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PERFORMANCE OF WHEAT VARIETIES, OKLAHOMA - 1983

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The key to successful wheat production for the 1982-83 season was to get a stand, because the fall of 1982 was dry. Many fields across the state were dusted-in, with the majority of the state's wheat not up to stand until late November. The remainder of the season however, was ideal for wheat growth and development. Gentle rains were frequent throughout the winter and spring months and temperatures remained mild, allowing the later emerged wheat to make up for tillering it would otherwise have lost. The major yield constraints encountered in 1982-83, aside from the dry fall, were cheat infestations, weeds in general and leaf diseases (Septoria leaf blotch and leaf rust). Harvest was late but good, in general. Rains received at mid-harvest did lower test weights, as can be seen in the results (compare the trials harvested in June with those harvested in July).

This report contains the results of 19 farmer cooperative and 7 experiment station trials. Trials at the following locations were abandoned or not reported for the following reasons: Tonkawa (severe cheat infestation), Waukomis (poor and variable stands), Idabel (waterlogging), and Haskell (CV in excess of 20%). 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

Grain yield and test weights for wheat varieties grown in Northwest Oklahoma, 1982-83.

Variety	Arnett		Buffalo		Boise City		Goodwell Dry	Goodwell Irr.	Average	
	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Bu/A	Bu/A	Lbs/Bu
Bounty 100	57.0	58.4	50.5	57.4	26.0	56.8	50.7	100.5	56.9	57.5
Dekalb 579A	55.8	59.2	47.0	56.9	21.7	56.3	57.8	96.1	55.7	57.5
TAM 105	62.8	59.9	38.8	56.1	33.7	57.5	52.1	87.0	54.9	57.8
H. W. 1010	55.4	59.7	42.5	56.8	26.2	58.3	53.3	92.3	53.9	58.3
Chisholm	53.1	60.3	47.6	57.3	27.6	58.6	42.1	98.7	53.8	58.7
Hawk	53.2	59.7	41.3	56.2	31.8	57.3	54.5	82.9	52.7	57.7
Payne	50.0	59.1	50.3	58.2	21.5	57.2	52.3	86.2	52.1	58.2
Vona	52.2	58.9	42.3	56.5	30.3	59.3	48.0	86.1	51.8	58.2
Probrand 835	54.1	60.9	47.2	58.0	28.4	58.7	41.5	87.6	51.8	59.2
TAM W-101	52.4	60.3	48.8	57.8	22.4	58.2	42.9	90.5	51.4	58.8
Newton	49.3	59.7	45.1	56.9	29.0	59.1	53.2	80.4	51.4	58.6
Wings	52.7	61.1	45.5	57.6	26.9	59.9	45.9	84.2	51.0	59.5
Centurk 78	52.0	59.9	47.0	56.1	26.9	56.4	50.6	76.1	50.5	57.5
Triumph 64	50.5	60.2	42.6	58.3	22.0	58.7	38.9	82.0	47.2	59.1
Sandy	46.6	60.7			30.6	57.7				
Scout 66	50.8	59.5			32.8	57.9				
Average:	53.0	59.8	45.5	57.1	27.4	58.0	48.8	87.9	52.5	58.3
LSD (0.05):	7.5	1.4	7.3	2.2	2.8	0.8	7.8	10.1		
CV(%):	9.9	1.6	11.3	2.7	7.2	1.0	11.1	3.1		

SOUTHWEST OKLAHOMA

Grain yields and test weights of wheat varieties grown in Southwest Oklahoma, 1982-83.

