

Title: Evaluation of winter wheat development lines for susceptibility to sawfly cutting in central Montana. (4W2755)

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Objectives: To evaluate stem solidness, sawfly resistance/ tolerance, and agronomic performance of new winter wheat lines developed to combat sawfly damage.

Results:

Forty nine winter wheat lines were seeded no-till re-crop into spring wheat stubble that had experienced severe sawfly cutting in the summer of 2008. The site was established on east edge of a field just north east of Moccasin. The seed bed was not optimum. The straw was very short due to the sawfly cutting and the producer's efforts to capture all of his wheat possible. The field was heavy harrowed, which packed the surface soil layer while creating a lot of fine dust. The site experienced wind blasting through the winter and mid-spring. These conditions resulted in a lost stand on the majority of plots and no data was obtained.

Summary:

The composite of traffic from heavy harrowing and air-drill seeding operations has created poor seed bed conditions in field perimeters of some fields. This condition is particularly evident when surface soils are very dry at seeding.

Funding Summary:

Expenditure information to be provided by OSP
No other grant support for this project

MWBC FY2011 Grant Submission Plans:

This trial will not be continued at this time. Even though sawfly populations seemed to be increasing, establishing a nursery with an suitable population of sawfly has been difficult. Sites with less than desirable seed bed conditions have been selected in an attempt to insure the presence of the sawfly. This has not produced successful results. Another venue will need to be identified for developing sawfly resistant winter wheat lines that are agronomically adapted to central Montana environments. A general demise of the sawfly is the preferred event, but appears to be a hopeful pipedream.