**Title**: Evaluation of solid- and hollow-stem spring wheat variety blends for controlling sawfly-induced stem lodging.

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**Objective:** To evaluate seed blending of sawfly resistant and susceptible spring wheat varieties for agronomic performance and effectiveness in controlling sawfly damage.

**Results:** Stem lodging from sawfly cutting was non-existent for Choteau, McNeal, and Choteau/McNeal blends, even though the sawfly was very prevalent in the plots during plant elongation. Grain yields were different for the mixtures, as well as the pure stands. Pure Choteau yielded 85 bu/a, with the pure stand of McNeal yielding 68 bu/a. The mixtures fit in the middle with yields in the mid 70's bu/a. Test weight and protein were not significantly different among treatments. (Table 1).

**Summary:** The effectiveness of blending solid and hollow stem varieties for controlling lodging could not be determined because of the lack of cutting.

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

**MWBC FY2012 Grant Submission Plans:** It is not planned to submit this project for funding consideration in the next fiscal year.

Table 1. Effect of seed-blending of solid and hollow stem spring wheat varieties on agronomic performance. Western Triangle Ag. Research Center. 2010.

| Variety and Blend | Yield bu/a | Test Wt lb/bu | Protein % | % Stem lodging |
|---|---|---|---|---|
| 100% Choteau | 85.0 a | 61.0 a | 13.8 a | 0.0 |
| 50% Choteau+50% McNeal | 74.8 b | 60.8 a | 14.1 a | 0.0 |
| 25% Choteau + 75% McNeal | 72.2 b | 60.3 a | 14.2 a | 0.0 |
| 100% McNeal | 68.6 c | 60.7 a | 14.0 a | 0.0 |
| mean | 75.2 | 60.7 | 14.0 | |
| LSD (p=0.05) | 3.3 | 0.8 | 0.6 | |
| CV (%) | 2.7 | 0.9 | 2.6 | |

Planted April 15, 2010. Harvested September 8, 2010.
Fertilizer, actual: 120-20-20
Sprayed with Huskie @ 11oz/a and Axial @ 16.4 oz/a on 6/4/2010.