

TO: Montana Wheat and Barley Committee

FROM: Montana State University-Bozeman
Agricultural Experiment Station
Research Centers located at:
Conrad, Havre, Huntley, Kalispell, Moccasin and Sidney

SUBJECT: 2008 Agricultural Research Report

Submitted is the 2008 Report of Agricultural Research conducted by the Montana Agricultural Experiment Station at Research Centers with funds received from the Montana Wheat and Barley Committee.

The main emphasis of research, with funding assistance from the Montana Wheat and Barley Committee, is to investigate various aspects of dryland continuous and/or flexible cropping systems as compared to traditional crop-fallow systems; and the appropriateness of various materials and practices as components of cropping systems in general.

This report has been bound according to subject matter and not by location in order that the reader may more easily refer to certain aspects of the research.

If there are scenarios where drought and/or hail during crop year 2008 affected research results for one or more components of a particular research project, the impacts are described in the written narrative for each such report.

In *Section I, Cereal Variety Performance Investigations Under Recrop or Continuous Cropping Conditions*, the two proposals submitted by CARC for agronomic performance of cereals were summarized in a single report to encompass all three locations originally proposed.

In *Section III, Cereal Variety Performance Investigations Under Fallow Cropping Conditions*, a report titled "Evaluation of Soft White Spring Wheat Varieties" was submitted by NWARC for informational purposes even though it was not included in the initial proposal.

In *Section IV, Crop Fertility Investigations*, a report titled "Grain yield and quality response of new barley, spring wheat and winter wheat cultivars to nitrogen fertilizer", submitted by WTARC, was reduced to only spring wheat due to poor climatic conditions.

In *Section V, Disease Management*, a report titled "Evaluation of 'Headline' fungicide in winter wheat", submitted by NWARC, was changed to "Evaluation of 'Headline' fungicide in spring wheat".

A Crop Variety Selection Tool has been created utilizing data from this and previous Agricultural Research Center reports. This tool, which can be accessed at <http://www.sarc.montana.edu/php/varieties.html>, is currently being modified and improved, and will be updated as additional crop information is made available.