

Current Report

Cooperative Extension Service • Division of Agriculture • Oklahoma State University

Performance of Wheat Varieties in Oklahoma-1986

David S. Howle and Tony R. Hughen

Department of Agronomy

The 1985-86 growing season for wheat in Oklahoma was rather unusual and highly variable. Ample moisture was available for early planting in most areas of the state and never became limiting during the fall months. Forage production was excellent going into the winter. Extremely warm, dry weather from January through April hastened crop development such that heading dates were as much as two weeks ahead of normal. This resulted in a general reduction in the number of mature tillers. Foliar diseases, primarily leaf rust, influenced yield and test weight in some areas. Wheat Streak Mosaic Virus was severe in some parts of northwestern and eastern Oklahoma. Severe hail damage occurred in some areas of southwestern Oklahoma. Rains during harvest resulted in grade and test weight reductions.

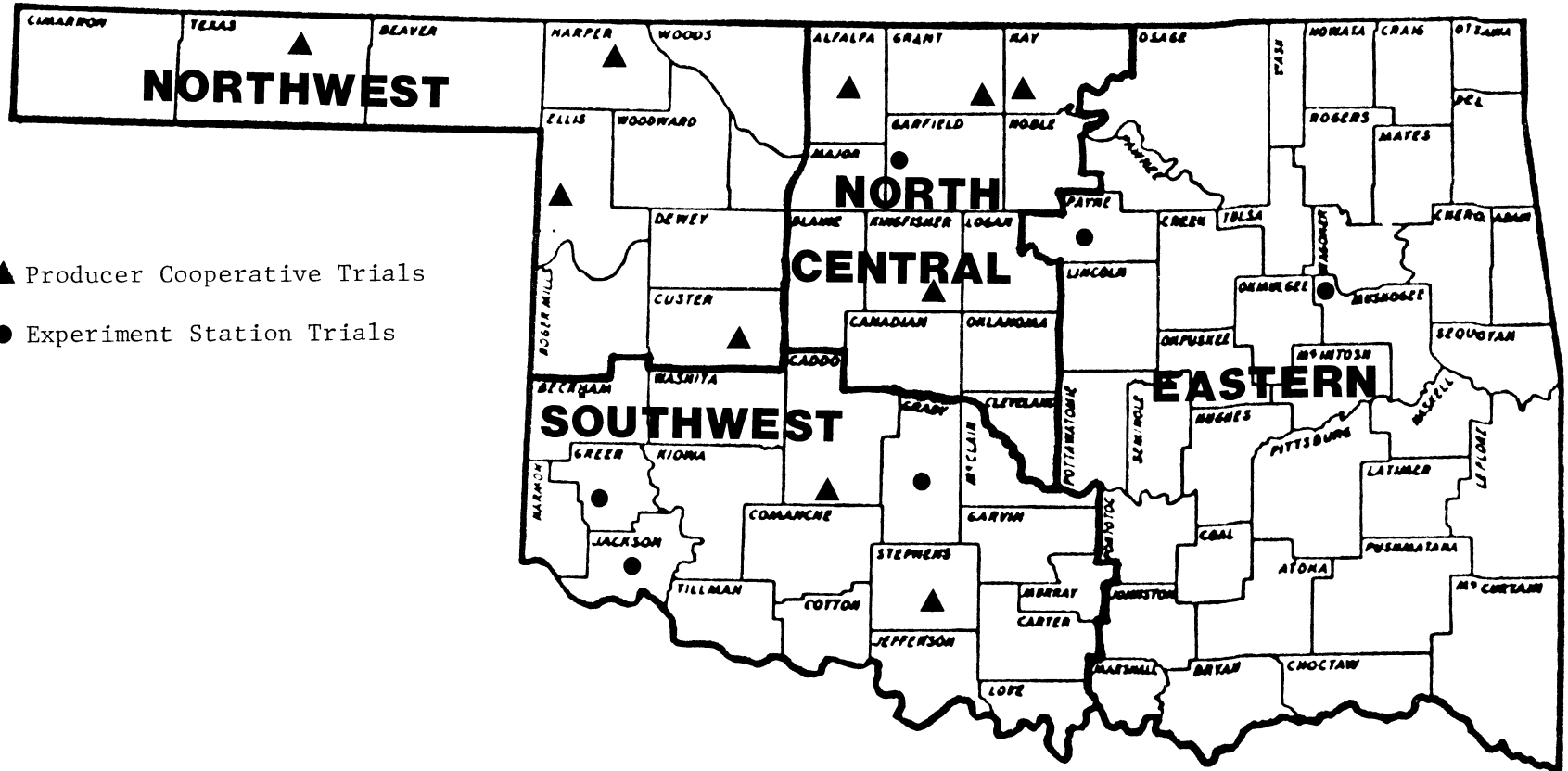
Two entries in the variety trial, Bounty Hybrid 122 and Pioneer 2157, performed well in all areas of the state. They exhibited very good yield potential and broad adaptability to Oklahoma growing conditions. Siouxland, Stallion, Chisholm, and Pioneer 2165 also yielded well in spite of

