

(NC)

SMALL GRAIN VARIETY TESTING AND DEMONSTRATION PROGRAM, 1965-66

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In the fall of 1965 a new type demonstration and testing program was initiated involving wheat, barley, and oats. This was a new endeavor to combine both testing and demonstration work into one complete program.

Most producers are interested in observing varieties being grown in large blocks so they may better evaluate their performance under field conditions. With this in mind, it was decided to plant the small grain varieties in plots large enough so they could be handled with equipment such as might be on a producer's farm.

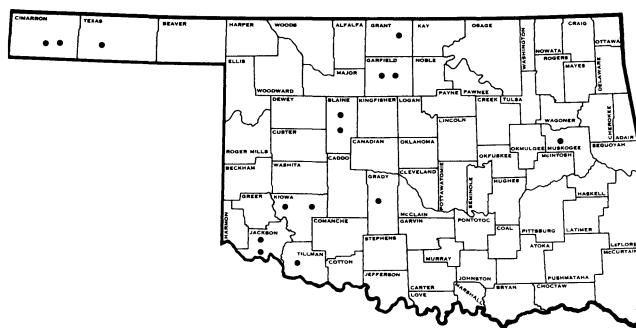
Each variety was planted in a strip 16 feet wide by 100 feet long with three replications. Accuracy and replication were also desired so the results would be useful to plant breeders in evaluating the different varieties. Working as a team at the University, the research and extension personnel determined the varieties that should be planted in each of the locations throughout the state.

The counties were selected where these demonstrations would be planted. County Extension Directors were contacted for assistance in locating the plots and selecting the cooperators in their county.

The planting plan consisted of a randomized, complete block design with three replications. A design such as this will lend itself to demonstration

work and also will provide accuracy for research personnel. The plots were planted with an eight foot tractor-mounted drill. Harvesting was by means of an eight foot self-propelled combine.

The plots were planted and harvested by the field personnel located at the various Oklahoma State University Research Stations in the area where the demonstrations were being grown. The stations involved were: Stillwater, Chickasha, Altus and the Panhandle A&M College at Goodwell. The area harvested from each variety consisted of a strip eight feet wide and 80 feet long from each replication. The grain yield and test weight were determined on each variety in each replication.



The demonstrations were planted in three geographic areas of Oklahoma, namely, the Panhandle, Northcentral, and Southwest areas. The data are presented in four tables according to area.

This new type testing and demonstration program is made possible through

Table 1. Yield and Test Weight of Small Grain Varieties at Six Locations, Southwest Oklahoma 1965-66

Variety	Altus ¹		Chickasha ²		Elmer ³		Frederick ⁴		Hobart ⁵		Mountain View ⁶		Average
	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A
Caddo	23.0	59.5	54.3	60.6	31.9	60.7	11.4	62.2	53.0	62.1	36.8	62.1	35.1
Imp. Triumph	20.8	57.7	51.8	59.5	32.1	60.0	10.2	61.2	49.7	60.7	39.2	61.3	34.0
Scout	19.3	55.4	48.6	57.5	27.1	57.1	12.1	59.0	50.4	59.4	36.2	59.4	32.3
Triumph 64	20.6	60.0	52.8	60.2	27.6	60.0	13.6	61.2	48.2	61.5	35.3	62.2	33.0
Triumph	19.4	59.0	54.3	59.6	24.6	59.3	9.7	59.9	49.8	61.3	37.2	61.7	32.5
Gage	12.8	53.5	52.6	56.9	31.5	57.9	9.6	58.4	45.7	58.4	37.8	58.0	31.7
Kaw 61	17.8	57.9	49.8	60.5	26.5	61.5	10.5	62.3	47.5	61.5	33.9	62.5	31.0
Wichita	16.9	59.2	44.6	59.6	27.9	59.9	14.2	61.7	42.9	61.2	33.3	62.8	30.0
Concho	21.4	52.3	53.2	56.2	18.6	54.6	14.9	59.7	45.6	57.7	29.5	59.4	30.5
Tascosa	16.8	58.0	44.3	59.8	20.7	59.1	14.2	61.6	42.1	61.1	35.5	61.0	30.5
Gaines	17.1										39.2	58.2	28.2
Rogers	7.2	40.6	31.3	43.6	21.1	46.4	8.6	48.6	50.6	47.6	43.0		27.0
Will	1.7	43.4	30.0	52.6	29.7	46.6	8.6	46.0	44.4	47.0	45.2		25.1
Bronco			4.0	35.5	21.1	35.4	13.0	33.0	33.5	30.3	50.3		24.4
Cimarron	3.4	36.4	23.6	33.7	29.2	34.7	10.9	41.2	25.9	37.7	55.0		24.7
Arkwin	1.1	29.2	13.6	31.8	22.1	34.2	6.3	32.2	23.3	34.0	39.4		17.6

¹ Irrigation Research Station

² Oklahoma Cotton Research Station

³ Roger Brown Farm, 11 miles south of Altus

⁴ Harvey Loftis Farm, 1/2 mile east of Frederick

⁵ Bob Smith Farm, 3 miles west of Hobart on Old Highway 9

⁶ Troy Halstead Farm, 1 mile east, 2 south of Mt. View on the east side

Table 2. Yield and Test Weight of Small Grain Varieties at Six Locations, Central Oklahoma 1965-66

