

Current Report

Cooperative Extension Service • Division of Agriculture • Oklahoma State University

Performance of Wheat Varieties in Oklahoma—1987

Eugene G. Krenzer, Jr. and Tony R. Hughen

Department of Agronomy

The 1986-87 wheat growing season in Oklahoma was a continuous battle with the weather. Planting time was difficult due to excessive rainfall during the fall. Early planted wheat was frequently washed away or flooded out, while fields remained too wet for re-planting in much of October and into November. Some fields were not planted until after Christmas. January and February were also very wet and many producers found it difficult to apply herbicides or fertilizer except by air. Hot weather in mid-March brought about rapid growth which was rudely interrupted by a severe freeze on March 30, 1987. The freeze appeared disastrous, but proved not nearly as destructive as initially thought. Many locations received no rain in April and early May resulting in drought stress during flowering and grain filling. The final weather barrier was rain at harvest delaying harvest at many locations.

This report contains the results of 11 farmer-cooperator and four experiment station trials. The purpose of this testing program is to provide Oklahoma wheat producers with current and reliable performance data on the varieties which are presently grown or are available for use in Oklahoma. When evaluating this data for variety selection, it is recommended that specific emphasis be given to data from the region in which the wheat is to be grown and that multiple-year averages be consulted whenever possible. See previous years current reports for earlier data. Note that the statewide summary table does contain two year data for entries which were included in both years.

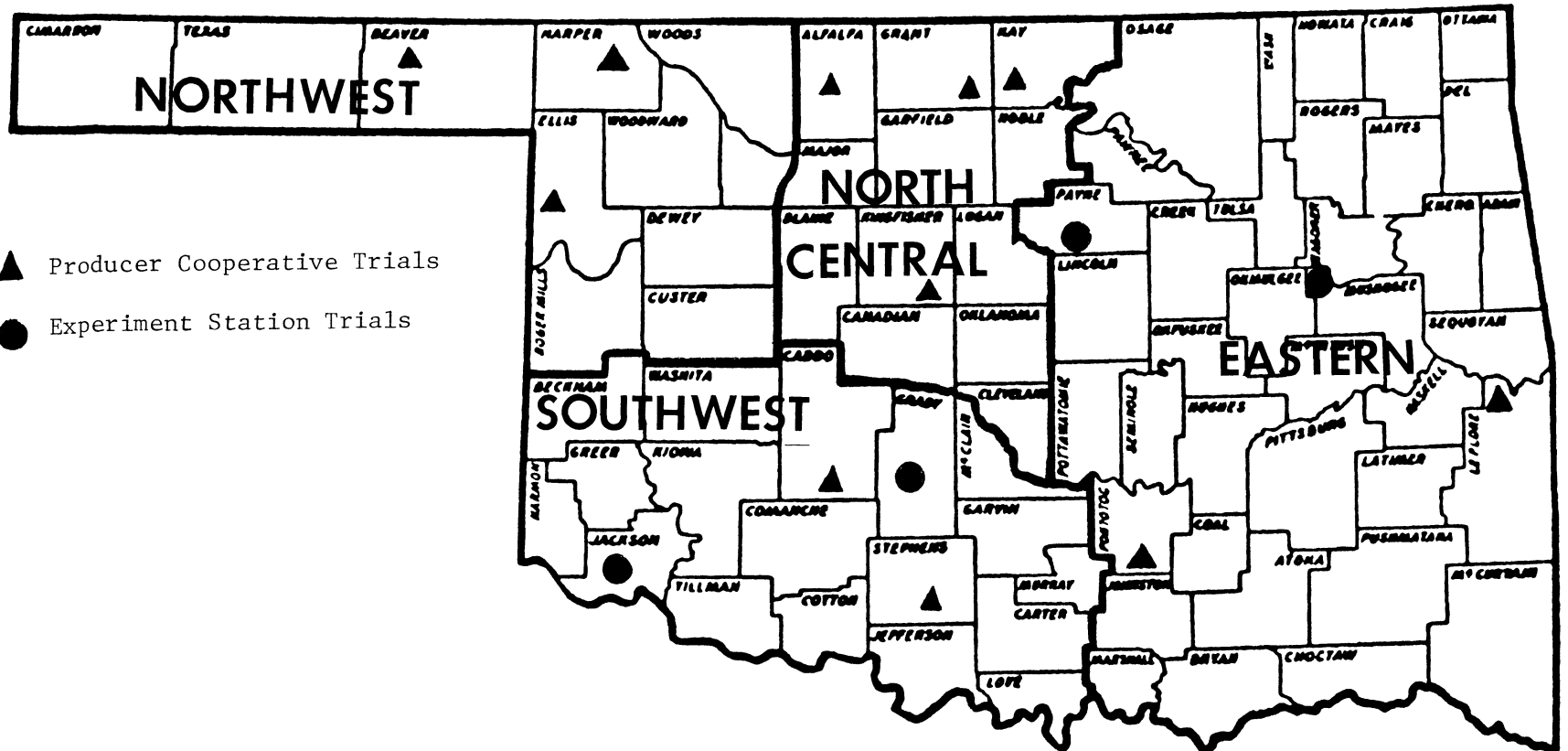
Grain yields and test weights were lower than usual at almost all locations where the variety tests were conducted. Drought during grain filling was the major reason for reduced yields and test weights. Rain at harvest also affected test weights. Disease was not a yield limiting factor at any test site in 1986-87.