Variety	Gould		Roosevelt		Mangum	Apache		Altus	Average	
	Bu/A	T.W.	Bu/A	T.W.	Bu/A	Bu/A	T.W.	Bu/A	Bu/A	T.W.
Bounty 100	52.3	60.3	45.9	59.4	23.0	73.9	56.4	60.8	51.2	58.7
Chisholm	51.2	61.5	42.4	59.9	25.3	70.3	57.8	50.8	48.0	59.7
Wings	49.8	62.8	44.6	61.1	24.4	67.6	54.7	51.2	47.5	59.5
H. W. 1010	48.3	61.3	39.8	58.7	27.8	64.2	53.5	54.1	46.8	57.8
Dekalb 579A	46.0	59.9	43.1	59.0	24.2	68.0	57.2	50.9	46.4	58.7
Hawk	46.4	60.2	42.5	59.0	33.6	60.4	54.0	48.6	46.3	57.7
Vona	49.0	61.7	42.3	59.5	24.0	67.5	54.8	50.8	44.2	58.7
TAM W-101	40.1	60.9	43.3	59.6	28.2	60.7	56.7	42.7	43.0	59.1
Probrand 835	47.6	61.6	41.3	60.6	17.0	60.2	57.1	48.5	42.9	59.8
Centurk 78	40.7	59.8	38.9	58.3	25.9	56.4	56.7	48.1	42.0	58.3
Payne	45.7	61.0	39.8	60.5	23.7	57.4	54.9	42.7	41.9	58.8
Triumph 64	41.7	62.1	38.2	61.6	25.0	57.8	58.4	43.2	41.2	60.7
TAM 105	37.6	57.8	33.5	55.9	26.2	59.3	54.6	47.1	40.7	56.1
Newton	42.9	59.8	31.3	57.9	24.8	48.3	53.0	45.2	38.5	56.9
Probrand 812					20.0	67.6	54.5			
Concho					23.9					
Sandy					24.9					
Sturdy					16.2					
Average:	45.7	60.8	40.5	59.3	24.3	62.3	55.5	48.9	44.3	58.6
LSD (0.05):	4.6	1.2	4.9	1.2	4.2	7.4	4.5			
CV (%):	7.1	1.3	8.6	1.5	12.0	8.4	6.4			

WEST CENTRAL OKLAHOMA

Grain yield and test weights for wheat varieties grown in West Central Oklahoma, 1982-83.

Variety	SEILING		CUSTER CITY		ELK CITY		CORDELL	AVERAGE	
	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Bu/A	Lbs/Bu
Bounty 100	64.9	58.1	42.7	57.1	43.6	58.5	52.7	51.0	57.9
Chisholm	58.0	58.6	38.7	57.8	37.6	57.3	40.8	43.8	57.9
Hawk	55.2	58.2	42.6	56.8	37.5	57.7	37.2	43.1	57.6
H. W. 1010	58.7	58.4	42.3	56.9	30.4	55.8	40.6	43.0	57.0
Dekalb 579A	52.3	58.3	39.8	57.0	34.7	55.9	40.9	41.9	57.1
Wings	62.0	60.4	39.7	58.9	27.1	58.0	34.8	40.9	59.1
Payne	49.5	60.1	46.0	57.6	29.6	58.2	36.8	40.5	58.6
Probrand 835	58.0	59.6	41.3	58.0	25.6	57.4	36.1	40.3	58.3
Centurk 78	47.7	60.0	42.2	57.8	32.7	58.4	37.3	40.0	58.7
Newton	48.3	56.4	40.7	57.1	36.4	57.0	33.5	39.7	56.8
Vona	55.4	58.3	38.5	57.5	28.5	56.4	35.3	39.4	57.4
Triumph 64	52.7	59.8	42.1	57.6	26.4	56.1	35.6	39.2	57.8
TAM 105	48.8	55.8	38.2	54.1	28.0	53.5	30.3	36.3	54.5
TAM W-101	47.0	59.3	40.4	56.8	26.8	55.5	30.5	36.2	57.2
Average:	54.2	58.7	41.1	57.2	31.8	56.8	37.3	41.1	57.6
LSD (0.05%):	5.8	1.4	5.5	1.2	6.9	1.6	6.9		
CV (%):	7.5	1.6	9.4	1.5	15.2	2.0	12.9		

NORTH CENTRAL OKLAHOMA

Grain yield and test weights of wheat varieties grown in North Central Oklahoma, 1982-83.

