

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

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**Objectives:** Evaluate Winter 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 MTS0705, MTS832, and MT06103. MTS0826, Decade, and Jerry were the high yielding varieties at Devon. The plots north of Devon did not have much standing stubble and the varieties were exposed to wind and cold the last couple of weeks in October of 2009 before the plants were well established.

**Summary:** Yields ranged from 55 to 75 bu/acre at the Knees, with a 12.9 percent average for protein, and 20 to 45 bu/acre north of Devon with an average of 12.8 percent protein. 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 first year of reestablishing the off station winter wheat plots in the Western Triangle area.

**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 winter wheat variety trial located near the Knees.  
Chouteau county. Western Triangle Ag. Research Center. 2010.

Cultivar			Yield bu/ac	Test weight lb/bu	Plant height in	Protein %	Lodging %
MTS0705	**	+	74.7	61.8	37.3	12.7	8
MTS0832	**	+	74.2	59.4	35.7	12.1	5
MT06103			72.9	60.6	35.7	12.9	27
MTS0826	**	+	70.8	60.4	34.3	13.3	6
Yellowstone			70.7	58.8	31.7	12.9	82
Wahoo			69.4	58.4	31.7	12.4	27
Pryor			66.7	58.4	29.7	12.8	38
Jagalene			66.6	60.1	31.0	13.2	65
MTS0532 (HWW)			66.4	59.7	30.7	12.6	40
Neeley			65.3	59.1	35.3	12.4	47
MTS0713			64.8	60.6	32.3	13.0	44
Genou			64.7	59.7	35.0	12.6	23
MTS0721	**	+	64.6	59.2	30.3	13.3	30
Carter			64.2	58.5	28.3	12.7	37
Ledger			63.4	59.3	29.0	12.6	87
Accipiter			63.0	58.8	30.7	13.1	10
Decade			62.3	60.0	32.3	13.4	30
Norris (CL)			61.2	59.7	36.0	13.0	43
CDC Falcon			58.8	58.5	27.7	14.1	37
Hyalite (CL, HWW)			58.0	58.9	33.7	13.4	57
Bynum (CL)			57.9	59.6	33.7	13.3	57
Rampart	**		56.3	59.7	32.7	13.2	63
Promontory			56.2	59.6	29.7	12.2	25
Jerry			55.5	58.8	32.3	13.2	88
Average			64.5	59.5	32.4	12.9	40.6
LSD (0.05)			7.9	1.4	3.0		32.6
C.V. (%)			7.4	1.4	5.6		48.8
P-value (Varieties)			<.0001	0.0017	<.0001		0.0000

Cooperator and Location: Aaron Killion, western Chouteau county.

Planted September 18, 2009 on chem-fallow. Harvested August 19, 2010.

Fertilizer, actual lbs/a: 132-20-10. 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: 6.2 inches.

\*\* = Sawfly tolerant (solid stem score of 19 or higher). + = New to off station trial for 2010.

Conducted by MSU Western Triangle Ag. Research Center.

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

Cultivar			Yield bu/ac	Test weight lb/bu	Plant height in	Protein %
MTS0826	**	+	44.5	59.6	27.0	12.4
Decade	**		41.8	59.5	24.7	12.7
Jerry			41.2	57.9	26.7	12.6
MTS0532 (HWW)	**		41.1	59.1	26.0	12.6
Accipiter			39.5	59.1	24.0	12.5
Hyalite (CL, HWW)			38.3	60.0	26.0	12.7
Genou			36.3	58.5	26.3	13.5
Yellowstone			36.2	58.0	25.3	12.1
Neeley			35.6	57.4	26.7	12.1
MTS0832		+	35.6	58.2	26.3	12.6
MTS0713			34.8	59.8	24.3	13.0
CDC Falcon			34.0	58.3	23.7	12.6
Wahoo	**		31.5	57.0	25.7	12.9
Ledger			31.2	60.1	22.7	12.1
Norris (CL)			30.6	59.5	25.7	12.8
Carter			30.0	58.7	22.3	13.2
Jagalene			28.9	58.1	24.7	13.0
MTS0705		+	28.8	57.8	27.0	13.3
MT06103			27.6	57.7	26.7	13.2
MTS0721		+	26.0	59.0	22.0	13.2
Pryor			25.1	55.8	24.7	11.9
Bynum (CL)	**		23.5	57.1	25.0	13.7
Promontory			20.6	57.8	25.0	12.5
Rampart			20.0	56.5	25.7	14.2
Average			32.6	58.4	25.2	12.8
LSD (0.05)			8.3	2.2	2.0	
C.V. (%)			15.4	2.3	4.9	
P-value (Varieties)			<.0001	0.0171	<.0001	

Cooperator and Location: Brian Aklestad, eastern Toole county.

Planted September 21, 2009 on chem-fallow. Harvested August 19, 2010.

Fertilizer, actual lbs/a: 132-20-10. 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). + = New to off station trial for 2010.

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