

**U.S. Wheat and Barley Scab Initiative
 FY00 Final Performance Report (approx. May 00 – April 01)
 July 30, 2001**

Cover Page

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Year:	FY2000 (approx. May 00 – April 01)
Grant Number:	59-0790-0-065
Grant Title:	Fusarium Head Blight Research
2000 ARS Award Amount:	\$8,780

Project

Program Area	Project Title	Requested Amount
Variety Development & Uniform Nurseries	Uniform scab nursery for Iowa.	\$4,000.00
Chemical & Biological Control	Uniform fungicide Trials to Identify Safe Products that are Effective Against FHB.	\$5,000.00
	Requested Total	\$9,000.00¹

Principal Investigator

Date

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

Project 1: Uniform scab nursery for Iowa.

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

Currently available commercial wheat varieties are not sufficiently resistant to Fusarium head blight. I am collaborating with other researchers in an attempt to solve this problem by developing wheat varieties with improved resistance to Fusarium head blight. My role is to provide data on head blight reactions of what varieties, breeding lines, and introductions in the Iowa environment. It is essential to evaluate these genotypes under a wide variety of environments in order to ensure that their performance is reliable and consistent.

2. What were the most significant accomplishments?

We have made progress toward the objective of accelerating the development of resistant wheat varieties by accumulating data on scab reactions of the entries in the spring wheat nursery. We collected data on disease severity, scabby kernels, 100-kernel weights, and deoxynivalenol for 43 entries. Our winter wheat nursery for 2000-2001 was abandoned due to winter kill.

Project 2: Uniform fungicide Trials to Identify Safe Products that are Effective Against FHB.

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

Fusarium head blight currently cannot be controlled adequately by non-chemical methods. It is uncertain whether currently available fungicides and those under development can provide effective, economical control of Fusarium head blight under a variety of environmental conditions. We are resolving the problem by conducting experiments to identify fungicides that can do so.

2. What were the most significant accomplishments?

We were not successful in contributing to the objectives of the project because Fusarium head blight symptoms were virtually nonexistent in our research plot in 2000. We have adjusted our procedures for 2001 in order to increase the likelihood of Fusarium head blight occurrence.

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.

None.