	45.3	52.7	7.3
OSU	Endurance	48	63	15	49.9	53.8	3.9
PlainsGold	Byrd	48	80	33	50.2	56.6	6.5
Dyna-Gro	Long Branch	45	67	22	47.8	52.3	4.5
OGI	Stardust	45	62	18	49.7	54.5	4.8
KWA	Larry	43	77	34	50.1	56.5	6.4
LCS	LCS Mint	40	58	18	51.5	55.7	4.2
PlainsGold	Avery	37	67	30	48.5	54.7	6.2
Watley	TAM 112	36	67	31	50.7	57.0	6.3
Experimentals							
	OK13209	77	77	0	56.9	57.5	0.6
	OK12912C-2	70	67	-3	56.5	55.7	-0.8
	OK12D22004-016	69	84	15	55.6	58.6	3.0
	OK13621	68	78	10	55.6	57.2	1.6
	OK12206-2	61	78	17	51.1	53.8	2.7
	OK12716R/W	61	77	16	52.8	55.5	2.7
	OK11755W-9W	52	78	25	52.2	56.8	4.6
	OK12D22002-077	48	62	14	51.4	54.7	3.3
Mean		59	75	16	53.3	56.1	2.8
LSD (0.05)		8	8	9	2.1	1.5	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. Lodging on a 1 - 5 scale with 1 indicating no lodging. Severe leaf rust pressure during mid- to late-grain fill.

† Variety entered into the 2016-17 trials as experimental line: AG Icon = KS080448C*-102; Bob Dole = KS061193K-2; SY Achieve CL2 = 07CL041-1; SY Benefit = 06BC362-8; SY Rugged = AP11T2222; WB4269 = H4N12-0038.

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Marshall Dual-Purpose Wheat Variety Trial

Cooperator: Dean Fuxa
 Planting & harvest dates: 9/12/16 & 6/7/17
 Management: Dual-purpose
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Kirkland silt loam
 Soil test: pH = 5.6, P = 62, K = 343

Source	Variety	Canopy Cover†		Grain Yield		
		11/15/16	3/1/17	2016-17	2-Year	3-Year
		-----%-----		-----bu/ac-----		
KWA	Joe	73	50	36	-	-
WestBred	WB-Cedar	68	50	34	38	41
Syngenta	SY Monument	81	55	29	41	-
OGI	Smith's Gold‡	71	52	28	-	-
OSU	Endurance	81	44	24	38	38
OGI	Duster	77	36	24	37	39
OGI	Gallagher	84	51	22	35	37
WestBred	WB4458	73	50	21	29	31
OGI	Bentley	81	51	20	36	36
OGI	Billings	75	43	20	29	29
OGI	Ruby Lee	80	49	20	24	28
Syngenta	SY Flint	57	41	19	32	-
WestBred	WB-Grainfield	82	44	17	33	-
LCS	LCS Chrome	82	58	16	-	-
Watley	TAM 204	70	48	16	23	-
Syngenta	SY Llano	80	49	14	23	-
KWA	Tatanka	66	50	14	-	-
OGI	Stardust	69	47	14	-	-
LCS	LCS Mint	80	49	14	19	22
LCS	LCS Pistol	65	52	11	26	29
Experimentals						
	OK14319	85	42	28	-	-
	OK12621	81	49	21	36	-
	OK12716R/W	84	47	21	36	-
	OK12206-2	78	44	17	-	-
Mean		76	48	21	32	33
LSD (0.05)				6	7	5

Notes: Shaded values are not statistically different from the highest value within a column. Grain samples were too small to measure test weight. Plots were grazed from 11/25/16 until Duster reached first hollow stem (2/24/17). Stocking rate was 325 lb/ac. Data for varieties Doublestop CL Plus, Iba, Larry, and OK11D25005 were not reported as the coefficient of variation (c.v.) exceeded 30. Moderate to severe leaf rust pressure during grain fill.

† Canopy cover measurements were collected from each plot using the Canopeo app prior to cattle grazing (11/15/16) and after cattle removal (3/1/17).

