

**PI: Burrows, Mary**

**PI's E-mail: mburrows@montana.edu**

**Project ID: FY08-BU-025**

**FY08 ARS Agreement #: New**

**Research Category: MGMT**

**Duration of Award: 1 Year**

**Project Title: Uniform Fungicide Trial for Fusarium Head Scab Control in Montana Spring Wheat.**

### **PROJECT 1 ABSTRACT**

(1 Page Limit)

Fusarium head blight (scab) can be an important disease in irrigated wheat and barley in Montana. We have been performing fungicide trials for Fusarium head blight at a location in Manhattan, MT for a number of years, but have not previously been involved in the uniform fungicide trial organized by the US Wheat and Barley Scab Initiative. This data will be valuable to our growers in their disease control decision making process. This data will also contribute to our understanding of effective Fusarium head blight management in the High Plains environment.

Plots will be established in Manhattan, MT with a historically high incidence of Fusarium head blight. We will rely on natural inoculum. Plots will be established in the variety 'Hank,' which is known to be very susceptible to this disease. Plots will be irrigated with a center pivot which applies 1/3 inch of water per day. Application of approximately 6 fungicides and 1 control will proceed at anthesis. We will also perform a limited trial of on fungicide (Prosaro, prothioconazole + tebuconazole) timing of application, with applications at the 5 leaf stage, at the boot stage, first flower, and at full flowering.

Plots will be rated for incidence of leaf diseases (primarily tan spot and septoria) on the flag leaf, Fusarium head blight in the heads, yield, test weight, protein, and DON levels. Other diseases will be rated as they occur (especially ergot).

This data will be distributed by publication in Plant Disease Management Reports and used in extension presentations at field days and cropping schools, industry meetings, fact sheets, AgAlerts and in a MontGuide (Montana State University Extension publication).