Producer production practices were used at all sites except where a small amount of additional weed control may have been added. Fertilization was done by the farmer. Soil tests were conducted to ensure nutrients did not limit yields.

Chisholm was the only entry which performed well at all locations. Other varieties performing well overall were Pioneer 2157, 2165 and 2172, Pony, Stallion, Century, and Siouxland, but these were not top performers at all locations. Test weight differences were also very consistent and these data should be used as one of the factors in variety selection.

These data result from a cooperative effort between several individual wheat growers, the Oklahoma Agricultural Experiment Station, the Cooperative Extension Service and the Oklahoma Wheat Commission.

Regional Divisions and Trial Locations
for 1986-87 Wheat Variety Trials



2095.2

NORTH CENTRAL

VARIETY	CHEROKEE			KINGFISHER		LAMONT		TONKAWA		REGIONAL AVERAGE	
	HT. ¹	T.W. ²	BU/A	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A
CHISHOLM	33.0	52.9	30.0	54.8	32.3	55.6	38.8	55.2	36.3	54.6	34.4
STALLION	34.8	54.8	32.8	55.1	29.5	56.7	39.9	55.7	30.3	55.6	33.1
CENTURY	36.5	52.7	30.8	53.4	27.6	53.9	36.1	53.6	32.4	53.4	31.7
PIONEER 2172	32.5	53.1	39.6	50.4	23.1	53.6	34.1	52.8	29.7	52.5	31.6
PIONEER 2157	35.0	54.3	31.1	54.9	26.1	55.8	31.2	55.9	34.3	55.2	30.7
SIOUXLAND	41.0	53.5	36.0	53.0	22.8	54.2	33.3	54.3	29.5	53.8	30.4
PONY	33.3	52.3	27.3	52.1	24.2	55.0	39.2	54.8	29.4	53.6	30.0
PIONEER 2165	34.3	52.3	30.0	52.8	24.3	53.5	31.9	53.1	31.2	52.9	29.4
QUANTUM XH-552*	39.3	53.3	35.4	52.0	16.6	53.4	32.3	53.6	29.2	53.1	28.4
TAM W-101	35.5	54.7	35.6	51.6	21.9	53.7	28.5	53.4	26.8	53.4	28.2
BOUNTY 122*	36.5	51.5	27.8	50.2	22.7	52.0	33.0	51.6	28.6	51.3	28.0
HYBEX 1037*	40.0	52.9	30.6	53.2	23.9	54.0	28.2	53.9	28.9	53.5	27.9
WRANGLER	32.0	53.7	28.3	51.6	23.9	54.5	26.3	53.9	29.4	53.4	27.0
ROHM & HAAS 7837	33.3	51.7	25.4	49.4	22.0	51.7	32.5	51.1	27.3	51.0	26.8
VONA	33.5	52.8	24.2	52.7	24.3	54.2	33.8	54.3	24.4	53.5	26.7
VICTORY	35.0	52.2	33.1	50.0	18.6	52.3	27.8	52.8	25.1	51.8	26.2
AMERICAN HYBRID 135	38.3	56.9	33.7	53.6	21.0	52.8	25.7	53.8	24.2	54.3	26.2
DODGE	36.0	52.9	23.1	53.9	17.9	52.3	30.7	53.5	31.9	53.2	25.9
LOCATION AVERAGE:	35.5	53.2	30.8	52.5	22.3	53.8	32.4	53.7	29.4	53.3	29.0
L.S.D. (.05):	2.9	1.5	4.4	1.7	3.9	1.3	3.8	1.2	3.8		
C.V. (%):	5.8	2.0	10.0	2.3	12.4	1.7	8.2	1.4	7.8		