‡ Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Marshall Grain-only Wheat Variety Trial

Cooperator: Dean Fuxa
 Planting & harvest dates: 10/13/16 & 6/7/17
 Management: Grain-only
 Tillage: Conventional

Previous crop: Wheat
 Soil type: Kirkland silt loam
 Soil test: pH = 5.6, P = 62, K = 343

Source	Variety	Grain Yield		
		2016-17	2-Year	3-Year
		-----bu/ac-----	---lb/bu---	
KWA	Joe	44	-	-
Syngenta	SY Monument	40	51	-
OGI	Iba	40	49	48
OGI	Duster	38	46	43
LCS	LCS Chrome	34	-	-
OSU	Endurance	33	40	38
OGI	Doublestop CL Plus	32	40	39
WestBred	WB-Cedar	31	39	43
WestBred	WB-Grainfield	31	45	-
OGI	Gallagher	30	44	44
OGI	Ruby Lee	29	27	29
OGI	Smith's Gold†	28	-	-
Syngenta	SY Flint	27	43	-
WestBred	WB4458	27	40	43
OGI	Bentley	26	39	40
KWA	Tatanka	22	-	-
OGI	Stardust	21	-	-
LCS	LCS Pistol	20	30	33
OGI	Billings	20	36	37
LCS	LCS Mint	17	30	29
KWA	Larry	16	-	-
Watley	TAM 204	14	30	-
Experimentals				
	OK14319	40	-	-
	OK12621	35	45	-
	OK11D25005	29	-	-
	OK12206-2	28	-	-
	OK12716R/W	27	43	-
Mean		29	40	39
LSD (0.05)		8	7	6

Notes: Shaded values are not statistically different from the highest value within a column. Grain samples were too small to collect a sufficient number of test weight samples for analyzing and reporting. Data for variety SY Llano was not reported as the coefficient of variation (c.v.) exceeded 30. Moderate to severe leaf rust pressure during grain fill."

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Marshall Dual-Purpose vs. Grain-Only Comparison

Cooperator: Dean Fuxa
 Planting date: 9/12/16 (Dual-purpose) & 10/13/16 (Grain-only)
 Harvest date: 6/7/17
 Previous crop: Wheat

Management: Dual-purpose, conventional tillage
 Soil type: Kirkland silt loam
 Soil test: pH = 5.6, P = 62, K = 343

Source	Variety	Grain Yield								
		2016-17			2-Year			3-Year		
		Dual- purpose	Grain- only	Diff.	Dual- purpose	Grain- only	Diff.	Dual- purpose	Grain- only	Diff.
-----bu/ac-----										
KWA	Joe	36	44	-8	-	-	-	-	-	-
WestBred	WB-Cedar	34	31	3	38	39	0	41	43	-2
Syngenta	SY Monument	29	40	-11	41	51	-10	-	-	-
OGI	Smith's Gold†	28	28	0	-	-	-	-	-	-
OSU	Endurance	24	33	-8	38	40	-2	38	38	0
OGI	Duster	24	38	-14	37	46	-9	39	43	-4
OGI	Gallagher	22	30	-8	35	44	-9	37	44	-6
WestBred	WB4458	21	27	-6	29	40	-11	31	43	-11
OGI	Bentley	20	26	-5	36	39	-3	36	40	-4
OGI	Billings	20	20	0	29	36	-7	29	37	-8
OGI	Ruby Lee	20	29	-9	24	27	-3	28	29	-2
Syngenta	SY Flint	19	27	-8	32	43	-11	-	-	-
WestBred	WB-Grainfield	17	31	-14	33	45	-12	-	-	-
LCS	LCS Chrome	16	34	-19	-	-	-	-	-	-
Watley	TAM 204	16	14	1	23	30	-7	-	-	-
Syngenta	SY Llano	14	-	-	23	-	-	-	-	-
KWA	Tatanka	14	22	-8	-	-	-	-	-	-
OGI	Stardust	14	21	-7	-	-	-	-	-	-
LCS	LCS Mint	14	17	-3	19	30	-10	22	29	-8
LCS	LCS Pistol	11	20	-10	26	30	-4	29	33	-4
OGI	Doublestop CL Plus	-	32	-	-	40	-	-	39	-
OGI	Iba	-	40	-	-	49	-	-	48	-
KWA	Larry	-	16	-	-	-	-	-	-	-
Experimentals										
	OK14319	28	40	-12	-	-	-	-	-	-
	OK12621	21	35	-14	36	45	-9	-	-	-
	OK12716R/W	21	27	-6	36	43	-8	-	-	-
	OK12206-2	17	28	-11	-	-	-	-	-	-
	OK11D25005	-	29	-	-	-	-	-	-	-
	Mean	21	29	-8	32	40	-7	33	39	-5
	LSD (0.05)	6	8	7	7	7	8	5	6	6

Notes: 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. Grain samples were too small to collect a sufficient number of test weight samples for analyzing and reporting. Plots were grazed from 11/25/16 until Duster reached first hollow stem (2/24/17). Stocking rate was 325 lb/ac. Data for variety SY Llano in the grain-only trial and varieties Doublestop CL Plus, Iba, Larry, and OK11D25005 in the dual-purpose trial were not reported as the coefficient of variation (c.v.) exceeded 30. Moderate to severe leaf rust pressure during grain fill."

