



# Oklahoma Wheat Variety Performance Tests

2005

Production Technology 2005-10

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## 2005 Wheat Crop Overview

The 2004-05 wheat production season was marked by extremes in moisture availability and widespread, severe stripe rust infestation. Late-summer and early-fall rains provided ample moisture for wheat emergence and growth last fall. Adequate moisture, however, soon turned to water-logged conditions and fields that were not sown by mid-October were generally never planted.

Growers that were able to plant wheat early in the season had plenty of forage available by November 1 and a favorable cattle market outlook (see OSU publication [PT 2005-4](#) for fall-forage production comparisons among varieties). The energy required for cattle to maneuver through muddy, waterlogged fields, however, subtracted from feed conversion efficiency. As a whole, this resulted in poor cattle weight gains and very rough fields.

First hollow stem occurred early in 2005, and most varieties reached first hollow stem by February 25 at the Stillwater research station and March 1 at the El Reno test site. This resulted in many wheat fields being grazed

past the first hollow stem stage of growth and associated yield reductions likely occurred. This is not to say that dual-purpose wheat producers removing cattle prior to first hollow stem were immune to yield reductions associated with grazing. This was well-



demonstrated by data from the El Reno and Marshall locations which include both grazed and non-grazed plots. Cattle were removed prior to first hollow stem at these locations, but significant yield losses still occurred in grazed plots. This was likely due to damage from cattle traffic on wet soil and poor conditions for re-growth once cattle were removed.

While excess moisture made grazing difficult, it was certainly not a problem during grain fill, as most locations had little to no significant rainfall after flag leaf emergence. In fact some of our southern OK locations did not receive enough rainfall to move top-dress nitrogen into the soil. Fortunately cool temperatures were predominant during grain fill, thereby reducing evaporative demand and making better use of limited spring soil moisture. Overall, though, the 2004-05 wheat crop year was greatly limited by insufficient soil moisture.

## **Disease**

Even though rainfall after flag leaf emergence was limited, foliar disease pressure was heavy on susceptible and moderately susceptible varieties. This was especially true for stripe rust, which greatly reduced yield of the many Oklahoma wheat fields. Leaf rust was also



present but losses were generally not as great as those associated with stripe rust. Powdery mildew pressure was very heavy on susceptible varieties in 2005, and some growers opted for early fungicide applications to help protect yield.

As a whole, foliar fungicide use in Oklahoma was much higher in 2005 than in previous years, and yield results from the Apache and Lahoma locations include fungicide treated and non-treated plots, which allows for direct assessment of the yield losses associated with foliar disease in 2005. For an in-depth description of foliar diseases and their symptoms visit the [OSU Entomology and Plant Pathology](#) extension web page.

## **Insect pest problems**

Localized infestations of greenbugs and Hessian fly occurred in the fall of 2004 and some growers opted for chemical control. In addition wheat streak mosaic virus (a virus transmitted by the wheat curl mite) resulted in significant yield losses in some areas of northern and northwestern Oklahoma. The most widespread damage in 2004-05, however, was associated with bird cherry-oat aphid infestations which resulted in transmission of the barley yellow dwarf virus. We did not have direct comparisons among

insecticide and non-insecticide treated varieties in 2004-05, so it is difficult to



quantify the yield losses that can be attributed to barley yellow dwarf virus. It is safe to say, however, that barley yellow dwarf virus did negatively impact yield in many Oklahoma wheat fields in 2004-05.

## **Locations and production practices**

The variety trials were all conventionally tilled and planted with 50 lb/ac of 18-46-0 in furrow. The producer practices for weed control, fertilization, and insect control were also applied to the variety trial on a location-by-location basis. Variety trial trials were sown at 60 lb/ac with the exceptions of El Reno and Frederick, which were sown at 120 lb/ac.

We were not immune to the problems associated with a wet fall, as conditions were never suitable for planting at our Kildare location. In addition, biotic and abiotic stresses resulted in extreme variability at our Lamont location, and it was not harvested. Special thanks are due Don Schieber and Kirby Farms (Kildare and Lamont, respectively) for their efforts and support of the OSU variety trials. We will try at these locations again next year and hope for more favorable environmental conditions.

## **New varieties for 2004-05**

Newly released varieties included in the trial this year include Okfield, OK Bullet, and Guymon. Okfield is an OSU-released herbicide-tolerant variety that shows promise

for producers looking to implement the Clearfield herbicide system. OK Bullet is an OSU-released variety that has good yield potential and excellent milling and baking characteristics. Finally, Guymon is an OSU-released hard white winter wheat variety, that, as the name implies, is well-suited for production in the Panhandle Oklahoma.

Several OSU candidate cultivars that have potential for release in the next year or two were included in the trials. These were included to evaluate their capability at sites not normally used as test locations in the OSU wheat breeding program. Characteristics of the experimental lines are available by selecting candidate cultivars on the web at <http://www.wit.okstate.edu>.

### **New features for 2004-05**

In previous years, fall forage data was collected and then the fields were either grazed or mowed to simulate grazing before harvesting grain. This year separate plots were sown for forage data collection, so all grazed trials were grazed according to farmer practice.

Rather than include 2- and 3-year averages for test weight at each location, a summary figure has been added to show how varieties compare to the weighted 3-year average for all variety trial locations. This figure includes data from three years at 29 locations including over 4,826 individual plots.

In an effort to ease comparisons among locations, a table with all 2004-05 yield data was compiled. In addition plant height data, lodging, and shatter losses are reported in a separate table, rather than with individual locations. Finally, to hasten delivery of yield trial information, protein analyses will be reported in a separate publication.