¹ Plant height in inches. ² Test Weight in Lb/Bu. * Hybrid.

EASTERN

VARIETY	ADA		HASKELL		PERKINS		POTEAU		REGIONAL AVERAGE			
	T.W. ¹	BU/A	T.W.	BU/A	HD ²	HT. ³	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A
PIONEER 2157	56.7	49.8	58.1	40.9	23	28.0	58.7	36.0	54.0	33.3	56.9	40.0
PIONEER 2165	54.6	43.9	56.8	34.2	24	27.5	56.7	33.8	52.9	34.8	55.3	36.7
CHISHOLM	56.6	37.7	58.0	27.7	22	27.5	57.2	42.8	51.9	33.0	55.9	35.3
STALLION	56.9	44.7	57.5	26.4	24	25.8	58.0	33.4	53.0	33.8	56.4	34.6
PONY	54.9	36.0	55.1	26.9	23	27.0	55.4	36.0	52.1	34.4	54.4	33.3
HYBEX 1037*	53.9	37.3	56.4	30.0	24	29.5	57.3	33.8	51.4	30.0	54.8	32.8
BOUNTY 122*	54.1	39.9	57.6	24.9	23	28.3	55.5	35.7	50.5	30.0	54.4	32.6
CENTURY	52.8	39.1	54.8	23.4	28	26.8	55.9	32.5	50.9	34.1	53.6	32.3
VICTORY	52.8	42.2	55.5	23.7	29	27.8	55.4	34.7	50.9	28.1	53.7	32.2
PIONEER 2172	54.1	42.1	56.8	18.6	25	25.8	53.6	35.8	50.1	29.8	53.7	31.6
ROHM & HAAS 7837	53.0	43.9	55.6	22.3	25	27.5	55.4	33.9	49.3	25.1	53.3	31.3
SIOUXLAND	52.5	27.3	57.0	27.1	27	33.3	57.4	32.6	54.0	36.2	55.2	30.8
WRANGLER	53.4	35.2	56.0	27.1	24	25.5	56.8	32.6	50.9	27.5	54.3	30.6
QUANTUM XH-552*	51.9	34.6	55.3	21.2	29	27.8	54.8	30.4	51.3	31.0	53.3	29.3
DODGE	54.5	34.2	57.5	23.4	30	28.8	56.3	29.4	52.4	27.2	55.2	28.6
TAM W-101	52.7	31.9	57.0	27.6	31	26.0	56.4	29.0	52.8	24.5	54.7	28.3
AMERICAN HYBRID 135	54.1	31.3	58.2	21.2	30	30.5	56.8	29.7	54.3	28.8	55.9	27.8
VONA	51.0	28.6	55.6	27.6	24	26.3	55.2	31.3	49.6	21.9	52.9	27.4
LOCATION AVERAGE:	53.9	37.8	56.3	25.2	26	28.0	56.2	33.2	51.8	30.2	54.7	32.0
L.S.D. (.05):	1.4	6.1	0.7	6.2	1.4	1.0	1.4	5.1	1.3	4.9		
C.V. (%):	1.6	9.8	0.9	17.4	3.9	3.6	1.8	10.9	1.7	11.5		

¹ Test Weight in Lb/Bu. ² Heading date in days after March 31. ³ Plant height in inches. * Hybrid.