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Thomas Wheat Variety Trial

Cooperator: Keith Miller
 Planting & harvest dates: 10/12/16 & 6/12/17
 Management: Grain-only
 Tillage: Conventional

Extension Educator: Ron Wright
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 5.4, P = 106, K = 536

Source	Variety	Shatter	Grain Yield			Test Weight 2016-17	Lodging 2016-17
			2016-17	2-Year	3-Year		
			-----bu/ac-----			---lb/bu---	1 - 5
OGI	Lonerider†	2.0	74	-	-	54.8	1
OGI	Gallagher	2.0	71	73	62	56.8	3
KWA	Joe	2.0	68	-	-	55.6	1
OGI	Billings	1.5	66	67	57	57.5	3
Syngenta	SY Monument	1.8	65	-	-	55.1	2
OGI	Iba	2.0	65	68	55	56.4	2
OGI	Smith's Gold†	1.8	64	70	-	57.4	2
WestBred	WB-Cedar	1.8	63	57	51	56.6	2
OGI	Duster	1.5	63	64	51	54.1	4
LCS	LCS Chrome	1.8	61	-	-	54.0	1
WestBred	WB-Grainfield	1.8	60	67	-	53.5	2
OGI	Doublestop CL Plus	1.3	58	62	54	57.6	1
OGI	Bentley	2.0	58	70	60	52.6	1
KWA	Tatanka	1.8	57	-	-	55.9	3
LCS	LCS Pistol	2.3	56	63	51	55.2	3
OSU	Endurance	2.0	56	63	50	54.5	2
WestBred	WB4458	2.0	54	58	53	55.0	2
LCS	LCS Mint	2.0	54	65	-	55.1	2
OGI	Ruby Lee	2.0	53	53	42	54.1	1
Watley	TAM 204	1.8	53	64	56	50.2	2
Syngenta	SY Llano	2.0	52	45	43	57.7	2
Syngenta	SY Flint	2.0	52	58	-	55.9	3
KWA	Larry	2.0	50	-	-	53.6	2
Experimentals							
	OK12716R/W	2.0	59	-	-	54.1	1
Mean		1.9	60	63	53	55.1	2
LSD (0.05)		7	9	7	1.1		

Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Rainfall during early June prevented a timely harvest. As a result, all varieties began to shatter before being harvested. Shattering rated on a 0 - 10 scale with 0 representing no shattering and 10 representing complete shatter loss. Lodging on a scale from 1 - 5 with 1 indicating no lodging. Low to moderate leaf rust pressure during grain fill.

† Variety tested and reported as an experimental line in previous trial(s): Lonerider = OK12DP22002-042; Smith's Gold = OK11D25056.

Union City Wheat Variety Trial

Cooperator: Don & Ray Bornemann
 Planting & harvest dates: 9/14/16 & 5/30/17
 Management: Dual-purpose
 Tillage: Conventional

Ext. Educator: Kyle Worthington
 Previous crop: Wheat
 Soil type: Pond Creek silt loam
 Soil test: pH = 6.7, P = 129, K = 291

Source	Variety	Grain Yield			Test Weight
		2016-17	2-Year	3-Year	2016-17
		-----bu/ac-----			---lb/bu---
OGI	Smith's Gold†	47	53	-	59.1
Syngenta	SY Razor	44	-	-	61.2
Watley	TAM 204	43	51	49	51.7
OGI	Bentley	42	54	49	57.4
Syngenta	SY Flint	42	50	-	58.3
OGI	Doublestop CL Plus	40	48	46	59.3
LCS	LCS Chrome	40	-	-	53.7
WestBred	WB-Cedar	38	47	48	59.1
LCS	LCS Pistol	36	47	42	54.5
OGI	Gallagher	36	50	49	56.5
WestBred	WB4458	35	43	44	59.0
OGI	Duster	34	46	43	54.9
LCS	LCS Mint	34	53	-	58.5
Syngenta	SY Llano	33	42	42	59.8
WestBred	WB-Grainfield	32	45	-	54.1
OGI	Iba	32	47	44	55.8
OSU	Endurance	31	48	42	56.0
OGI	Ruby Lee	26	39	38	54.5
OGI	Billings	26	39	38	57.3
Experimentals					
	OK12716R/W	49	61	-	57.1
	OK14319	43	-	-	57.3
	OK11D25005	22	-	-	54.4
Mean		37	48	44	56.8
LSD (0.05)		7	7	5	2.0

"Notes: Grain yields adjusted to 12% moisture. Shaded values are not statistically different from the highest value within a column. Plots were grazed from 11/25/16 through 2/25/17 at a stocking rate of 320 lb/ac. Low to moderate leaf rust pressure throughout grain fill."