### **Additional Information on the Web**

For information on disease resistance and other characteristics of all wheat varieties grown in Oklahoma, see the “Wheat Variety Characteristic Chart” under Variety Information on the web at <http://www.wit.okstate.edu>.

### **Cooperation Acknowledged**

These data result from a cooperative effort among our many farmer cooperators, county extension agents, area agronomists, USDA-CSREES agreement # 2004-06066, and the

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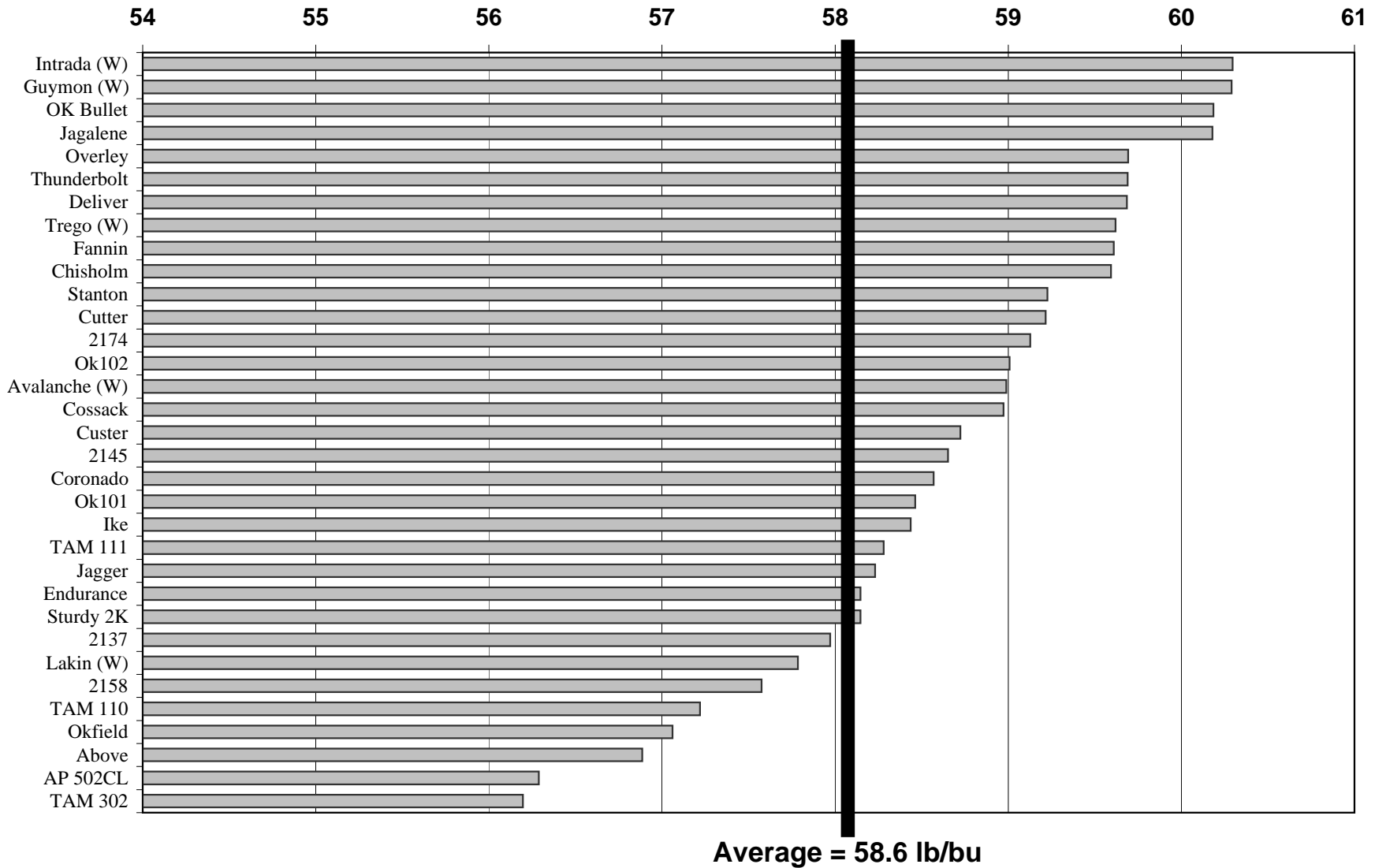
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## 2005 Oklahoma Wheat Variety Trial Summary

