U.S. Wheat and Barley Scab Initiative FY01 Final Performance Report (approx. May 01 – April 02) July 15, 2002

Cover Page

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Year:	FY2001 (approx. May 01 – April 02)
Grant Number:	59-0790-9-042
Grant Title:	Fusarium Head Blight Research
FY01 ARS Award Amount:	\$ 5,841

Project

Program Area	Project Title	Requested Amount
	Identification of Safe and Effective Foliar	
Chem/Bio	Fungicides for Managing Fusarium Head Blight in	\$ 5,000
	Wheat	
	Total Amount Requested	\$ 5,000

Principal Investigator	Date

FY01 (approx. May 01 – April 02)

PI: Hershman, Donald E. Grant: 59-0790-9-042

Project 1: Identification of Safe and Effective Foliar Fungicides for Managing Fusarium Head Blight in Wheat

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

This work was done as part of the 2000-2001 National Uniform Fusarium Head Blight Biological Control Agent and Foliar Fungicide Test. In this test, common fungicide treatments were applied by scientists in all cooperating states with the purpose of identifying safe and economic biological control agents and/or fungicidal treatments that effectively manage or suppress Fusarium head blight in wheat. Two biological control agents and eight fungicide treatments were applied in the spring of 2001 to an inoculated (with various isolates of *Fusarium graminearum*) and mist-irrigated field located at the University Research and Education Center, Princeton, KY. Each treatment was applied once at the beginning of crop flowering. Subsequently, disease ratings were made; data were also collected for yield and vomitoxin contamination.

2. What were the most significant accomplishments?

Certain fungicides tested significantly reduced the incidence, but not severity, of Fusarium Head Blight in inoculated, mist-irrigated wheat. The biological control agents tested did not provide any measurable control of Fusarium head blight. Grain quality was significantly improved by most fungicide treatments tested.

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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.

Hershman, D. E., Bachi, P. R., TeKrony, D. M. and VanSanford, D. A. 2001. 2000-2001 Management of Fusarium Head Blight in Wheat Using Selected Biological Control Agents and Foliar Fungicides. IN: University of Kentucky Wheat Science 2000-2001 Research Report.

Hershman, D. E, Bachi, P., VanSanford, D. and TeKrony, D., Hall, M., Kennedy, B., and Hua, L. 2001. NCR-184 2001 Kentucky State Report. IN: Proceedings of 2001 National Fusarium Head Blight Forum, Erlanger, KY, December 2001.

Presentation made to wheat growers, ag consultants and extension agents at the University of Kentucky Wheat Field Day at Princeton, KY. May 2001.