Variety	Lamont		Cherokee		Lahoma Test 1		Lahoma Test 2	Woodward	Average	
	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Bu/A	Bu/A	Lbs/Bu
Chisholm	56.0	55.6	54.4	53.4	44.5	55.6	63.2	80.8	59.8	54.9
Wings	52.5	55.8	47.6	52.5	34.6	55.0	67.5	82.1	58.5	54.4
Probrand 835	50.9	55.8	56.5	56.0	42.2	56.9	67.2	75.0	58.4	56.2
Payne	56.8	54.5	53.2	54.1	36.7	55.1	70.8	70.9	57.7	54.6
H. W. 1010	54.6	54.9	48.1	49.9	39.3	53.5	60.8	81.7	56.9	52.8
Bounty 100	46.9	53.5	48.4	49.1	41.0	53.3	68.3	78.0	56.5	52.0
Dekalb 579A	53.3	53.5	45.1	48.2	37.5	53.7	65.1	76.7	55.5	51.8
Vona	53.4	54.7	46.8	49.8	34.7	53.5	58.0	81.0	54.8	52.7
TAM 105	52.5	53.6	48.6	51.5	33.0	52.9	59.3	69.5	52.6	52.7
TAM W-101	48.4	53.8	52.3	53.4	31.2	54.9	54.6	74.5	52.2	54.0
Hawk	49.9	54.5	41.4	47.8	27.7	52.0	58.2	82.3	51.9	51.4
Triumph 64	47.1	57.1	46.9	57.3	41.4	56.4	58.6	64.8	51.8	56.9
Newton	49.4	53.6	44.9	50.1	28.6	53.2	56.1	78.5	51.5	52.3
Centurk 78	47.2	55.0	38.3	51.5	31.1	55.0	55.8	79.7	50.4	53.8
Average:	51.3	54.7	48.0	51.8	36.0	54.4	61.7	76.8	54.9	53.6
LSD (0.05):	4.8	1.3	7.7	2.5	8.2	1.6	5.7	11.2		
CV (%):	6.6	1.6	11.3	3.3	15.9	2.0	6.5	10.2		

CENTRAL OKLAHOMA

Grain yield and test weight for wheat varieties grown in Central Oklahoma, 1982-83.

Variety	Duncan		Guthrie		Kingfisher		Stillwater	Average	
	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Bu/A	Lbs/Bu
Chisholm	60.0	61.1	60.4	54.9	63.1	58.1	35.1	54.7	58.0
Vona	65.3	60.2	61.4	54.3	54.2	57.7	36.9	54.5	57.4
Payne	62.4	60.3	63.5	56.1	56.3	57.4	35.4	54.4	57.9
Wings	58.8	61.6	61.3	56.1	55.2	58.9	38.1	53.4	58.9
Bounty 100	54.2	58.8	61.9	52.3	62.1	57.8	35.1	53.3	56.3
Dekalb 579A	53.9	59.0	58.5	53.1	60.3	57.1	38.5	52.8	56.4
Probrand 835	55.6	61.4	63.2	57.0	55.3	58.5	32.6	51.7	59.0
H. W. 1010	63.6	60.2	61.2	55.2	52.6	58.1	28.6	51.5	57.8
TAM 105	61.0	58.3	53.6	51.7	54.5	56.0	30.3	49.9	55.3
Centurk 78	58.3	59.4	49.3	55.1	52.6	55.3	34.3	48.6	56.6
TAM W-101	54.8	61.9	50.0	53.2	51.8	58.0	32.0	47.2	57.7
Triumph 64	51.7	61.3	48.2	58.1	50.3	58.5	37.4	46.9	59.3
Hawk	56.7	59.4	47.1	52.3	50.4	57.3	32.5	46.7	56.3
Newton	49.0	57.6	49.2	52.3	51.1	56.3	25.4	43.7	55.4
Probrand 812	48.2	58.8	--	--	--	--			
Coker 68-15	59.7	61.8	--	--	--	--			
Average:	57.1	60.1	56.4	54.4	55.0	57.5	33.5	50.7	57.3
LSD (0.05):	7.4	0.7	4.1	1.3	7.6	1.9	5.7		
CV (%):	9.1	0.8	5.1	1.6	9.9	2.3	11.8		

EASTERN OKLAHOMA

Grain yield and test weights for wheat varieties grown in Eastern Oklahoma, 1982-83.