Variety	Deer Creek ¹		Douglas ²		Drummond ³		Greenfield ⁴		Muskogee ⁵		Okeene ⁶		Average
	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A	Test Wt.	Bu/A
Caddo	38.5	62.0	24.9	62.4	36.1	63.0	40.1	61.5	50.8	61.2	24.6	57.5	35.8
Imp. Triumph	36.6	60.7	25.7	60.5	32.8	61.0	42.5	61.3	39.9	57.3	27.7	56.4	34.2
Scout	40.9	59.6	27.0	61.0	40.6	60.8	33.8	56.8	42.3	57.5	25.3	55.3	35.0
Triumph 64	34.3	61.6	18.3	61.6	29.9	61.9	41.6	62.3	39.0	57.9	26.5	57.6	31.6
Triumph	37.9	62.2	18.9	60.4	37.2	61.8	38.1	61.9	36.1	59.4	29.0	58.2	32.9
Gage	38.5	58.7	22.0	59.0	32.0	57.2	37.1	57.6	48.1	57.9	26.4	53.9	34.0
Kaw 61	37.3	63.2	25.5	62.3	29.7	63.1	46.2	62.5	38.0	61.5	25.2	59.2	33.5
Wichita	35.0	61.2	26.3	62.0	27.6	61.9	34.0	60.9	32.3	57.8	25.7	56.8	30.2
Concho	36.2	59.4	28.8	60.6	32.2	61.9	48.2	59.6	44.0	58.6	27.2	55.8	36.1
Tascosa	37.7	60.2	23.0	62.2	31.5	62.2	39.7	60.4	42.8	59.8	21.7	53.8	32.7
Gaines					38.1	59.2					22.0	50.2	30.1
Rogers	57.0	49.8	22.5	46.9	53.2	49.3	61.3	48.0	39.2	41.9	49.0	43.2	47.0
Will	59.1	46.7	31.4	41.7	45.4	45.6	59.7	43.6	40.5	40.1	48.5	36.5	47.4
Zora									39.5	38.4			39.5
Bronco	49.2	34.3	32.7	36.3	69.7	37.9	24.6	36.9	90.0	32.3	38.0	31.0	50.7
Cimarron	64.7	35.7	39.0	33.6	68.9	37.4	59.4	35.2	56.7	32.7	48.6	32.7	56.2
Arkwin	61.6	36.1	33.8	34.4	34.0	38.6	35.9	34.5	73.2	35.4	38.1	30.2	46.1
Oro									83.0	32.7			83.0

2006.2

¹ Elvie Lasiter Farm, 8 1/2 miles north of Deer Creek

² Horace Williams Farm, 2 1/2 miles east of Douglas

³ Blain Rikli Farm, 2 blocks east of Co-op Elevator, Drummond

⁴ Bob Nitzel Farm, 2 miles west of Greenfield

⁵ Eastern Oklahoma Pasture Station, 10 miles southwest of Muskogee

⁶ Owen Wimberly Farm, 2 miles east, 1 3/4 north of Okeene

a grant from the Oklahoma Crop Improvement Association. Each of the locations is marked with a 3' x 5' orange and black sign with the lettering "OSU Variety Test"

on both sides. There have been 36 locations' planted for the 1967 harvest. If any of these demonstrations are in your area stop by and look them over.

Table 3. Yield of Small Grain Varieties at Three Locations, Oklahoma Panhandle 1965-66

Variety	Boise City ¹	Griggs ²	Guymon ³	Average
	Bu/A	Bu/A	Bu/A	Bu/A
Caddo	12.1	45.8	29.2	29.0
Imp. Triumph	6.8	46.3	28.1	27.1
Scout	10.5	50.6	35.9	32.3
Triumph 64	7.3	42.5	31.6	27.1
Triumph	7.7	42.1	25.5	25.1
Kaw 61	7.8	44.5	30.0	27.4
Wichita	9.5	45.2	27.0	27.2
Concho	11.4	45.5	31.7	29.5
Tascosa	10.6	49.2	37.4	32.4
Rogers	0.4	56.7	24.0	27.0
Will	3.2	60.4	39.6	34.4
Harrison			37.0	37.0

¹ Lewis & Morris Alexander Farm, 2 miles south, 10 east of Boise City

² B. J. Cox Farm, 1 1/2 miles west, 1 north of Griggs (irrigated)

³ T. M. Raburn, Jr. Farm, 2 miles southwest of Guymon (irrigated)

Table 4. Average Yield of Small Grain at Fifteen Locations 1965-66

Varieties	Bu/A	Varieties	Bu/A
Caddo	34.2	Zora	39.5 ³
Scout	33.4	Harrison	37.0 ³
Gage	32.8 ¹	Will	36.5
Imp. Triumph	32.7	Rogers	35.0
Concho	32.6		
Kaw 61	31.3		
Triumph 64	31.3	Oro	83.0 ³
Triumph	31.2	Cimarron	40.4 ¹
Tascosa	31.1	Bronco	38.7 ⁴
Wichita	29.5	Arkwin	31.9 ¹
Gaines	29.1 ²		

¹ 12 locations

² 4 locations

³ 1 location

⁴ 11 locations