



Current Report

Cooperative Extension Service • Division of Agriculture • Oklahoma State University

Performance of Wheat Varieties, Oklahoma-1984

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Generally wheat yields across the State were better than expected. The dry fall resulted in seven locations being planted after November 15th. The lateness of planting appears to have lowered some variety yields because they did not fully tiller. This was especially so this year due to the added effect of our record cold temperatures in late December. Concerns about winterkill of the small wheat plants, weed problems, etc. made the January wheat outlook poor. The remainder of the winter and early spring were cool with ample moisture and this allowed the wheat to recover. By late spring, wheat conditions were rated good to excellent. The Southwest region was an exception, as conditions remained dry all season, except for a November flood that forced replanting of many acres of "dusted in" wheat. The 25.0 bushel per acre Southwest regional average was the lowest in the State and indicated the lack of moisture. The North Central region was the top yielding wheat region with a 56.3 bushel per acre average, followed by a 48.0 bushel per acre average in the South Central region. Harvest weather was good to excellent and only short delays provided for completion of harvest by early July. Test weights were generally high.

This report contains the results of 19 farmer cooperative trials. Several additional locations were planted but are not reported for various reasons. 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 farmers 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 the data representing the region of the state in which the wheat is to be grown and that multiple year averages be consulted when possible. It will also be helpful to consider the cultural information provided in an accompanying table.

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

NORTHWEST OKLAHOMA

VARIETIES	HOOKER		BUFFALO		BOISE CITY		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Bounty 202	48.5	54.6	41.3	56.0	32.7	58.3	40.8	56.3
2. Chisholm	49.9	58.6	35.8	58.7	32.2	58.8	39.3	58.7
3. Mustang	47.4	57.2	35.1	58.4	33.9	58.8	38.8	58.1
4. TAM W-101	51.1	58.3	30.7	57.0	28.2	61.5	36.7	58.9
5. H. W. 1010	46.7	57.4	36.8	58.1	26.2	59.3	36.6	58.3
6. Vona	48.1	58.1	31.0	57.0	29.0	60.1	36.0	58.4
7. TAM 105	43.8	56.8	31.4	56.5	30.6	57.7	35.3	57.0
8. Wings	45.4	59.5	27.3	57.7	32.4	61.6	35.0	59.6
9. Probrand 835	43.8	57.9	30.4	58.7	30.8	60.5	35.0	59.0
10. Hawk	42.6	56.0	31.1	56.3	31.2	58.6	35.0	57.0
11. Newton	40.5	55.7	32.7	56.7	29.1	58.4	34.1	56.9
12. Triumph 64	43.7	59.0	29.2	58.8	28.2	60.2	33.7	59.3
13. Payne	41.4	56.4	32.0	55.2	27.4	59.4	33.6	57.0
14. Quantum X157B	--	--	35.9	56.5	29.2	58.1	32.6	57.3
15. SRI 5221	50.0	55.7	25.1	55.5	22.0	58.0	32.4	56.4
16. Arkan	--	--	34.1	55.4	25.1	57.6	29.6	56.5
17. Ram	41.0	57.4	21.2	54.1	29.7	56.9	30.6	56.1
Location Average:	45.6	57.2	31.8	56.9	29.3	59.0	32.9	57.7
L.S.D. (.05):	3.24		5.70		4.84			
C.V. (%):	5.42		12.60		11.61			