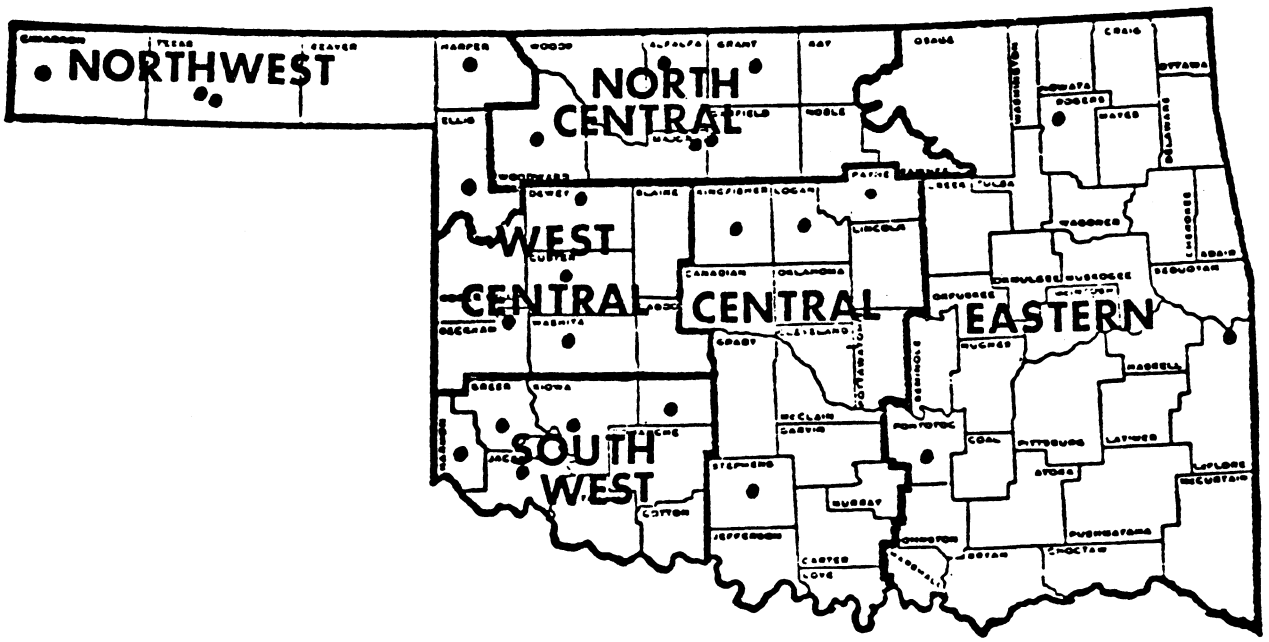
Variety	Ada		Talala		Poteau		Average	
	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu	Bu/A	Lbs/Bu
Probrand 835	60.8	54.8	55.3	55.9	45.9	58.9	54.0	56.5
Chisholm	60.1	57.0	41.5	51.6	49.6	60.8	50.4	56.5
Dekalb 579A	59.1	53.7	43.3	49.4	47.0	58.9	49.8	54.0
H. W. 1010	64.2	53.7	33.3	47.7	48.2	60.8	48.6	54.1
Bounty 100	53.8	54.2	44.6	50.8	43.9	60.5	47.4	55.2
Vona	49.2	51.1	37.6	50.9	51.2	59.8	46.0	53.9
Payne	--	--	43.9	54.0	47.6	59.6	45.8	56.8
Texred	54.6	55.2	37.7	51.9	44.1	60.9	45.5	56.0
Hawk	45.7	48.4	36.9	51.4	44.6	59.2	42.4	53.0
Wings	46.1	53.3	34.5	51.4	46.2	59.8	42.3	54.8
TAM 105	45.3	50.2	34.8	48.4	42.0	57.8	40.7	52.1
Triumph 64	41.9	53.9	38.1	54.4	40.4	60.4	40.1	56.2
Centurk 78	31.2	47.7	45.1	55.8	40.8	58.3	39.0	53.9
Newton	39.5	51.2	36.0	52.2	40.6	59.7	38.7	54.4
TAM W-101	41.0	51.5	37.3	51.8	34.7	57.2	37.7	53.9
Probrand 812	54.9	52.1	--	--				
Arkan	59.5	55.7	53.6	54.9				
Coker 68-15	65.5	55.3						
Coker 916	62.7	55.8						
Average:	52.0	53.0	40.8	52.0	44.5	59.5	44.6	54.8
LSD (0.05):	12.2	4.2	6.4	2.3	5.2	2.9		
CV (%):	16.6	5.7	11.0	3.2	5.4	2.3		