	Alva	Apache	Apache fungicide	Balko	Buffalo	Cherokee	Elk City	El Reno grazed	El Reno non-grazed	Frederick	Gage	Goodwell Irr.	Goodwell Non-irr.	Haskell	Kingfisher	Lahoma	Lahoma fungicide	Marshall grazed	Marshall non-grazed	Olustee
	-----bu/ac-----																			
2137	40	42	47	30	33	38	23	40	59	17	44	55	24	54	42	39	57	14	23	39
2145	48	47	53	37	32	36	35	36	57	14	50	75	25	73	43	51	64	16	28	43
2158	-	-	-	38	-	-	-	-	-	-	-	69	40	-	-	-	-	-	-	-
2174	42	41	47	35	35	37	22	43	50	25	38	52	28	59	42	40	54	14	31	38
AP502CL	52	41	47	32	33	39	27	49	54	21	40	64	37	54	53	39	60	15	20	48
Avalanche (W)	-	-	-	29	-	-	-	-	-	-	-	66	40	-	-	-	-	-	-	-
OK Bullet	42	53	53	44	-	43	51	54	-	19	51	87	37	-	-	-	-	17	38	-
Custer	40	42	40	34	31	38	23	40	52	19	40	58	34	48	41	37	46	15	29	39
Cutter	50	50	55	42	42	47	51	47	60	16	57	85	40	54	52	54	62	15	30	51
Deliver	42	43	46	40	45	33	46	50	64	19	47	76	39	47	42	55	59	17	40	44
Endurance	53	50	56	39	40	47	41	53	61	20	53	72	37	64	53	55	60	13	30	53
Fannin	54	48	47	41	41	39	50	42	66	15	49	83	37	65	49	59	65	11	32	41
Guymon (W)	41	-	-	37	-	-	-	-	-	-	45	67	33	-	-	-	-	-	-	-
Ike	-	-	-	35	-	-	-	-	-	-	-	61	39	-	-	-	-	-	-	-
Intrada (W)	40	-	-	36	-	-	-	-	-	-	-	69	36	-	-	-	-	-	-	-
Jagalene	44	47	56	42	40	42	47	43	50	21	55	81	36	61	51	62	66	18	27	59
Jagger	48	52	54	43	40	51	49	45	58	17	50	95	46	34	54	57	66	12	31	57
Lakin (W)	-	-	-	27	-	-	-	-	-	-	-	48	18	-	-	-	-	-	-	-
Ok101	45	43	46	33	41	38	30	45	55	24	42	72	38	54	44	44	59	13	26	47
Ok102	43	37	41	33	35	36	20	40	46	26	37	56	22	47	41	40	51	20	29	36
Okfield	41	37	41	41	-	34	38	44	-	20	44	68	34	-	-	-	-	17	27	-
Overley	60	62	68	43	37	45	48	48	73	17	57	93	42	23	52	63	64	16	45	58
Stanton	-	-	-	39	-	-	-	-	-	-	-	44	26	-	-	-	-	-	-	-
Sturdy 2K	44	43	47	28	32	38	43	48	55	11	48	70	30	51	47	49	53	16	30	40
TAM 110	-	-	-	34	-	-	-	-	-	-	43	67	44	-	-	-	-	-	-	-
TAM 111	-	-	-	50	-	-	-	-	-	-	55	94	45	-	-	-	-	-	-	-
Thunderbolt	43	37	40	39	39	42	39	44	56	21	42	71	35	54	48	48	58	14	23	50
Trego (W)	49	-	-	38	-	-	-	-	-	-	-	47	25	-	-	-	-	-	-	-
OK00421	42	-	-	32	-	-	41	-	-	-	48	68	27	-	-	-	-	-	-	-
OK00508W	49	-	-	42	-	-	36	-	-	-	45	63	38	-	-	-	-	-	-	-
OK01307	-	53	59	-	-	48	51	61	-	-	-	-	-	-	-	-	-	-	-	-
OK01817	-	47	49	-	-	41	29	43	-	-	-	-	-	-	-	-	-	-	-	-
OK93P656	57	-	-	-	-	-	-	53	-	-	-	-	-	-	-	-	-	22	32	-
OK99212	-	-	-	-	-	43	33	47	-	-	41	-	-	-	-	-	-	21	33	-
Mean	46	46	50	37	37	41	38	46	57	19	47	69	34	53	47	50	59	16	30	46
LSD (0.05)	7	6	8	4	6	4	4	7	6	10	6	10	7	4	6	6	6	6	4	4

### 3-Year average test weight (lb/bu) of wheat varieties in the OSU variety testing program



## Alva Variety Trial

**Cooperator: Wes Mallory**

**Management: Grain only**

**Soil type: Grant silt loam**

**Soil test information: pH = 6.2, P = 60, K = 528**

**Planting date: 09-30-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			---lb/bu---
Kansas	Overley	60	52	-	62
Agripro	Fannin	54	53	-	62
Oklahoma	Endurance	53	50	58	60
Agripro	AP502CL	52	51	58	59
Agripro	Cutter	50	50	59	60
Kansas	Trego (W)	49	50	58	61
Kansas	Jagger	48	47	57	61
Kansas	2145	48	46	55	61
Oklahoma	Ok101	45	44	53	61
Texas	Sturdy 2K	44	-	-	59
Agripro	Jagalene	44	45	56	61
Agripro	Thunderbolt	43	47	58	60
Oklahoma	Ok102	43	44	54	60
Oklahoma	Deliver	42	46	-	60
Oklahoma	OK Bullet	42	48	-	60
Oklahoma	2174	42	43	52	62
Oklahoma	Okfield	41	42	-	59
Oklahoma	Guymon (W)	41	41	-	62
Kansas	2137	40	41	51	60
Oklahoma	Custer	40	42	50	59
Oklahoma	Intrada (W)	40	43	49	61
Experimentals					
	OK93P656-2C04	57	-	-	61
	OK00508W-4C04	49	-	-	60
	OK00421	42	-	-	60
Mean		46	46	55	60
LSD <sub>(0.05)</sub>		7	5	4	1

(W) = Hard white wheat variety

## Apache Variety Trial

**Cooperator: Paul Jackson**  
**Soil type: Hollister silt loam**  
**Planting date: 10-21-04**

**Management: Grain only**  
**Soil test information: pH=5.7, P=42, K=423**  
**Fungicide = Quilt @ 14 oz/ac on April 8, 2005**

