

**U.S. Wheat and Barley Scab Initiative
Annual Progress Report
September 15, 1999**

Cover Page

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Year:	FY1999
Grant Number:	59-0790-9-042
Grant Title:	Fusarium Head Blight Research
Amount Granted:	\$4,878.00

Project

Program Area	Objective	Requested Amount
Chemical & Biological Control	Identify safe, effective fungicides for FHB through evaluation across of wheat and/or barley varieties grown in relevant environments.	\$4,000
Chemical & Biological Control	Develop and implement systems for disseminating research information in a timely fashion to producers.	\$1,000
	Requested Total	\$5,000¹

¹ Note: The Requested Total and the Amount Granted are not equal.

Project 1: Identify safe, effective fungicides for FHB through evaluation across of wheat and/or barley varieties grown in relevant environments.

1. What major problem or issue is being resolved and how are you resolving it?

Evaluate existing application technology and wheat fungicide chemistry as a tool for managing Fusarium head blight at two locations in Kentucky. Determine economics of the various treatments evaluated.

2. Please provide a comparison of the actual accomplishments with the objectives established.

Fusarium head blight (FHB) disease pressure was light during the 1999 season in Kentucky. As a result, no differences were detected among the fungicide treatments relative to the non-treated control plots at either test location. Thus, none of the treatments were economical. Data indicate the importance of developing FHB forecasting models so that fungicide treatments, should they be shown to be effective, are only applied when needed.

3. What were the reasons established objectives were not met? If applicable.

Natural disease pressure was extremely light in the two test locations.

4. What were the most significant accomplishments this past year?

Showed the importance of disease forecasting since FHB epidemics in Kentucky are very unpredictable and often have little impact on crop yields.

Project 2: Develop and implement systems for disseminating research information in a timely fashion to producers.

1. What major problem or issue is being resolved and how are you resolving it?

Lack of producer knowledge about the possible use and limitations of foliar fungicides managing Fusarium head blight (FHB).

2. Please provide a comparison of the actual accomplishments with the objectives established.

Information concerning the potential use and limitations of foliar fungicides in managing FHB was presented at two large field days to 375 wheat producers. Representing about 150,000 wheat and/or barley acres.

3. What were the reasons established objectives were not met? If applicable.

Not applicable.

4. What were the most significant accomplishments this past year?

Farmers representing about 150,000 acres of wheat and/or barley were educated about the potential for foliar fungicides to assist in managing FHB epidemics.

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Progress Report

Include below a list of the publications, presentations, peer reviewed articles, and non-peer reviewed articles written about your work that resulted from all of the projects included in the grant. Please reference each item using an accepted journal format. If you need more space, continue the list on the next page.

Presentations:

1999 Joint Research Conference of the Eastern and Southern Small Grain Workers – May 2-4, 1999, Williamsburg, VA

University of Kentucky Wheat Field Day – May 19, 1999, Princeton, Kentucky

Wheat Tech, Inc. Wheat Field Day – May 20, 1999, Allensville, Kentucky

Posey County Wheat Field Day - June 2, 1999, Mt. Vernon, Indiana.

Publications:

Hershman, D. E. Fusarium head blight of wheat: current and prospective management strategies. IN: Proceedings of 1999 Joint Research Conference of the Eastern and Southern Small Grain Growers. May 2-4, 1999, Williamsburg, VA

Results of 1999 Uniform Fusarium Head Blight Fungicide Test. IN: 1998-99 University of Kentucky Wheat Science Report.