

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

Cover Page

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Year:	FY1999
Grant Number:	59-0790-9-072
Grant Title:	Fusarium Head Blight Research
Amount Granted:	\$9,756.00

Project

Program Area	Objective	Requested Amount
Chemical & Biological Control	Identify application technologies that will maximize fungicide coverage and efficacy against FHB.	\$10,000
	Requested Total	\$10,000¹

Principle Investigator

Date

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

Project 1: Identify application technologies that will maximize fungicide coverage and efficacy against FHB.

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

The project is proceeding as planned. During the 1999 production season Agricultural Engineers cooperated with Dr. Pat Hart's field staff to conduct "side by side" efficacy studies comparing two different fungicide application technologies and a non-sprayed control in replicated plots.

STANDARD APPLICATION

Boom sprayer with angled (10 Degrees from horizontal, rearward), flat fan nozzles (SS11002) on 20" centers at 55 psi, 5.4 mph ground speed, resulting in 13.2 GPA (gallons per acre).

EXPERIMENTAL PROTOTYPE APPLICATION

Protec heads (air-assisted, small droplet, rotary atomizer) on 5 foot centers, angled at 45 degrees downward, .27 GPM (gallons per minute) per head, 5.4 mph ground speed, resulting in 5 GPA.

FUNGICIDE RATE

A.) Folicur at 4 oz. / acre + Induce (0.06% v/v)

B.) Folicur at 2.5 oz. / acre + Induce (0.06% v/v)

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

Project proceeding as planned. Beginning this fall, we plan to proceed with the construction of a prototype air-carrier sprayer that can be skid-mounted into the back of a pickup truck. This unit will enable us to conduct commercial scale field studies next production season.

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

NA

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

The low-volume, air-assisted application system appears to be an equally effective with standard boom spraying as a method of scab control.

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Progress Report

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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.

Our research team is just receiving and analyzing our first set of field results. At this time it is premature for any publications.