Source	Variety	Grain Yield					Test Weight		
		2004-2005		2-Year*	3-Year*	2004-2005			
		No fungicide	Fung. fungicide	Fung. advantage	No fungicide	No fungicide	No fungicide	Fung. fungicide	Fung. advantage
-----bu/ac-----					-----lb/bu-----				
Kansas	Overley	62	68	6	57	-	60	60	0
Oklahoma	OK Bullet	53	53	0	50	-	61	61	0
Kansas	Jagger	52	54	2	49	50	59	60	1
Agripro	Cutter	50	55	5	47	-	61	61	0
Oklahoma	Endurance	50	56	6	50	50	59	59	0
Agripro	Fannin	48	47	-1	45	-	61	61	0
Agripro	Jagalene	47	56	9	47	50	61	61	0
Kansas	2145	47	53	6	45	46	60	61	1
Texas	Sturdy 2K	43	47	4	-	-	59	59	0
Oklahoma	Ok101	43	46	3	41	42	60	61	1
Oklahoma	Deliver	43	46	3	43	44	60	60	0
Kansas	2137	42	47	5	41	40	58	59	1
Oklahoma	Custer	42	40	-2	42	42	60	60	0
Agripro	AP502CL	41	47	6	41	40	57	58	1
Oklahoma	2174	41	47	6	43	44	60	60	0
Agripro	Thunderbolt	37	40	3	35	38	60	60	0
Oklahoma	Okfield	37	41	4	36	-	57	58	1
Oklahoma	Ok102	37	41	4	38	39	60	60	0
Experimentals									
	OK01307	53	59	6	-	-	60	60	0
	OK01817	47	49	2	-	-	60	60	0
Mean		46	50	4	44	44	60	60	0
LSD <sub>(0.05)</sub>		6			4	3	1		

\* 2005 was the first year for the Apache fungicide trial, so there are no 2- or 3-year fungicide/no fungicide comparisons

## Balko Variety Trial

Cooperator: Steve Frantz

Management: Grain only

Soil type: Ulysses-Richfield Complex

Soil test information: pH=8.1, P=32, K=836

Planting date:10-18-04

Source	Variety	Grain Yield		Test Weight
		2004-05	2-Year	2004-05
		-----bu/ac----		-----lb/bu-----
Texas	TAM 111	50	-	59
Oklahoma	OK Bullet	44	32	60
Kansas	Overley	43	28	57
Kansas	Jagger	43	27	57
Agripro	Jagalene	42	29	59
Agripro	Cutter	42	29	58
Oklahoma	Okfield	41	30	58
Agripro	Fannin	41	23	59
Oklahoma	Deliver	40	29	57
Agripro	Thunderbolt	39	28	59
Kansas	Stanton	39	27	58
Oklahoma	Endurance	39	27	58
Pioneer	2158	38	26	57
Kansas	Trego (W)	38	28	58
Kansas	2145	37	26	58
Oklahoma	Guymon (W)	37	27	58
Oklahoma	Intrada (W)	36	25	59
Kansas	Ike	35	23	58
Oklahoma	2174	35	25	58
Oklahoma	Custer	34	21	59
Texas	TAM 110	34	22	56
Oklahoma	Ok102	33	25	58
Oklahoma	Ok101	33	-	57
Agripro	AP502CL	32	21	54
Kansas	2137	30	23	55
Colorado	Avalanche (W)	29	18	58
Texas	Sturdy 2K	28	-	57
Kansas	Lakin (W)	27	15	56
Experimentals				
	OK00508W	42	-	58
	OK00421	32	-	60
Mean		37	25	58
LSD <sub>(0.05)</sub>		8	4	1

(W) = Hard white wheat variety



## Buffalo Variety Trial

**Cooperator: NRCS**

**Management: Grain only**

**Soil type: St. Paul silt loam**

**Soil test information: pH=7.4, P=41, K=554**

**Planting date: 11-08-04**

Source	Variety	Grain Yield			Test Weight*
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			-----lb/bu-----
Oklahoma	Deliver	45	47	55	57
Agripro	Cutter	42	49	58	56
Agripro	Fannin	41	44	-	58
Oklahoma	Ok101	41	45	53	54
Oklahoma	Endurance	40	45	53	55
Agripro	Jagalene	40	49	59	57
Kansas	Jagger	40	44	53	55
Agripro	Thunderbolt	39	48	56	57
Kansas	Overley	37	45	-	57
Oklahoma	2174	35	43	51	56
Oklahoma	Ok102	35	29	46	56
Kansas	2137	33	46	54	55
Agripro	AP502CL	33	45	50	53
Kansas	2145	32	43	51	56
Texas	Sturdy 2K	32	-	-	55
Oklahoma	Custer	29	37	46	55
Mean		37	44	53	56
LSD <sub>(0.05)</sub>		4	5	4	1

\*Harvest was delayed by rain, which lowered test weights of all varieties

## Cherokee Variety Trial

**Cooperator: Kenneth Failes**

**Management: Dual purpose**

**Soil type: Dale silt loam**

**Soil test information: pH=5.9, P=59, K=659**

**Planting date: 09-27-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			-----lb/bu-----
Kansas	Jagger	51	52	57	60
Agripro	Cutter	47	48	55	61
Oklahoma	Endurance	47	50	55	58
Kansas	Overley	45	55	-	61
Oklahoma	OK Bullet	43	47	-	61
Agripro	Jagalene	42	49	55	61
Agripro	Thunderbolt	42	45	53	60
Agripro	AP502CL	39	45	49	57
Agripro	Fannin	39	39	-	60
Texas	Sturdy 2K	38	-	-	59
Kansas	2137	38	41	47	58
Oklahoma	Custer	38	39	44	60
Oklahoma	Ok101	38	42	47	60
Oklahoma	2174	37	41	46	59
Kansas	2145	36	41	47	58
Oklahoma	Ok102	36	41	48	60
Oklahoma	Okfield	34	37	-	58
Oklahoma	Deliver	33	41	46	60
Experimentals					
	OK01307	48	-	-	60
	OK99212	43	-	-	60
	OK01817	41	-	-	60
Mean		41	44	50	60
LSD <sub>(0.05)</sub>		6	4	4	1