below-average performance at certain sites. Pioneer 2157 and Stallion maintained the highest test weights in the trial.

This report contains the results of 11 farmer cooperative and 6 experiment station trials. In no way is this report an endorsement or recommendation of all or any of the varieties or hybrids tested. 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. It will also be helpful to consider the cultural information provided in an accompanying table.

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 1985-86 Wheat Variety Trials



2088.2

EASTERN

VARIETIES	PERKINS		HASKELL		POTEAU		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Bounty 122 *	42.4	56.6	52.2	57.4	--	--	47.3	57.0
2. Stallion	43.2	59.0	46.0	57.8	35.7	52.6	41.6	56.5
3. Quantum XH-551 *	41.6	56.8	41.3	56.1	--	--	41.5	56.5
4. Pioneer 2157	40.1	59.4	46.5	59.3	35.7	52.8	40.7	57.2
5. Pony	38.9	56.9	43.7	56.3	37.6	53.7	40.1	55.6
6. Pioneer 2165	40.5	57.1	44.3	55.6	35.0	51.6	39.9	54.8
7. Chisholm	38.9	58.3	44.5	57.8	36.3	53.0	39.9	56.4
8. Siouxland	39.7	58.2	38.8	57.3	39.5	55.7	39.3	57.1
9. Victory	38.9	55.0	35.8	54.6	36.3	50.4	37.0	53.3
10. TAM 107	32.7	54.7	40.4	53.1	--	--	36.6	53.9
11. Wrangler	38.5	57.5	35.4	57.0	35.7	52.3	36.5	50.0
12. Hybrex 1010 *	38.5	56.8	33.9	55.0	--	--	36.2	55.9
13. Garst HR-48	39.7	55.6	31.8	55.5	--	--	35.7	55.6
14. TAM W-101	32.3	55.3	35.4	55.8	--	--	33.8	55.5
15. Mustang	35.0	57.7	31.5	56.6	--	--	33.3	57.2
16. Triumph 64	35.4	58.9	30.2	57.3	25.9	52.0	30.5	56.1
Location Average:	38.5	57.1	39.2	56.2	36.0	52.9	38.1	55.5
L.S.D. (.05):	2.98	0.82	3.07	1.47	5.16	2.18		
C.V. (%):	5.4	1.0	5.5	1.8	9.0	2.6		

