Site† Treatment, Yield Component Statistics Big Sandy **Box Elder** Joplin Sunburst Oilmont Mean± Grain Yield (Mg ha-1)

4.48

4.43

0.26

0.88

130

123

0.23

6

0.03*

4.05

3.92

0.22

0.56

108

99

4

0.08*

0.28

4.83

4.36

0.26

0.11

127

117

0.24

0.15

1.69

1.51

0.18

0.36

95

99

3

0.24

0.01*

3.94

3.70

0.11

110

106

0.13

69

62

2

781

786

0.04*

<0.01*

2

0.04*

4.76

4.25

0.36

0.21

88

94

4

0.26

Treatment means, standard error of the difference in means, and two-sided p-values for wheat yield component responses

Table 4

Grain Protein (g kg-1)

across five sites in north-central Montana.

Fallow I GM

p-value

Fallow

p-value

p-value

LGM

SE difference

SF difference

Grain N Yield (kg ha-1) Fallow 65 90 72 99 25 LGM 61 84 62 79 23 SE difference 5 5 5 0.48 0.23 0.07* 0.04* 0.50 p-value Grain Density (kg m-3) 772 777 775 Fallow 786 794 LGM 776 788 770 796 800 SE difference 4 4 6

0.05*

^{*} Treatment differences at individual sites determined by paired t-tests and treatment means across all sites from mixedeffects ANOVA considered significant at $p \le 0.10$.

[†] Big Sandy, Box Elder and Joplin grew winter wheat, Sunburst and Oilmont grew spring wheat.

[#] Treatment means and statistics as calculated across all sites. Note: "Mean" is not the mean of site means.