NORTHWEST

VARIETY	ARNETT		BUFFALO			FORGAN		REGIONAL AVERAGE	
	T.W. ¹	BU/A	HT. ²	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A
SIouxLAND	58.0	37.7	35.5	58.9	36.2	58.7	29.3	58.5	34.4
CHISHOLM	58.1	35.5	27.3	56.4	31.9	58.9	35.2	57.8	34.2
CENTURY	58.3	34.3	29.9	55.9	33.5	59.3	34.2	57.8	34.0
PIONEER 2172	56.7	38.3	28.3	54.8	31.8	57.2	31.8	56.2	34.0
TAM W-101	59.0	38.8	28.6	56.4	31.1	58.9	30.1	58.1	33.3
PONY	58.4	37.6	28.3	55.8	30.9	59.7	28.2	58.0	32.2
STALLION	58.9	36.5	25.6	57.4	29.8	59.8	28.8	58.7	31.7
VICTORY	56.0	33.8	29.3	55.0	29.8	56.8	29.4	55.9	31.0
DODGE	58.6	35.9	29.8	54.4	27.9	58.9	28.5	57.3	30.8
BOUNTY 122*	55.6	32.1	29.1	53.8	32.1	57.5	27.8	55.6	30.7
PIONEER 2157	58.5	35.0	27.9	56.1	29.7	59.4	26.6	58.0	30.4
PIONEER 2165	57.4	35.6	27.9	55.5	27.9	57.9	27.5	56.9	30.3
VONA	56.2	28.8	26.4	55.3	31.0	58.5	30.1	56.6	30.0
QUANTUM XH-552*	57.6	34.3	32.3	54.7	28.4	58.9	26.7	57.1	29.8
HYBEX 1037*	58.3	34.4	31.4	55.3	28.9	58.4	25.8	57.3	29.7
ROHM & HAAS 7837	56.1	33.1	28.5	53.3	28.8	56.9	27.2	55.4	29.7
WRANGLER	57.0	28.2	26.8	55.2	24.2	58.7	30.0	57.0	27.5
AMERICAN HYBRID 135	58.1	29.0	33.8	56.6	28.3	58.8	20.1	57.8	25.8
LOCATION AVERAGE:	57.6	34.4	29.2	55.6	30.1	58.5	28.8	57.2	31.1
L.S.D. (.05):	1.3	5.9	2.8	1.5	4.6	0.9	4.7		
C.V. (%):	1.5	12.2	6.7	1.9	10.8	1.1	11.5		

¹Test Weight in Lb/Bu.

²Plant height in inches.

* Hybrid.