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

Walters Wheat Variety Trial

Cooperator: Jimmy Kinder
 Planting & harvest dates: 10/05/16 & 5/29/17
 Management: Dual-purpose
 Tillage: No-till

Ext. Educator: Wyatt Kirwan
 Previous crop: Canola
 Soil type: Foard silt loam
 Soil test: pH = 6.0, P = 53, K = 307

Source	Variety	Grain Yield		
		2015-16	2-Year	3-Year
-----bu/ac-----				
LCS	LCS Chrome	21	-	-
OGI	Doublestop CL Plus	20	28	30
LCS	LCS Pistol	20	25	28
OGI	Iba	19	25	27
OGI	Duster	19	31	31
OGI	Ruby Lee	19	22	22
OGI	Bentley	19	27	27
WestBred	Winterhawk	19	23	27
Syngenta	SY Flint	17	30	-
OGI	Gallagher	17	29	28
OGI	Smith's Gold†	17	-	-
Watley	TAM 204	16	23	24
OSU	Endurance	15	21	22
Syngenta	SY Llano	15	19	20
WestBred	WB-Grainfield	15	20	25
LCS	LCS Mint	12	-	-
Syngenta	SY Razor	12	-	-
WestBred	WB4458	12	19	21
Experimentals				
	OK12716R/W	22	-	-
	OK11D25005	21	-	-
Mean		17	25	26
LSD (0.05)		2	4	4

Notes: Grain samples were too small to measure test weight. Shaded values are not statistically different from the highest value within a column. Precipitation from planting to harvest totaled 17.4 inches with 8.7 inches received after March 25 (data from Grandfield Mesonet station). Plots were grazed from 12/26/16 through 2/26/17 at a stocking rate of 200 lb/ac. All plots were treated with 3.8 fl oz/ac Lambda-T on 3/14/17.

† Variety tested and reported as an experimental line in previous trial(s): Smith's Gold = OK11D25056.

2016-2017 Oklahoma Wheat Variety Performance Tests -- Heading Date and Plant Height