SOUTHWEST OKLAHOMA

VARIETY	ALTUS		GOULD		ROOSEVELT		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Mustang	29.4	58.1	21.5	58.0	33.4	55.4	28.1	57.2
2. Bounty 202	32.7	57.8	19.7	57.9	31.7	54.4	28.0	56.7
3. Chisholm	27.4	58.9	20.8	58.6	34.7	56.6	27.6	58.0
4. H. W. 1010	28.4	58.1	19.9	58.6	32.4	55.3	26.9	57.3
5. TAM W-101	29.3	59.6	19.6	59.1	31.4	58.6	26.8	59.1
6. Wings	26.7	58.9	19.9	59.1	30.8	56.4	25.8	58.1
7. Quantum X157B	28.5	57.1	18.3	58.1	30.4	54.5	25.7	56.6
8. Hawk	28.6	57.9	19.0	58.2	29.4	54.7	25.7	56.9
9. Garst 428402	29.4	57.1	21.9	58.1	--	--	25.7	57.6
10. Triumph 64	28.6	60.7	19.6	60.0	28.5	57.1	25.6	59.3
11. Vona	28.6	56.3	19.2	58.7	28.4	54.9	25.4	56.6
12. Garst EX-203	28.0	58.0	21.1	58.0	--	--	24.5	58.0
13. Newton	26.0	56.7	19.0	58.5	28.0	55.5	24.3	56.9
14. Payne	24.9	58.0	18.7	58.5	29.2	55.0	24.3	57.2
15. Garst HR-64	25.4	56.9	20.7	58.5	--	--	23.0	57.7
16. SRI 5221	22.4	56.9	18.5	57.5	26.9	54.8	22.6	56.4
17. TAM 105	25.1	56.6	18.4	58.1	23.8	55.1	22.4	56.6
18. Probrand 812	22.7	58.1	16.1	58.2	28.5	54.1	22.4	56.8
19. Arkan	23.3	55.9	16.0	58.3	26.7	53.7	22.0	56.0
20. Garst PL-145	25.6	56.9	17.4	58.0	--	--	21.4	57.5
21. Golden Acres 5221	22.0	56.5	19.5	58.7	--	--	20.7	57.6
22. Ram	24.8	55.3	16.6	58.0	--	--	20.7	56.7
23. Probrand 835	22.7	58.1	14.0	58.5	21.8	54.5	19.5	57.0
Location Average:	26.5	57.6	18.9	58.4	29.2	55.3	24.3	57.3
L.S.D. (.05):	3.85		3.60		6.15			
C.V. (%):	10.29		13.49		14.82			

WEST CENTRAL OKLAHOMA

VARIETIES	CUSTER CITY		SEILING		ARNETT		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Mustang	55.3	57.9	57.8	58.4	45.9	59.3	53.0	58.5
2. TAM W-101	60.8	58.7	45.3	59.6	50.0	58.2	52.0	58.8
3. Chisholm	62.6	59.3	44.9	59.3	45.5	57.2	51.0	58.6
4. H. W. 1010	56.2	56.1	48.4	59.2	44.2	56.5	49.6	57.3
5. Bounty 202	55.7	57.2	50.3	58.0	42.3	57.9	49.4	57.7
6. Vona	56.7	56.8	46.0	56.0	42.7	56.3	48.5	56.4
7. Quantum X157B	54.7	57.2	49.5	56.6	40.0	55.8	48.1	56.5
8. Hawk	51.4	56.4	42.5	57.0	45.4	57.8	46.4	57.1
9. TAM 105	59.2	55.3	40.6	57.6	34.9	56.7	44.9	56.5
10. Triumph 64	50.1	59.6	42.0	61.3	39.9	59.9	43.4	60.3
11. Wings	50.4	57.4	39.8	56.2	39.0	58.4	43.4	57.3
12. Arkan	--	--	45.5	57.7	38.7	55.0	42.1	56.4
13. Payne	51.2	55.5	36.5	57.0	34.7	55.6	40.8	56.0
14. Probrand 835	47.5	56.3	33.7	60.0	40.6	55.7	40.6	57.3
15. SRI 5221	45.8	54.6	38.4	58.0	35.6	55.3	39.9	56.0
16. Newton	48.5	55.2	34.5	56.2	36.3	55.6	39.8	55.7
Location Average:	53.7	56.9	43.5	58.0	41.0	57.0	45.8	57.3
L.S.D. (.05):	7.59		14.11		10.16			
C.V. (%)	10.70		22.92		17.60			