SOUTHWEST

VARIETY	ALTUS		APACHE		CHICKASHA		DUNCAN		REGIONAL AVERAGE	
	T.W. ¹	BU/A	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A	T.W.	BU/A
PIONEER 2157	55.9	24.3	58.3	40.7	53.7	41.2	58.8	30.4	56.7	34.1
CHISHOLM	54.4	27.4	56.2	39.5	53.0	39.1	57.0	24.8	55.1	32.7
PIONEER 2165	53.9	23.7	55.4	33.3	51.4	37.0	57.0	25.5	54.4	29.9
STALLION	53.6	19.5	57.5	33.6	53.7	40.2	58.4	23.4	55.8	29.2
CENTURY	53.2	20.0	55.8	30.4	50.6	35.2	56.3	29.4	54.0	28.7
PIONEER 2172	51.8	23.0	52.8	36.5	47.7	30.2	55.0	24.6	51.8	28.6
WRANGLER	51.7	21.2	54.2	33.5	51.7	35.5	56.8	24.1	53.6	28.6
BOUNTY 122*	50.1	20.0	53.3	33.2	48.8	33.3	55.2	26.6	51.8	28.3
PONY	50.7	16.8	53.3	33.0	51.6	38.9	55.0	23.6	52.6	28.1
HYBEX 1037*	54.3	22.1	57.1	33.0	51.7	34.0	56.5	22.3	54.9	27.9
SIouxLAND	53.3	19.3	56.0	31.5	51.0	32.4	56.8	26.7	54.3	27.5
TAM W-101	53.5	24.8	56.3	34.5	48.7	25.8	56.1	22.2	53.6	26.8
ROHM & HAAS 7837	50.4	19.0	51.8	31.2	48.5	31.1	55.2	21.8	51.5	25.8
VONA	52.6	19.5	54.6	31.9	48.2	22.0	56.1	23.8	52.9	24.3
AMERICAN HYBRID 135	55.0	21.5	56.8	28.0	51.5	27.7	55.7	18.8	54.8	24.0
DODGE	55.3	21.1	56.5	29.4	49.5	26.0	56.5	18.7	54.4	23.8
QUANTUM XH-552*	49.8	13.6	54.0	27.8	49.6	31.5	53.6	19.3	51.7	23.1
VICTORY	50.8	18.1	53.7	27.7	46.2	23.9	53.8	18.4	51.1	22.0
LOCATION AVERAGE:	52.8	20.7	55.2	32.7	50.4	32.2	56.1	23.6	53.6	27.4
L.S.D. (.05):	0.8	2.3	1.0	4.1	1.2	3.7	1.4	4.8		
C.V. (%):	1.0	7.8	1.3	8.8	1.6	8.2	1.2	9.7		

¹Test Weight in Lb/Bu.

* Hybrid.

VARIETY TEST SITE INFORMATION

SITE	SOIL SERIES AND TEXTURE ¹	PLANTING DATE	SEEDING ² RATE	HARVEST DATE	COMMENTS ³
ADA	Port SiCL	10-18-86	60	6-16-87	Row spacing was 7 inches; 3-rep test.
HASKELL	Taloka SiL	09-24-86	90	6-16-87	Sprayed for leaf rust in the fall; 7 inch row spacing; lodging.
PERKINS	Teller L	10-21-86	60	6-05-87	Drought during flowering and grain filling.
POTEAU	Coushatta SiCL	11-20-86	90	6-15-87	Row spacing was 7 inches; double cropped with soybeans.
CHEROKEE	Dale SiL	09-19-86	60	6-16-87	March 30 freeze killed up to 70% of growing points; grazed; tall lodging.
KINGFISHER	Kirkland SL	11-18-86	90	6-09-87	Drought in the flowering through grain filling stages.
LAMONT	Pond Creek SiL	10-31-86	60	6-16-87	Very wet fall and winter.
TONKAWA	Bethany SiL	10-30-86	60	6-24-87	Very wet fall, winter and harvest time; lodging; wet conditions delayed harvest 10 days.
ARNETT	St. Paul SiL	10-17-86	60	6-18-87	Drought at flowering and early grain filling.
BUFFALO	Woodward L	10-16-86	60	6-17-87	March 30 freeze killed up to 50% of the growing points; leaf rust late.
FORGAN	Richfield L	10-15-86	60	6-17-87	Non-irrigated continuous wheat.
ALTUS	Hollister CL	11-14-86	60	6-17-87	Alternate fallow; 6 weeks without rain from flowering through grain filling; wet conditions delayed harvest 2 weeks.
APACHE	Hollister SiL	10-20-86	60	6-08-87	Drought during grain filling; leaf rust late.
CHICKASHA	Reinach SiL	12-19-86	100	6-17-87	Late planted; excessive water until jointing; 9 inch row spacing.
DUNCAN	Kirkland CL	11-24-86	90	6-17-87	Late planting; 2 replications harvested.

