

Title: Off-Station Spring Wheat evaluations in the Western Triangle Area

Principal Investigator: John Miller and Grant D. Jackson, Western Triangle Ag. Research Center, Conrad. Luther Talbert and Susan Lanning, PSPP, Bozeman.

Objectives: Evaluate spring Wheat varieties and promising new lines in the Western Triangle area.

Results: Results are tabulated in Table 1 for the Knees location and Table 2 for the location north of Devon. The Choteau location was lost due to poor stands probably caused by wire worms and the Cut Bank location was lost due to hail on July 19. Top yielding varieties at the Knees were MT 0832, MT 0827, and ONeal. MT 0852, Vida, and Oneal were the high yielding varieties at Devon.

Summary: Yields ranged from 35 to 58 bu/acre at the Knees and 31 to 45 bu/acre north of Devon. The Choteau area location was lost due to differential wire worm damage and the Cut Bank location was lost due to hail. No long term data are reported for either location as this was the second year of reestablishing the off station spring wheat plots at the Knees and the first year of data from north of Devon.

Funding Summary: Office of Special Projects will provide expenditure information. No other grants support this project.

MWBC FY2012 Grant Submission Plans: A similar project will be proposed for FY 2012.

Table 1. Off-station spring wheat variety trial located near the Knees.
Chouteau county. Western Triangle Ag. Research Center. 2010.

Variety	Class	Yield bu/a	Test Wt lb/bu	Height in.	Protein %	Lodging %
MT 0832		58.5	58.3	29.3	15.0	8.3
MT 0827		58.4	59.8	31.3	15.0	43.3
ONeal		56.2	60.7	30.3	14.8	13.3
Corbin	*	54.8	59.1	28.0	14.6	66.6
Choteau	**	53.3	57.3	29.0	15.7	31.6
Vida		53.0	58.0	31.0	14.8	11.7
Jedd	CL	52.5	59.0	24.3	14.4	58.3
McNeal		51.2	57.9	31.7	15.2	85.0
MT 0852		50.8	59.9	30.7	15.0	3.0
Outlook		50.3	56.5	30.0	14.6	87.3
Mott		49.5	59.0	32.7	14.8	11.7
Conan	*	49.5	59.6	27.3	15.2	31.6
Volt		48.5	60.1	29.0	14.5	65.0
Reeder		48.5	58.6	29.7	15.3	58.3
Hank		27.3	57.1	27.3	14.8	86.7
Freyr		45.0	57.7	30.3	14.8	91.7
AP 604 CL		42.4	58.5	28.7	16.0	83.3
Kuntz		39.6	56.3	27.3	14.3	95.7
Kelby		37.5	58.4	25.3	15.9	85.7
Fortuna	**	35.3	59.2	34.0	16.0	12.3
mean		49.1	58.6	29.4	15.0	51.5
LSD (.05)		8.6	1.3	2.3		29.0
C.V. 1 (%) (S/mean)*100		10.6	1.4	4.8		34.1

Cooperator and Location: Aaron Killion, western Chouteau county.

Planted April 7, 2010 on chem-fallow. Harvested August 19, 2010.

Fertilizer, actual lbs/a: 120-20-10. Sprayed with Starane at 1 pt/a, Salvo at 12 oz/a and Ally at 0.1 oz/a on 6/2/2010.

Precipitation from 4/7/2010 until harvest was: 6.8 inches.

** = Sawfly tolerant (solid stem score of 19 or higher). * = implies partial sawfly tolerance.

Conducted by MSU Western Triangle Ag. Research Center.

Table 2. Off-station spring wheat variety trial located north of Devon.
Toole county. Western Triangle Ag. Research Center. 2010.

Variety	Class	Yield bu/a	Test Wt lb/bu	Height in.	Protein %	Lodging %
MT 0852		45.3	58.7	27.7	15.3	5.0
Vida		44.0	57.9	28.3	13.9	33.3
ONeal		43.7	61.1	28.3	14.4	15.0
MT 0827		43.7	59.3	30.0	14.6	43.3
McNeal		43.5	58.3	28.7	14.8	40.0
MT 0832		43.3	55.3	29.0	15.2	8.3
Volt		43.1	60.9	27.3	14.0	23.3
Fortuna	++	42.4	57.3	32.7	15.2	8.3
Choteau	++	41.9	55.5	26.3	15.3	6.7
Outlook		41.7	56.5	28.3	14.5	23.3
Reeder		38.9	57.1	28.3	15.1	33.3
Corbin		38.8	58.9	27.3	15.5	20.0
Hank		38.0	57.0	26.7	15.0	36.7
AP 604 CL		37.9	55.6	30.3	15.3	20.0
Mott		37.3	55.9	28.7	16.5	18.3
Conan		36.5	57.4	26.0	15.9	11.7
Kelby		35.8	58.2	25.7	15.9	23.3
Freyer		35.4	56.9	29.0	14.1	73.3
Jedd	CL	34.5	58.0	25.7	14.9	23.3
Kuntz		30.9	56.2	26.3	14.4	50.0
mean		39.3	57.4	27.8	15.0	26.8
LSD (.05)		5.7	2.1	1.5		14.1
C.V. 1 (%) (S/mean)*100		8.8	2.3	3.3		31.8

Cooperator and Location: Brian Aklestad, eastern Toole county.

Planted April 8, 2010 on chem-fallow. Harvested August 19, 2010.

Fertilizer, actual lbs/a: 120-20-10. Sprayed with Huskie at 11 oz/a and Axial XL at 16.4 oz/a on 5/15/2010.

Precipitation from 4/8/2010 until harvest was: 8.3 inches.

** = Sawfly tolerant (solid stem score of 19 or higher).

Conducted by MSU Western Triangle Ag. Research Center.