NORTH CENTRAL

VARIETIES	KINGFISHER		LAMONT		CHEROKEE		LAHOMA		TONKAWA		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Pioneer 2157	19.7	53.0	58.1	56.7	48.0	59.3	47.5	58.1	51.0	56.2	44.9	56.7
2. Stallion	19.1	52.7	50.8	55.6	50.7	58.2	43.3	57.9	44.7	56.7	41.7	56.2
3. Pioneer 2165	16.0	50.0	48.4	53.4	47.0	56.5	41.1	56.5	48.6	54.5	40.2	54.2
4. Garst HR-48	19.1	51.7	49.6	52.1	46.3	55.4	38.1	55.1	47.1	52.3	40.0	53.3
5. Bounty 122 *	21.1	50.0	49.6	52.2	48.3	55.2	45.3	55.2	35.0	52.3	39.9	53.0
6. Victory	16.3	50.5	44.2	52.9	45.6	55.4	41.4	56.8	48.6	52.8	39.2	53.7
7. Wrangler	22.8	52.1	46.6	54.1	41.5	56.1	38.9	55.7	44.0	54.0	38.7	54.4
8. TAM W-101	12.9	47.6	46.6	53.5	49.7	58.0	39.2	58.3	44.7	53.5	38.6	54.2
9. Quantum XH-551 *	21.4	49.6	46.0	51.4	44.9	56.1	37.6	56.5	42.8	53.0	38.5	53.3
10. Siouxland	17.4	50.6	43.0	54.6	47.0	57.4	49.5	58.8	34.6	52.8	38.3	54.8
11. Hybrex 1010 *	16.0	50.7	47.2	54.2	47.3	56.0	37.7	56.3	41.6	53.8	38.0	54.2
12. Mustang	21.1	51.1	46.0	54.6	39.8	56.1	38.8	56.4	42.8	54.7	37.7	54.6
13. Pony	16.3	49.7	46.6	53.5	43.6	54.3	37.2	54.9	38.5	53.3	36.4	53.1
14. Chisholm	16.3	51.9	43.0	53.8	44.6	56.3	36.1	57.2	41.6	54.5	36.3	54.7
15. TAM 107	19.7	51.5	45.4	51.5	43.9	53.7	35.0	54.7	33.8	49.5	35.6	52.2
16. Triumph 64	19.1	53.0	41.1	56.0	41.5	57.8	32.5	58.4	36.2	55.0	34.1	56.1
17. TAM 108	18.4	44.9	43.6	50.4	--	--	--	--	44.7	52.3	35.6	49.2
18. Arkan	--	--	50.8	54.2	40.2	54.2	--	--	48.6	53.5	46.5	54.0
19. Vona	17.7	49.3	--	--	46.3	55.7	--	--	--	--	32.0	52.5
Location Average:	18.4	50.6	47.0	53.6	45.3	56.2	39.9	56.7	42.7	53.6	38.5	53.9
L.S.D. (.05):	5.6	1.3	N.S.	1.6	N.S.	1.2	3.7	0.6	7.03	1.4		
C.V. (%):	22.7	1.9	14.4	1.76	10.5	1.5	9.3	1.0	11.6	1.9		

SOUTHWEST

VARIETIES	CHICKASHA		MANGUM		DUNCAN		APACHE		ALTUS		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Bounty 122 *	58.3	53.7	33.5	56.7	58.6	56.5	50.0	53.5	29.9	55.9	46.1	55.3
2. Siouxland	60.8	55.0	24.7	56.6	64.1	58.2	54.8	55.9	22.8	57.1	45.4	56.6
3. Chisholm	60.8	55.3	27.0	58.3	56.7	57.1	52.8	57.0	26.8	57.8	44.8	57.1
4. Pony	63.7	55.7	26.0	56.4	56.1	55.9	48.7	54.4	26.0	55.9	44.1	55.6
5. Pioneer 2165	57.4	54.4	22.3	56.1	52.5	57.3	54.1	55.8	26.7	57.0	42.6	56.1
6. Stallion	57.4	55.5	27.4	58.0	54.7	57.8	52.1	56.5	20.6	58.8	42.4	57.3
7. Pioneer 2157	47.2	54.0	28.1	58.1	50.3	58.2	50.4	57.2	26.9	58.8	40.6	57.2
8. Wrangler	52.0	54.6	24.5	57.2	51.2	56.3	44.2	55.1	28.7	56.7	40.1	56.0
9. Hybrex 1010 *	51.5	52.6	30.5	57.2	51.2	55.1	43.2	53.7	22.7	56.1	39.8	54.9
10. Garst HR-48	50.6	52.1	30.0	56.7	49.8	54.1	42.9	52.4	25.9	56.0	39.8	54.3
11. Mustang	52.0	53.4	26.4	57.6	50.3	56.2	41.2	54.6	28.4	57.6	39.7	55.9
12. TAM 107	55.0	50.5	18.4	53.2	50.6	53.3	45.6	51.3	22.7	54.4	38.5	52.4
13. Victory	46.2	50.5	27.8	56.6	47.6	54.6	46.3	52.0	24.3	55.1	38.4	53.8
14. Quantum XH-551 *	48.1	52.4	27.1	55.9	50.3	56.0	43.6	53.8	20.7	54.9	38.0	54.6
15. Triumph 64	47.6	55.7	22.6	57.5	51.4	58.3	42.9	57.6	20.3	58.7	37.0	57.6
16. TAM W-101	40.8	50.9	25.5	57.8	39.3	54.2	40.5	54.0	25.9	56.5	34.4	54.7
17. TAM 108	45.2	50.5	24.9	55.7	--	--	--	--	20.2	52.1	30.1	54.0
Location Average:	53.4	53.3	26.3	53.4	51.5	56.2	47.1	54.7	24.7	56.4	40.1	55.5
L.S.D. (.05):	7.79	1.36	6.86	--	4.40	1.23	3.62	0.81	2.68	0.86		
C.V. (%):	10.3	1.8	26.3	--	5.2	1.3	5.4	1.0	7.7	1.1		

