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:	**59-0790-9-069**
Grant Title:	**Fusarium Head Blight Research**
FY01 ARS Award Amount:	**$ 5,841**

Project

Program Area	Project Title	Requested Amount
Chem/Bio	Uniform Fungicide Trial to Identify Products Effective Against Fusarium Head Blight	$ 5,000
	Total Amount Requested	**$ 5,000**

Laura E. Sweets July 9, 2002

Principal Investigator Date

(Form – FPR01)

Project 1: Uniform Fungicide Trial to Identify Products Effective Against Fusarium Head Blight

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

The Uniform Scab Fungicide Trial was set up to identify safe fungicides that are most effective against FHB. A given set of fungicides is being evaluated for consistency in performance across a number of wheat classes and varieties, barley varieties and environments. For the past two years the trial has been expanded to include two biological materials as well as chemical fungicides. Missouri is participating in this uniform scab fungicide trial. The set of fungicides and biologicals was applied to two soft red winter wheat varieties and data was collected on FHB incidence, head severity, foliage disease severity, yield and test weight. The fieldwork for this trial has just been completed. Data is being analyzed prior to completion of the current year's report.

2. What were the most significant accomplishments?

The Uniform Scab Fungicide Trial was conducted in Missouri this season. No difficulties were encountered in planting, maintaining or harvesting the trial. Although timely rains did occur as the wheat was flowering, the rains were accompanied by cooler than normal temperatures. Development of FHB was slow. Field ratings of FHB were quite low. However, the harvested grain showed higher levels of tombstone or shrunken kernels. Results from DON analysis have not yet been received.

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:

Crop Injury Diagnostic Clinic, Field Crop Disease Session, July 2001, Columbia, Missouri

Update on Field Crop Diseases at Crop Management Conference, November, 2000, Columbia, Missouri

Update on Field Crop Diseases during Commercial Pesticide Applicators Recertification Program, January 2001, St. Louis and Kansas City, Missouri

Wheat Diseases, MFA Training, February 2002, Columbia, Missouri

Crop Scouting School, March 2001, Lamar, MO

MU Winter Wheat Diagnostic Clinic, May 2001, Columbia, MO

Hail School, June 2001, Columbia, MO

Publications:

Articles in Integrated Pest and Crop Management Newsletter, published by University of Missouri IPM Program

2 news releases by University of Missouri Information Services

Sweets, L.E. 2001. Evaluation of fungicides for control of Fusarium head blight and leaf diseases on winter wheat. 2000. Fungicide and Nematicide Tests 56. Online publication

Milus, E.A., Donald Hershman and Marcia McMullen. 2001. Analysis of the 2001 uniform wheat fungicide and biocontrol trials across locations, pp. 75-79 in 2001 National Fusarium Head Blight Forum Proceedings. Missouri data is included in this summary