## Elk City Variety Trial

**Cooperator: Carl Simon**

**Management: Dual purpose**

**Soil type: Grandfield sandy loam**

**Soil test information: pH=5.5, P=40, K=355**

**Planting date: 09-29-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		----bu/ac----			----lb/bu----
Oklahoma	OK Bullet	51	50	-	59
Agripro	Cutter	51	47	54	58
Agripro	Fannin	50	47	-	59
Kansas	Jagger	49	50	56	58
Kansas	Overley	48	48	-	58
Agripro	Jagalene	47	48	55	59
Oklahoma	Deliver	46	48	56	58
Texas	Sturdy 2K	43	-	-	57
Oklahoma	Endurance	41	43	51	55
Agripro	Thunderbolt	39	44	51	58
Oklahoma	Okfield	38	41	-	55
Kansas	2145	35	38	47	56
Oklahoma	Ok101	30	36	45	56
Agripro	AP502CL	27	38	49	52
Oklahoma	Custer	23	35	42	53
Kansas	2137	23	34	45	53
Oklahoma	2174	22	32	44	51
Oklahoma	Ok102	20	31	40	53
Experimentals					
	OK01307	51	-	-	58
	OK00421	41	-	-	59
	OK00508W	36	-	-	55
	OK99212	33	-	-	56
	OK01817	29	-	-	55
Mean		38	42	49	56
LSD <sub>(0.05)</sub>		4	6	6	1

## EI Reno Variety Trial

**Cooperator: Bornemann Farms**

**Management: Grain only and Dual purpose**

**Soil type: Pond creek silt loam**

**Soil test information:**

**Planting date: 09-20-04**

Source	Variety	Grain Yield			Test Weight		
		2004-2005			2004-2005		
		Grazed	Non-grazed	Difference	Grazed	Non-grazed	Difference
		-----bu/ac-----			-----lb/bu-----		
Oklahoma	OK Bullet	54	-	-	62	-	-
Oklahoma	Endurance	53	61	8	59	57	-2
Oklahoma	Deliver	50	64	14	61	61	0
Agripro	AP502CL	49	54	5	57	57	0
Kansas	Overley	48	73	25	62	61	-1
Texas	Sturdy 2K	48	55	7	59	57	-2
Agripro	Cutter	47	60	13	61	60	-1
Kansas	Jagger	45	58	13	59	59	0
Oklahoma	Ok101	45	55	10	61	60	-1
Agripro	Thunderbolt	44	56	12	60	60	0
Oklahoma	Okfield	44	-	-	56	-	-
Oklahoma	2174	43	50	7	60	58	-2
Agripro	Jagalene	43	50	7	60	60	0
Agripro	Fannin	42	66	24	60	60	0
Kansas	2137	40	59	19	58	58	0
Oklahoma	Custer	40	52	12	59	58	-1
Oklahoma	Ok102	40	46	6	59	57	-2
Kansas	2145	36	57	21	57	59	2
Experimentals							
	OK01307	61	-	-	60	-	-
	OK01817	43	-	-	60	-	-
	OK93P656	53	-	-	60	-	-
	OK99212	47	-	-	61	-	-
Mean		46	57	13	60	59	-1
LSD <sub>(0.05)</sub>		7			1		

## Frederick Variety Trial\*

**Cooperator: Buddy Treadwell**

**Management: Dual purpose**

**Soil type: Hollister silt loam**

**Soil test information: pH=7.9, P=73, K=739**

**Planting date: 09-20-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			-----lb/bu-----
Oklahoma	Ok102	26	36	36	58
Oklahoma	2174	25	33	35	59
Oklahoma	Ok101	24	36	39	58
Agripro	AP502CL	21	37	43	56
Agripro	Thunderbolt	21	34	37	58
Agripro	Jagalene	21	34	40	59
Oklahoma	Okfield	20	34	-	58
Oklahoma	Endurance	20	35	-	58
Oklahoma	Custer	19	31	33	58
Oklahoma	OK Bullet	19	33	-	59
Oklahoma	Deliver	19	32	-	59
Kansas	Overley	17	36	-	58
Kansas	Jagger	17	37	40	57
Kansas	2137	17	30	33	59
Agripro	Cutter	16	32	39	59
Agripro	Fannin	15	35	-	60
Kansas	2145	14	31	35	59
Texas	Sturdy 2K	11	-	-	58
Mean		19	34	37	58
LSD <sub>(0.05)</sub>		6	5	4	N.S.

\* All plots had greater than 75% lodging and 20% shatter losses. However, no differences among varieties were observed.

## Gage Variety Trial

**Cooperator: Curtis Torrance**

**Management: Grain only\***

**Soil type: St. Paul silt loam**

**Soil test information: pH=7.2, P=228, K=699**

**Planting date: 09-28-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year*	3-Year*	2004-05
		-----bu/ac-----			-----lb/bu-----
Kansas	Overley	57	42	-	61
Agripro	Cutter	57	51	47	61
Texas	TAM 111	55	45	46	59
Agripro	Jagalene	55	48	46	61
Oklahoma	Endurance	53	49	40	59
Oklahoma	OK Bullet	51	-	-	62
Kansas	Jagger	50	42	42	59
Kansas	2145	50	44	41	61
Agripro	Fannin	49	39	-	61
Texas	Sturdy 2K	48	-	-	58
Oklahoma	Deliver	47	42	-	61
Oklahoma	Guymon (W)	45	-	-	60
Kansas	2137	44	39	-	57
Oklahoma	Okfield	44	-	-	57
Texas	TAM 110	43	36	37	57
Agripro	Thunderbolt	42	40	38	60
Oklahoma	Ok101	42	35	36	59
Oklahoma	Custer	40	38	38	60
Agripro	AP502CL	40	40	40	56
Oklahoma	2174	38	34	34	59
Oklahoma	Ok102	37	36	39	60
Experimentals					
	OK00421	48	-	-	61
	OK00508W	45	-	-	58
	OK99212	41	-	-	59
Mean		47	41	40	59
LSD <sub>(0.05)</sub>		10	7	5	2

