U.S. Wheat and Barley Scab Initiative
Annual Progress Report
September 18, 2000

Cover Page

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Year:	**FY2000**
Grant Number:	**59-0790-9-047**
Grant Title:	**Fusarium Head Blight Research**
Amount Granted:	**$9,900.00**

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.	$9,900.00
	Requested Total	$9,900.00

____Roger K. Jones_____9/13/00___
Principal Investigator Date

(Form – PR1)

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?

   Currently, Folicur (tebuconazole) is registered by the EPA for use on wheat and barley to supress FHB through Section 18 specific exemption from tolerance. Tilt fungicide (propiconazole) is registered through special local need (SLN 24c) registrations. It is imparative to continue full registration efforts for these fungicides while continuing to investigate the efficacy of new and or alternative fungicides on new, important wheat and barley varieties in a relevant environment.

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

   In 2000, trials were conducted at on the new spring wheat (HRSW) cultivar Ivan and the susceptible 6-row malt barley cultivar Stander. Each trial consisted of 10 treatments in an RCB design replicated 4 times (as per the uniform testing protocol). Tests included tebuconazole, propiconazole, metconazole, azoxystrobin, BAS 500, and benomyl. Experiments have been planted, spray treatments applied, plots were assessed for disease and harvested. DON analysis is not yet complete.

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

   Objectives were met. Results will be forwarded to the Research Program Area Coordinator (Marcia McMullen) following completion of the DON analysis.

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

   The strobilurine BAS 500 continued to out perform standard treatments. Metconazole (Caramba) performed better than propiconazole or tubuconazole (the standard treatments). Variety selection (cultivar Ivan) sustantially reduced interactions with Septoria and Leaf rust. Septoria developed in the barley trial (affecting the flag leaves). This was the first trial I have done in which levels of this disease were significant. Triazole fungiceds were effective against it (particularly metconazole).

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.

Jones, R.K. 2000. Assessments of Fusarium head blight of wheat and barley in response to fungicide treatment. Plant Disease 84:1021-1030.