NORTHWEST

VARIETIES	CUSTER CITY		BUFFALO		ARNETT		HOOKER		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Bounty 122 *	48.4	55.0	33.4	54.3	37.1	57.6	30.3	57.5	37.3	56.1
2. TAM W-101	50.2	56.8	25.2	53.9	36.8	60.6	28.6	59.7	35.2	57.7
3. Siouxland	47.5	56.5	22.1	54.2	39.5	59.2	29.6	58.9	34.7	57.2
4. Hybrex 1010 *	47.3	55.7	25.5	54.6	33.7	58.1	29.3	59.1	34.0	56.9
5. Victory	43.8	54.8	22.1	53.8	37.1	57.9	28.4	57.9	32.8	56.1
6. Quantum XH-551 *	45.7	52.6	24.2	53.3	33.0	57.7	28.3	57.8	32.8	55.4
7. Pioneer 2157	41.4	57.0	28.9	57.7	34.4	60.3	25.8	60.7	32.6	58.9
8. Garst HR-48	43.4	55.2	21.1	54.6	36.4	58.2	29.5	58.1	32.6	56.5
9. Mustang	38.3	56.5	24.2	55.4	37.1	59.9	30.0	59.3	32.4	57.8
10. TAM 107	39.5	53.3	26.2	54.5	34.4	55.8	27.6	57.3	31.9	55.2
11. Chisholm	37.0	55.9	26.2	55.0	36.8	59.0	27.7	59.1	31.9	57.2
12. Pony	40.8	54.6	21.8	52.8	34.4	57.2	27.7	58.5	31.2	55.8
13. Wrangler	40.3	56.1	20.8	55.5	34.4	58.8	28.1	59.6	30.9	57.5
14. Stallion	34.2	57.2	24.5	55.9	37.1	60.1	27.2	60.0	30.8	58.3
15. Triumph 64	37.1	56.5	22.8	56.0	35.4	60.0	25.5	59.6	30.2	58.0
16. Pioneer 2165	41.6	55.3	18.4	53.6	34.0	59.1	24.8	58.9	29.7	56.7
Location Average:	42.3	55.6	24.2	54.7	35.7	58.7	28.0	58.9	32.6	57.0
L.S.D. (.05):	6.99	0.70	4.59	1.10	N.S.	1.05	2.85	0.61		
C.V. (%):	17.6	1.3	13.3	1.4	7.3	1.3	10.6	1.04		