\* Plots were grazed in the 2002-03 and 2003-04 crop years

## Goodwell Irrigated Variety Trial

**Cooperator: Oklahoma Panhandle**

**Research and Extension Center**

**Management: Grain only**

**Soil type: Richfield clay loam**

**Soil test information: pH=7.8, P=41, K=1023**

**Planting date: 10-01-04**

Source	Variety	Grain Yield		Test Weight
		2004-05	2-Year	2004-05
		-----bu/ac-----		-----lb/bu-----
Kansas	Jagger	95	72	58
Texas	TAM 111	94	94	61
Kansas	Overley	93	79	60
Oklahoma	OK Bullet	87	80	61
Agripro	Cutter	85	71	61
Agripro	Fannin	83	66	60
Agripro	Jagalene	81	73	60
Oklahoma	Deliver	76	67	59
Kansas	2145	75	68	59
Oklahoma	Ok101	72	-	59
Oklahoma	Endurance	72	72	59
Agripro	Thunderbolt	71	55	60
Texas	Sturdy 2K	70	-	58
Oklahoma	Intrada (W)	69	64	61
Pioneer	2158	69	69	58
Oklahoma	Okfield	68	68	58
Texas	TAM 110	67	67	58
Oklahoma	Guymon (W)	67	75	61
Colorado	Avalanche (W)	66	66	59
Agripro	AP502CL	64	67	57
Kansas	Ike	61	61	57
Oklahoma	Custer	58	67	58
Oklahoma	Ok102	56	71	58
Kansas	2137	55	65	57
Oklahoma	2174	52	63	59
Kansas	Lakin (W)	48	61	56
Kansas	Trego (W)	47	62	59
Kansas	Stanton	44	44	59
Experimentals				
	OK00421	68	-	60
	OK00508W	63	-	58
<hr/>				
	Mean	69	68	59
	LSD <sub>(0.05)</sub>	6	10	1

(W) = Hard white wheat variety

## Goodwell Nonirrigated Variety Trial

**Cooperator: Oklahoma Panhandle**

**Research and Extension Center**

**Management: Grain only**

**Soil type: Richfield clay loam**

**Soil test information: pH=7.9, P=57, K=1126**

**Planting date: 10-01-04**

Source	Variety	<u>Grain Yield</u>	<u>Test Weight</u>
		2004-05	2004-05
		-----bu/ac-----	-----lb/bu-----
Kansas	Jagger	46	55
Texas	TAM 111	45	59
Texas	TAM 110	44	56
Kansas	Overley	42	56
Colorado	Avalanche (W)	40	57
Pioneer	2158	40	55
Agripro	Cutter	40	56
Kansas	Ike	39	57
Oklahoma	Deliver	39	57
Oklahoma	Ok101	38	56
Oklahoma	OK Bullet	37	58
Oklahoma	Endurance	37	57
Agripro	Fannin	37	57
Agripro	AP502CL	37	54
Oklahoma	Intrada (W)	36	58
Agripro	Jagalene	36	58
Agripro	Thunderbolt	35	58
Oklahoma	Custer	34	57
Oklahoma	Okfield	34	56
Oklahoma	Guymon (W)	33	57
Texas	Sturdy 2K	30	56
Oklahoma	2174	28	56
Kansas	Stanton	26	58
Kansas	2145	25	58
Kansas	Trego (W)	25	60
Kansas	2137	24	56
Oklahoma	Ok102	22	56
Kansas	Lakin (W)	18	56
Experimentals			
	OK00508W	38	56
	OK00421	27	58
	Mean	34	57
	LSD <sub>(0.05)</sub>	10	1

(W) = Hard white wheat variety



## Haskell Variety Trial

**Cooperator: Eastern Research Station**

**Management: Grain only**

**Soil type: Taloka silt loam**

**Soil test information: pH=6.3, P=70, K=270**

**Planting date: 10-18-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			-----lb/bu-----
Kansas	2145	73	61	59	60
Agripro	Fannin	65	57	-	60
Oklahoma	Endurance	64	58	59	57
Agripro	Jagalene	61	53	52	60
Oklahoma	2174	59	52	54	60
Agripro	Cutter	54	48	49	59
Agripro	Thunderbolt	54	53	54	60
Agripro	AP502CL	54	51	52	57
Kansas	2137	54	48	52	58
Oklahoma	Ok101	54	48	47	58
Texas	Sturdy 2K	51	-	-	59
Oklahoma	Custer	48	48	52	56
Oklahoma	Ok102	47	50	54	57
Oklahoma	Deliver	47	47	49	59
Kansas	Jagger*	34	37	40	58
Kansas	Overley*	23	29	-	59
Mean		53	49	52	59
LSD <sub>(0.05)</sub>		7	6	5	1

\*Overley and Jagger sustained significant bird damage (greater than 50%) prior to harvest in 2004 and 2005