Source	Variety	Goodwell					Chickasha			Lahoma	
		Altus	Chickasha	Irrigated	Lahoma	Stillwater	Altus	Chickasha	IWM	Lahoma	Fungicide
		-----50% heading-----					-----plant height at harvest - inches-----				
AGSECO	AG Icon	4/1	4/5	4/28	4/17	4/6	31	28	29	37	35
AGSECO	AG Robust	3/31	4/3	4/24	4/14	4/1	31	25	25	33	34
PlainsGold	Avery	-	-	4/25	4/18	4/10	-	-	-	31	37
OGI	Bentley	3/31	4/5	4/25	4/17	4/5	34	32	34	31	31
OGI	Billings	4/1	4/3	4/25	4/16	4/3	33	26	29	32	35
Syngenta	Bob Dole	4/2	4/5	4/25	4/16	4/6	35	29	32	37	39
PlainsGold	Brawl CL Plus	-	-	4/25	4/16	4/6	-	-	-	33	36
PlainsGold	Byrd	-	-	4/22	4/18	4/6	-	-	-	33	35
OGI	Doublestop CL Plus	4/8	4/10	-	4/18	4/10	35	27	32	35	37
OGI	Duster	4/3	4/5	4/24	4/17	4/6	34	28	29	28	31
OSU	Endurance	4/5	4/5	4/22	4/17	4/9	35	31	32	34	36
OGI	Gallagher	3/31	4/4	4/25	4/17	4/3	32	26	29	31	32
AGSECO	Hot Rod	4/1	4/5	4/21	4/15	4/12	31	30	31	31	33
OGI	Iba	4/2	4/5	4/28	4/17	4/5	32	27	28	30	33
KWA	Joe	4/2	4/5	4/28	4/17	4/9	34	29	33	34	33
PlainsGold	Langin	-	-	4/26	4/14	4/1	-	-	-	34	33
KWA	Larry	4/5	4/5	4/28	4/16	4/9	33	26	31	31	32
LCS	LCS Chrome	4/9	4/17	4/28	4/19	4/13	32	28	31	36	35
LCS	LCS Mint	4/9	4/14	4/28	4/18	4/10	32	28	29	32	34
LCS	LCS Pistol	4/2	4/5	4/24	4/16	4/5	29	25	29	31	31
LCS	LCS Wizard	4/9	4/10	4/28	4/17	4/10	31	27	31	33	30
OGI	Lonerider	-	-	4/24	-	3/30	-	-	-	-	-
Dyna-Gro	Long Branch	4/10	4/17	-	4/21	4/13	34	30	35	38	36
OGI	NF 101	3/27	3/31	4/24	4/15	3/30	32	31	34	35	36
OGI	Ruby Lee	3/28	4/3	4/24	4/16	4/1	35	29	31	35	38
OGI	Smith's Gold	4/3	4/6	4/24	4/17	4/3	34	30	30	35	35
OGI	Spirit Rider	-	-	-	-	4/9	-	-	-	-	-
OGI	Stardust	4/2	4/10	4/22	4/16	4/3	32	24	29	32	36
Syngenta	SY Achieve CL2	3/29	3/31	4/22	4/14	4/1	33	32	34	33	33
Syngenta	SY Benefit	4/3	4/3	4/24	4/15	4/5	32	30	34	32	33
Syngenta	SY Drifter	4/4	4/5	-	4/17	4/9	33	27	31	31	33
Syngenta	SY Flint	3/29	4/3	4/24	4/15	4/5	32	25	29	33	32
Syngenta	SY Grit	4/1	4/3	4/24	4/16	4/3	33	28	30	32	31
Syngenta	SY Llano	3/26	3/30	-	4/13	3/30	31	25	27	33	34
Syngenta	SY Monument	-	-	-	4/18	4/10	-	-	-	33	33
Syngenta	SY Razor	4/2	4/5	-	-	4/6	34	33	38	-	-
Syngenta	SY Rugged	4/1	4/3	4/26	4/15	4/3	33	27	29	28	31
LCS	T158	4/2	4/5	4/25	4/15	4/5	33	30	32	35	34
Watley Seed	TAM 112	-	-	4/26	4/14	4/2	-	-	-	33	33
AGSECO	TAM 114	4/6	4/10	4/24	4/17	4/10	32	33	35	34	35
Watley Seed	TAM 204	4/5	4/10	4/22	4/17	4/9	33	28	31	33	34
KWA	Tatanka	4/5	4/4	4/27	4/16	4/6	32	30	33	29	31
WestBred	WB4269	3/27	3/31	4/22	4/15	4/3	31	26	29	30	31
WestBred	WB4303	3/26	3/31	4/24	4/15	3/30	33	28	30	31	33
WestBred	WB4458	3/27	4/3	4/24	4/14	4/7	32	27	30	32	33
WestBred	WB4515	4/8	4/10	-	4/18	4/10	33	29	32	34	31
WestBred	WB4721	4/8	4/7	4/28	4/18	4/11	33	31	34	35	35
WestBred	WB-Cedar	3/25	3/31	4/22	4/13	3/28	29	28	28	28	31
WestBred	WB-Grainfield	4/8	4/10	4/27	4/18	4/10	34	32	36	33	34
WestBred	Winterhawk	3/31	4/3	4/28	4/16	4/2	35	30	34	33	32
KWA	Zenda	4/4	4/5	4/24	4/17	4/5	33	31	35	34	35
OSU Experimentals											
	OK11755W-9W	4/2	-	4/26	4/16	4/3	33	-	-	34	37
	OK11D25005	-	-	-	-	4/10	-	-	-	-	-
	OK12206-2	-	-	4/24	4/18	4/7	-	-	-	33	34
	OK12621	-	-	-	-	4/2	-	-	-	-	-
	OK12716R/W	4/4	4/10	4/26	4/17	4/8	32	28	32	36	41
	OK12912C-2	4/4	-	4/24	4/17	4/5	31	-	-	39	39
	OK12D22002-077	4/1	4/5	4/26	4/16	4/1	30	26	28	34	35
	OK12D22004-016	-	-	-	4/14	3/29	-	-	-	33	33
	OK13209	4/2	4/6	-	4/16	4/3	34	31	32	34	38
	OK13621	3/30	4/3	4/27	4/14	3/29	32	27	30	34	-
	OK14319	-	-	-	-	4/6	-	-	-	-	-
Mean		4/2	4/5	4/24	4/16	4/5	33	29	31	33	34

The Oklahoma Cooperative Extension Service 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.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: eeo@okstate.edu has been designated to handle inquiries regarding non-discrimination policies; Director of Equal Opportunity. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$3.00 per copy. Revised 0917 GH.