SITE INFORMATION

	Soil Series and Texture*	Soil pH	Soil Temp(°F)	Soil Moisture	Planting Date	Seeding Rate	Harvest Date	Comments
Hooker	Dalhart FSL	6.4	58°	Good	10-08-85	40	6-13-86	Drought stress
Buffalo	Woodward L	7.8	60°	Good	10-07-85	60	6-12-86	Wheat Streak Mosaic Virus
Arnett	S. Paul SiL	6.6	59°	Good	10-24-85	60	6-12-86	
Custer City	Carey SiL	5.7	62°	Good	9-25-85	60	6-30-86	Drought stress
Cherokee	Dale SiL	---	55°	Wet	10-03-85	60	6-11-86	
Lamont	Pond Creek SiL	---	61°	Good	10-03-85	60	6-26-86	3-reps; cheat; some lodging
Tonkawa	Bethany SiL	---	59°	Good	10-04-85	60	6-26-86	Soil Borne Mosaic Virus
Lahoma	Pond Creek SiL	4.6	---	Good	10-25-85	68	6-13-86	Low pH; 8" row spacing
Kingfisher	Kirkland SL	6.2	78°	Good	9-18-85	60	6-20-86	Cheat; Greenbug damage; Drought stress
Chickasha	Dale SiL	---	52°	Good	11-08-85	80	6-24-86	7" row spacing
Apache	Hollister SiL	5.7	52°	Good	11-05-85	80	6-23-86	Some lodging
Duncan	Kirkland CL	---	---	Wet	11-06-85	60	6-09-86	3-rep test
Mangum	Meno FSL	---	66°	Good	10-31-85	60	6-09-86	Had to be replanted; Low pH; Drought
Altus	Hollister CL	7.1	---	Good	11-05-85	60	6-03-86	Hail damage (20-25%)
Perkins	Teller L	---	54°	Good	10-31-85	80	6-17-86	
Haskell	Taloka SiL	---	63°	Good	10-07-85	90	6-18-86	Some lodging
Poteau	Coushatta SiCL	---	---	Good	12-09-85	90	6-19-86	Poor stand; 7" row spacing; 3- reps

* C = clay, L = loam, Si = silt, S = sand, F = fine

Statewide Yield Summary for 1984-86 Wheat Variety Trial

Variety	North Central		Southwest		Northwest		East		State
	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Average
-----Bu/A-----									
1. Bounty 122 *	39.9	(5)	46.1	(1)	37.3	(1)	47.3	(1)	42.6
2. Pioneer 2157	44.9	(1)	40.6	(7)	32.6	(7)	40.7	(4)	39.7
3. Siouxland	38.3	(10)	45.4	(2)	34.7	(3)	39.3	(8)	39.4
4. Stallion	41.7	(2)	42.4	(6)	30.8	(14)	41.6	(2)	39.1
5. Chisholm	36.3	(14)	44.8	(3)	31.9	(11)	39.9	(7)	38.2
6. Pioneer 2165	40.2	(3)	42.6	(5)	29.7	(16)	39.9	(6)	38.1
7. Pony	36.4	(13)	44.1	(4)	31.2	(12)	40.1	(5)	37.9
8. Quantum XH-551 *	38.5	(9)	38.0	(14)	32.8	(6)	41.5	(3)	37.7
9. Garst HR-48	40.0	(4)	39.8	(10)	32.6	(8)	35.7	(13)	37.0
10. Hybrex 1010 *	38.0	(11)	39.8	(9)	34.0	(4)	36.2	(12)	37.0
11. Victory	39.2	(6)	38.4	(13)	32.8	(5)	37.0	(9)	36.9
12. Wrangler	38.7	(7)	40.1	(8)	30.9	(13)	36.5	(11)	36.6
13. Mustang	37.7	(12)	39.7	(11)	32.4	(9)	33.3	(15)	35.8
14. TAM 107	35.6	(15)	38.5	(12)	31.9	(10)	36.6	(10)	35.6
15. TAM W-101	38.2	(8)	34.4	(16)	35.2	(2)	33.8	(14)	35.4
16. Triumph 64	34.1	(16)	37.0	(15)	30.2	(15)	30.5	(16)	32.9
Regional Average:	38.5		40.1		32.6		38.1		37.5

* Hybrid

NORTH CENTRAL
Kingfisher
Lamont
Tonkawa
Cherokee
Lahoma

SOUTHWEST
Duncan
Apache
Altus
Mangum
Chickasha

NORTHWEST
Hooker
Arnett
Buffalo
Custer City

EASTERN
Perkins
Haskell
Poteau

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