## Kingfisher Variety Trial

**Cooperator: Rodney Mueggenborg**

**Management: Grain only**

**Soil type: Renfro clay loam**

**Soil test information: pH=6.1, P=38, K=464**

**Planting date: 10-19-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		-----bu/ac-----			-----lb/bu-----
Kansas	Jagger	54	57	61	61
Agripro	AP502CL	53	56	54	60
Oklahoma	Endurance	53	52	56	60
Agripro	Cutter	52	52	57	61
Kansas	Overley	52	50	-	61
Agripro	Jagalene	51	54	61	62
Agripro	Fannin	49	50	-	62
Agripro	Thunderbolt	48	48	52	62
Texas	Sturdy 2K	47	-	-	60
Oklahoma	Ok101	44	47	52	60
Kansas	2145	43	44	50	61
Kansas	2137	42	44	46	60
Oklahoma	Deliver	42	44	52	62
Oklahoma	2174	42	53	51	61
Oklahoma	Ok102	41	50	47	61
Oklahoma	Custer	41	48	51	61
<b>Mean</b>		47	50	53	61
LSD <sub>(0.05)</sub>		4	4	4	1

## Lahoma Variety Trial

**Cooperator: North Central Research Station**

**Management: Grain only**

**Soil type: Pond creek silt loam**

**Soil test information: pH=6.3, P=23, K=294**

**Planting date: 10-05-04**

**Fungicide = Stratego @ 10 oz/ac on April 4, 2005**

Source	Variety	Grain Yield									Test Weight		
		2004-2005			2-Year			3-Year			2004-2005		
		No fung.	Fung.	Yield inc.	No fung.	Fung.	Yield inc.	No fung.	Fung.	Yield inc.	No fung.	Fung.	TW inc.
		-----bu/ac-----									-----lb/bu-----		
Kansas	Overley	63	64	1	67	68	1	-	-	-	58	57	-1
Agripro	Jagalene	62	66	4	59	67	8	66	76	10	58	59	1
Agripro	Fannin	59	65	6	58	62	4	-	-	-	58	58	0
Kansas	Jagger	57	66	9	56	67	11	62	69	7	56	57	1
Oklahoma	Endurance	55	60	5	58	64	6	64	70	6	55	56	1
Oklahoma	Deliver	55	59	4	58	63	5	66	69	3	58	58	0
Agripro	Cutter	54	62	8	52	61	9	60	68	8	57	57	0
Kansas	2145	51	64	13	57	66	9	64	71	7	56	58	2
Texas	Sturdy 2K	49	53	4	-	-	-	-	-	-	56	57	1
Agripro	Thunderbolt	48	58	10	47	57	10	57	65	8	57	58	1
Oklahoma	Ok101	44	59	15	46	59	13	55	67	12	55	57	2
Oklahoma	Ok102	40	53	13	47	61	14	56	66	10	54	57	3
Oklahoma	2174	40	54	14	50	58	8	58	65	7	55	57	2
Agripro	AP502CL	39	60	21	45	64	19	50	67	17	50	55	5
Kansas	2137	39	57	18	50	64	14	57	70	13	54	57	3
Oklahoma	Custer	37	46	9	51	56	5	60	67	7	52	55	3
Mean		50	59	10	53	62	9	60	68	9	56	57	2
LSD (same variety + or - fung.)		6			5			4			1		
LSD (any two varieties )		6			7			6			1		

## Marshall Variety Trial

Cooperator: Henry Fuxa

Management: Grain only and Dual purpose

Soil type: Kirkland silt loam

Soil test information: pH=5.1, P=45, K=269

Planting date: Dual purpose = 08-31-04; Grain only = 10-29-04

Source	Variety	Grain Yield									Test Weight		
		2004-2005			2-Year			3-Year			2004-2005		
		Grazed	Non-grazed	Diff.	Grazed	Non-grazed	Diff.	Grazed	Non-grazed	Diff.	Grazed	Non-grazed	Diff.
-----bu/ac-----													
Oklahoma	Ok102	20	29	9	35	41	6	43	46	3	56	56	0
Agripro	Jagalene	18	27	9	32	41	9	42	49	7	57	56	-1
Oklahoma	Okfield	17	27	10	32	39	7	-	-	-	55	52	-3
Oklahoma	Deliver	17	40	23	34	47	13	40	53	13	55	55	0
Oklahoma	OK Bullet	17	38	21	34	34	0	-	-	-	57	57	0
Texas	Sturdy 2K	16	30	14	-	-	-	-	-	-	55	54	-1
Kansas	2145	16	28	12	30	41	11	38	46	8	55	54	-1
Kansas	Overley	16	45	29	31	54	23	-	-	-	56	57	1
Oklahoma	Custer	15	29	14	31	43	12	38	43	5	56	56	0
Agripro	Cutter	15	30	15	26	43	17	35	50	15	56	55	-1
Agripro	AP502CL	15	20	5	28	33	5	34	35	1	53	52	-1
Kansas	2137	14	23	9	30	38	8	38	44	6	54	52	-2
Oklahoma	2174	14	31	17	30	42	12	39	48	9	56	55	-1
Agripro	Thunderbolt	14	23	9	31	31	0	39	34	-5	57	56	-1
Oklahoma	Endurance	13	30	17	31	41	10	41	47	6	56	57	1
Oklahoma	Ok101	13	26	13	28	35	7	36	40	4	54	54	0
Kansas	Jagger	12	31	19	25	43	18	34	46	12	55	54	-1
Agripro	Fannin	11	32	21	21	43	22	-	-	-	57	56	-1
Experimentals													
	OK93P656	22	32	10	-	-	-	-	-	-	57	55	-2
	OK99212	21	33	12	-	-	-	-	-	-	57	57	0
Mean		16	30	14	30	41	11	38	45	6	56	55	-1
LSD for any two means within the same year		6			5			5			1		