¹C=clay, L=loam, Si=silt, S=sand. ²Seeding rate in Lb/A calibrated for each variety.

³All locations are continuous wheat, 4 - rep tests, and planted into 10 inch row spacings unless specified.



Cooperative
Extension
Service

Oklahoma State Cooperative Extension Service does not discriminate because of race, color, sex, or national origin in its programs and activities, and is an equal opportunity employer. Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Charles B. Browning, Director of Cooperative Extension Service, Oklahoma State University. Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agriculture and has been prepared and distributed at a cost of \$517.59 for 5,925 copies. AI-6993 0787 TD

2095.6

STATEWIDE YIELD SUMMARY FOR 1986-87 WHEAT VARIETY PERFORMANCE

VARIETY	HEADING ¹	EASTERN		NORTH CENTRAL		NORTHWEST		SOUTHWEST		STATE	2-YR ²
	DATE	YIELD	RANK	YIELD	RANK	YIELD	RANK	YIELD	RANK	AVE.	AVE.
		-----BU/A-----									
CHISHOLM	22	35.3	(3)	34.4	(1)	34.2	(2)	32.7	(2)	34.1	36.2
PIONEER 2157	23	40.0	(1)	30.7	(5)	30.4	(11)	34.1	(1)	34.0	36.9
STALLION	24	34.6	(4)	33.1	(2)	31.7	(7)	29.2	(4)	32.2	35.7
PIONEER 2165	24	36.7	(2)	29.4	(8)	30.3	(12)	29.9	(3)	31.7	34.9
CENTURY	28	32.3	(8)	31.7	(3)	34.0	(3)	28.7	(5)	31.5	
PIONEER 2172	25	31.6	(10)	31.6	(4)	34.0	(4)	28.6	(6)	31.3	
PONY	23	33.3	(5)	30.0	(7)	32.2	(6)	28.1	(9)	30.8	34.4
SIouxLAND	27	30.8	(12)	30.4	(6)	34.4	(1)	27.5	(11)	30.5	35.0
BOUNTY 122*	23	32.6	(7)	28.0	(11)	30.7	(10)	28.3	(8)	29.8	36.2
HYBEX 1037*	24	32.8	(6)	27.9	(12)	29.7	(16)	27.9	(10)	29.6	
TAM W-101	31	28.3	(16)	28.2	(10)	33.3	(5)	26.8	(12)	28.9	32.2
WRANGLER	24	30.6	(13)	27.0	(13)	27.5	(17)	28.6	(7)	28.5	32.6
ROHM & HAAS 7837	25	31.3	(11)	26.8	(14)	29.7	(15)	25.8	(13)	28.3	
VICTORY	29	32.2	(9)	26.2	(16)	31.0	(8)	22.0	(18)	27.6	32.3
QUANTUM XH-552*	29	29.3	(14)	28.4	(9)	29.8	(14)	23.1	(17)	27.5	
DODGE	30	28.6	(15)	25.9	(18)	30.8	(9)	23.8	(16)	27.0	
VONA	24	27.4	(17)	26.7	(15)	30.0	(13)	24.3	(14)	26.9	
AMERICAN HYBRID 135	30	27.8	(18)	26.2	(17)	25.8	(18)	24.0	(15)	25.9	
REGIONAL AVERAGE		32.0		29.0		31.1		27.4		29.8	

* Hybrid. ¹Heading date at Perkins in days after March 31.
²Average across 17 locations in 1985-6 and 15 locations 1986-7.

EASTERN	NORTH CENTRAL	NORTHWEST	SOUTHWEST
ADA	CHEROKEE	ARNETT	ALTUS
HASKELL	KINGFISHER	BUFFALO	APACHE
PERKINS	LAMONT	FORGAN	CHICKASHA
POTEAU	TONKAWA		DUNCAN

OKLAHOMA STATE UNIVERSITY
CENTENNIAL
 1890 • 1990