NORTH CENTRAL OKLAHOMA

VARIETIES	KINGFISHER		GUTHRIE		TONKAWA		LAMONT		CHEROKEE		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. Arkan	46.3	58.9	49.7	59.1	55.1	58.4	81.5	60.8	59.4	57.8	58.4	59.0
2. Chisholm	49.9	60.3	59.6	61.5	53.0	59.1	66.8	60.9	59.0	58.9	57.7	60.1
3. Bounty 202	46.3	57.3	50.0	57.8	50.2	57.7	76.0	59.0	62.3	58.1	57.0	58.0
4. Quantum X157B	52.8	59.1	52.9	58.8	52.6	57.2	72.0	58.9	53.8	56.1	56.8	58.0
5. Mustang	46.5	58.8	54.7	59.6	53.3	58.3	75.0	60.3	51.2	57.2	56.1	58.8
6. H. W. 1010	49.3	59.4	53.1	60.0	47.5	57.2	73.0	60.0	55.2	58.0	55.6	58.9
7. Vona	48.5	59.8	52.7	59.3	51.7	57.0	65.5	59.5	58.0	57.0	55.3	58.5
8. Wings	52.1	60.9	52.5	61.4	51.8	58.4	63.9	59.8	52.4	58.3	54.5	59.8
9. Hawk	47.5	58.9	50.7	59.1	50.3	56.8	68.9	58.4	52.0	58.0	53.9	58.2
10. TAM W-101	44.8	60.2	49.9	59.2	47.9	57.2	70.7	60.8	53.0	59.0	53.3	59.3
11. Probrand 835	51.9	60.7	48.5	60.9	49.5	60.1	53.6	60.3	50.4	58.9	50.8	60.2
12. Triumph 64	45.5	61.3	49.5	62.2	51.2	61.5	52.9	60.7	50.7	61.2	50.0	61.4
13. SRI 5221	45.9	59.9	49.1	59.2	48.2	57.7	55.2	58.2	50.6	55.6	49.8	58.1
14. Newton	40.0	57.1	46.3	57.7	43.2	55.0	73.8	58.7	45.0	56.3	49.7	57.0
15. Payne	50.1	60.0	50.3	58.5	45.5	56.8	50.5	57.8	49.8	55.1	49.2	57.6
16. TAM 105	43.8	57.5	43.6	58.2	41.8	55.1	64.9	58.1	52.1	55.3	49.2	56.8
17. Centurk 78	--	--	--	--	--	--	54.6	59.8	--	--	54.6	59.8
Location Average:	47.3	59.4	50.8	59.5	49.5	57.7	65.8	59.5	53.4	57.5	53.6	58.8
L.S.D. (.05):	3.68		4.86		5.00		7.51		9.40			
C.V. (%)	5.47		6.71		7.07		8.03		12.35			

SOUTH CENTRAL OKLAHOMA

VARIETIES	LAWTON		APACHE		CHICKASHA		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Bounty 202	37.7	58.9	45.0	55.7	78.7	56.0	53.8	56.9
2. Chisholm	37.6	60.0	45.7	58.5	74.4	58.4	52.6	59.0
3. Arkan	--	--	39.7	56.5	65.5	56.2	52.6	56.4
4. Mustang	34.9	60.2	43.8	55.5	71.5	58.3	50.1	58.0
5. Quantum X157B	37.9	59.7	45.3	56.6	65.5	55.6	49.6	57.3
6. TAM W-101	30.9	59.6	47.2	60.6	70.6	58.8	49.6	60.0
7. H. W. 1010	34.9	60.2	42.7	56.3	71.9	56.7	49.8	57.7
8. Wings	35.2	62.0	44.2	58.8	66.4	55.6	48.6	58.8
9. SRI 5221	29.7	60.9	45.3	55.1	68.9	56.8	48.0	57.6
10. Triumph 64	31.8	61.6	45.0	61.0	66.8	59.5	47.9	60.7
11. Hawk	38.0	60.7	40.9	57.5	62.5	55.7	47.1	58.0
12. Vona	34.4	60.6	40.7	57.2	64.6	54.2	46.6	57.3
13. Probrand 835	33.9	61.1	43.0	56.8	57.0	55.6	44.6	57.8
14. TAM 105	32.9	58.4	40.8	58.9	57.4	54.4	43.7	57.2
15. Newton	34.0	59.3	42.5	58.5	51.1	55.4	42.5	57.7
16. Payne	33.0	60.2	40.3	61.0	51.1	59.5	41.5	60.2
17. Probrand 812	28.0	58.9	42.0	55.6	--	--	35.0	57.3
Location Average:	34.1	60.1	43.2	57.7	65.2	56.7	47.3	58.1
L.S.D. (.05):	3.60		5.07		9.64			
C.V. (%):	7.58		8.30		10.37			