Soil and Cultural Information for winter wheat variety trials at 26 Oklahoma locations, 1982-83.

Location	*Soil Series & Texture	Planting Data: Soil pH	Soil Temp(°F)	Moisture	Date	Rate Lbs/A	Harvest Date	**Comments
Gould	Tillman CL	---	47	Adequate	12/20	60	6/22	
Altus	Hollister CL	---	--	Adequate	12/20	60	6/22	14 month fallow
Roosevelt	Altus FSL	6.5	44	Excellent	12/16	60	6/22	
Mangum	Meno FSL	---	--	Minimal	9/29	60	6/16	
Apache	Hollister SiL	5.7	60	Minimal	11/2	60	6/21	cheat
Custer City	St. Paul SiL	6.8	40	Adequate	12/9	60	7/6	volunteer wheat
Cordell	Port-Reinach CL	---	--	Adequate	12/17	60	7/1	
Elk City	Dill-Quinlan CL	6.2	48	Dry	11/23	60	7/7	grazed
Seiling	St. Paul SiL	6.6	52	Minimal	11/16	60	7/11	
Boise City	Richfield L	8.0	72	Adequate	9/8	30	7/12	14 month fallow, 15% hail damage
Goodwell (I)	Richfield CL	---	--	Good	10/12	60	7/6	irrigated
Goodwell (D)	Richfield CL	---	--	Adequate	10/12	60	7/6	dryland
Buffalo	Woodward L	7.8	41	Dry	12/7	60	7/8	cheat
Arnett	St. Paul SiL	6.2	64	Excellent	10/13	45	7/11	
Woodward	Woodward L	---	--	Good	10/15	60	7/6	14 month fallow
Cherokee	Dale SiL	7.4	62	Dry	10/19	60	7/8	volunteer wheat
Lahoma-1	Pond Creek SiL	---	--	Good	10/21	60	7/6	continuous wheat
Lahoma-2	Pond Creek SiL	---	--	Good	10/20	60	7/5	14 month fallow
Lamont	Dale SCL	5.4	75	Excellent	9/17	60	7/1	
Kingfisher	Kirkland SiL	5.8	50	Minimal	11/24	90	7/5	cheat
Guthrie	Port SiCL	5.5	47	Good	11/15	60	7/5	
Stillwater	Norge SiL	---	--	Good	11/3	60	6/24	14 month fallow
Duncan	Kirkland CL	5.0	72	Minimal	9/29	60	6/17	grazed, some frost damage
Ada	Port SiCL	5.3	67	Good	10/12	60	6/23	flooded, lodging
Poteau	Coushatta SiCL	6.8	78	Dry	9/28	60	6/24	grazed, ryegrass
Talala	Summit SiCL	6.6	--	Adequate	11/4	60	7/13	wild buckwheat, weedy

* C = clay, L = loam, Si = silt, S = sand, F = fine
** All locations are continuous wheat culture unless otherwise noted.

REGIONAL DIVISIONS AND TRIAL LOCATIONS FOR THE 1982-83 VARIETY TRIALS



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