## Olustee Variety Trial

**Cooperator: Larry Bassel**

**Management: Grain only**

**Soil type: Foard silt loam**

**Soil test information: pH = 6.1, P = 56, K = 1007**

**Planting date:10-15-04**

Source	Variety	Grain Yield			Test Weight
		2004-05	2-Year	3-Year	2004-05
		----bu/ac----			----lb/bu----
Agripro	Jagalene	59	52	53	61
Kansas	Overley	58	52	-	60
Kansas	Jagger	57	51	52	60
Oklahoma	Endurance	53	49	47	60
Agripro	Cutter	51	47	48	60
Agripro	Thunderbolt	50	40	41	61
Agripro	AP502CL	48	42	41	59
Oklahoma	Ok101	47	40	41	60
Oklahoma	Deliver	44	40	41	60
Kansas	2145	43	42	42	60
Agripro	Fannin	41	37	-	61
Texas	Sturdy 2K	40	-	-	60
Kansas	2137	39	37	38	59
Oklahoma	Custer	39	39	40	60
Oklahoma	2174	38	40	41	60
Oklahoma	Ok102	36	37	40	60
Mean		46	43	43	60
LSD <sub>(0.05)</sub>		4	5	4	1

## Guymon White Wheat Dual-Purpose Variety Trial

Cooperator: Joe Webb

Management: Dual purpose

Planting date: 9-30-04

Source	Variety	Grain Yield	Test Weight
		2004-05	2004-05
		-----bu/ac-----	-----lb/bu-----
Agripro	Platte (W)	57	61
Oklahoma	Guymon (W)	55	62
Kansas	Trego (W)	54	65
Colorado	Avalanche (W)	53	61
Kansas	Lakin (W)	50	60
Oklahoma	Intrada (W)	47	62
Experimentals			
	OK98G508W-2-40	66	59
	OK98G508W-2-30	62	59
	OK02518W	61	60
	OK02522W	61	64
	OK98G508W-2-12	60	59
	OK98G508W-2-47	59	59
	OK02507W	56	57
	OK99504W-396	54	60
Mean		57	61
LSD <sub>(0.05)</sub>		8	5

**Plant height, lodging score, shattering score, and heading date for selected variety trials in Oklahoma in 2005**

	Plant Height					Lodging				Shattering	Heading date			
	Alva	Goowell NI	Goodwell IR	Kingfisher	Lahoma	Buffalo	Goodwell IR	Goodwell NI	Haskell	Olustee	EI Reno	Lahoma	Marshall GO	Stillwater
	inches					0 - 10 scale*				0 - 10 scale**				
2137	32	24	32	31	32	5	0	0	3	3	4/19	4/22	4/18	4/19
2145	31	26	36	29	32	1	0	0	3	4	4/20	4/21	4/18	4/16
2158	-	26	35	-	-	-	4	5	-	-	-	-	-	-
2174	32	26	37	31	33	1	0	0	1	1	4/19	4/21	4/18	4/18
AP502CL	33	24	35	32	31	7	0	0	4	2	4/15	4/18	4/16	4/12
Avalanche (W)	-	24	36	-	-	-	0	2	-	-	-	-	-	4/18
OK Bullet	36	28	40	-	-	-	0	0	-	-	4/19	-	4/18	4/16
Custer	34	24	38	32	33	2	0	1	3	2	4/16	4/20	4/17	4/16
Cutter	38	26	41	35	38	5	1	1	4	6	4/19	4/21	4/19	4/16
Deliver	34	26	38	32	34	5	0	1	6	1	4/19	4/21	4/18	4/16
Endurance	34	22	38	33	35	2	0	1	3	2	4/18	4/21	4/18	4/18
Fannin	33	29	33	35	38	4	3	2	4	4	4/18	4/20	4/17	4/13
Guymon (W)	33	25	-	-	-	-	1	0	-	-	-	-	-	4/18
Ike	-	25	32	-	-	-	3	5	-	-	-	-	-	4/19
Intrada (W)	33	24	35	-	-	-	1	0	-	-	-	-	-	4/14
Jagalene	34	25	34	32	36	2	0	0	3	2	4/20	4/21	4/18	4/16
Jagger	34	26	31	33	35	4	3	4	2	3	4/18	4/20	4/17	4/14
Lakin (W)	-	26	34	-	-	-	0	0	-	-	-	-	-	4/17
Ok101	33	25	35	31	34	5	-	-	3	2	4/17	4/20	4/17	4/16
Ok102	29	26	34	28	33	2	0	0	2	1	4/19	4/21	4/18	4/18
Okfield	35	29	39	-	-	-	0	0	-	-	4/20	-	4/19	4/21
Overley	35	25	38	33	36	2	2	0	1	5	4/18	4/18	4/15	4/11
Stanton	-	23	38	-	-	-	0	0	-	-	-	-	-	4/21
Sturdy 2K	33	25	37	33	37	4	0	0	4	4	4/19	4/21	4/18	4/18
TAM 110	-	25	36	-	-	-	2	0	-	-	-	-	-	4/17
TAM 111	-	28	39	-	-	-	4	0	-	-	-	-	-	4/18
Thunderbolt	35	26	38	32	35	4	0	2	3	3	4/21	4/22	4/20	4/16
Trego (W)	32	24	34	-	-	-	0	0	-	-	-	-	-	4/18
OK00421	35	28	40	-	-	-	0	0	-	-	-	-	-	4/19
OK00508W	32	24	34	-	-	-	0	0	-	-	-	-	-	4/18
OK93P656	32	-	-	-	-	-	-	-	-	-	4/20	-	4/18	4/18

\* Scale of 0-10 with 0 representing no lodging and 10 representing 100% lodging

\*\*Scale of 0-10 with 0 representing no shatter losses and 10 representing severe shatter losses