EASTERN OKLAHOMA

VARIETIES	ADA		POTEAU		REGIONAL AVERAGE	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	T.W.
1. Payne	58.1	59.8	53.5	59.9	55.8	59.9
2. Wings	52.6	59.9	49.8	58.6	51.2	59.3
3. Bounty 202	47.5	58.5	51.5	55.7	49.5	57.1
4. Hawk	45.1	59.3	52.7	58.3	48.9	58.8
5. Arkan	53.5	59.6	41.7	55.4	47.6	57.5
6. TAM 105	47.8	57.8	45.7	57.3	46.8	57.6
7. Quantum X157B	52.6	57.9	40.3	58.0	46.5	58.0
8. Chisholm	48.4	58.3	42.1	60.3	45.3	59.3
9. Mustang	48.1	58.0	42.0	58.4	45.1	58.2
10. Newton	45.4	59.0	44.6	57.5	45.0	58.3
11. Vona	42.4	58.4	47.0	55.5	44.7	57.0
12. TAM W-101	52.3	59.7	36.6	58.6	44.5	59.2
13. Triumph 64	41.8	61.2	46.1	59.7	44.0	60.5
14. Probrand 835	46.9	59.3	38.5	59.9	42.7	59.6
15. H. W. 1010	43.3	59.3	40.8	59.0	42.0	59.2
16. SRI 5221	45.1	57.4	38.2	57.4	41.6	57.4
Location Average:	48.0	59.0	44.4	58.1	46.3	58.5
L.S.D. (.05):	6.90		15.83			
C.V. (%):	10.18		17.01			

Planting Data

Location	*Soil Series and Texture	Soil pH	Soil Temp. (F°)	Moisture	Planting Date	Rate Lbs/A	Harvest Date	**Comments
1. Custer City	Carey SiL	6.6	--	good	9-23-83	60	6-28-84	
2. Seiling	St. Paul SiL	6.6	84°	good	9-27-83	60	6-28-84	
3. Arnett	St. Paul SiL	6.2	80°	good	9-27-83	60	6-29-84	
4. Kingfisher	Kirkland SL	6.1	--	marginal	11-21-83	60	6-21-84	
5. Guthrie	Port SiCL	5.5	51°	good	11-18-83	60	6-22-84	
6. Tonkawa	Bethany SiL	---	53°	good	11-18-83	60	6-25-84	
7. Lamont	Pond Creek SiL	5.4	72°	good	9-22-83	60	6-25-84	Lodging
8. Cherokee	Dale SiL	---	87°	good	9-26-83	60	6-27-84	Grazed
9. Ada	Port SiCL	5.3	--	good	10-10-83	60	6-22-84	Some frost damage
10. Poteau	Coushatta SiCL	---	84°	good	9-30-83	60	6-25-84	
11. Hooker	Dalhart FSL	6.9	52°	good	10-26-83	30	7-9-84	
12. Buffalo	Woodward L	7.8	80°	good	9-26-83	60	6-29-84	Cheat
13. Boise City	Richfield CL	8.0	50°	marginal	10-25-83	30	7-10-84	
14. Lawton	Foard Tillman SiCL	8.1	57°	good	11-15-83	60	6-13-84	
15. Apache	Hollister SiL	5.7	54°	good	11-16-83	60	6-12-84	Cheat
16. Chickasha	Dale SiL	---	62°	good	10-14-83	60	6-18-84	
17. Altus	Hollister CL	---	64°	good	10-14-83	60	6-8-84	
18. Gould	Tillman CL	---	57°	good	11-14-83	60	6-12-84	
19. Roosevelt	Altus FSL	6.5	55°	good	11-16-83	60	6-14-84	

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

** All locations are continuous wheat

2083.5

Performance Summary of Winter Wheat Varieties Common
To All Regions In the 1983-84 Oklahoma Trials

Yields in Bushels/Acre

Variety	NORTH CENTRAL ¹		SOUTH CENTRAL ²		EASTERN ³		WEST CENTRAL ⁴		NORTHWEST ⁵		SOUTHWEST ⁶		STATE	
	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank
*BOUNTY 202	57.0	(3)	53.8	(1)	49.5	(3)	49.4	(5)	40.8	(1)	28.0	(2)	46.4	(1)
CHISHOLM	57.7	(2)	52.6	(2)	45.3	(8)	51.0	(3)	39.3	(2)	27.6	(3)	45.6	(2)
MUSTANG	56.1	(5)	50.1	(4)	45.1	(9)	53.0	(1)	38.8	(3)	28.1	(1)	45.2	(3)
TAM W-101	53.3	(10)	49.6	(6)	44.5	(12)	52.0	(2)	36.7	(4)	26.8	(5)	43.8	(4)
*H.W. 1010	55.6	(6)	49.8	(7)	42.0	(15)	49.6	(4)	36.6	(5)	26.9	(4)	43.4	(5)
*QUANTUM X157B	56.8	(4)	49.6	(5)	46.5	(7)	48.1	(7)	32.6	(14)	25.7	(8)	43.2	(6)
WINGS	54.5	(8)	48.6	(8)	51.2	(2)	43.4	(11)	35.0	(8)	25.8	(6)	43.0	(7)
VONA	55.3	(7)	46.6	(12)	44.7	(11)	48.5	(6)	36.0	(6)	25.4	(10)	42.8	(8)
HAWK	53.9	(9)	47.1	(11)	48.9	(4)	46.4	(8)	35.0	(10)	25.7	(7)	42.7	(9)
ARKAN	58.4	(1)	52.6	(3)	47.6	(5)	42.1	(12)	29.6	(16)	22.0	(15)	42.1	(10)
PAYNE	49.2	(15)	41.5	(16)	55.8	(1)	40.8	(13)	33.6	(13)	24.3	(11)	40.9	(11)
TRIUMPH 64	50.0	(12)	47.9	(10)	44.0	(13)	43.4	(10)	33.7	(12)	25.6	(9)	40.8	(12)
TAM 105	49.2	(16)	43.7	(14)	46.8	(6)	44.9	(9)	35.3	(7)	22.4	(14)	40.4	(13)
NEWTON	49.7	(14)	42.5	(15)	45.0	(10)	39.8	(16)	34.1	(11)	24.3	(12)	39.2	(14)
SRI 5221	49.8	(13)	48.0	(9)	41.6	(16)	39.9	(15)	32.4	(15)	22.6	(13)	39.1	(15)
PROBRAND 835	50.8	(11)	44.6	(13)	42.7	(14)	40.6	(14)	35.0	(9)	19.5	(16)	38.9	(16)

AVERAGE:	53.6		48.0		46.3		45.8		35.3		25.0		42.3	
LOCATIONS:	5		3		2		3		3		3			
*HYBRID														

1 NORTH CENTRAL

Cherokee
Tonkawa
Lamont
Kingfisher
Guthrie

2 SOUTH CENTRAL

Lawton
Apache
Chickasha

3 EASTERN

Ada
Poteau

4 WEST CENTRAL

Custer City
Seiling
Arnett

5 NORTHWEST

Buffalo
Hooker
Boise City

6 SOUTHWEST

Altus
Gould
Roosevelt