

USDA-ARS / USWBSI
FY03 Final Performance Report (approx. May 03 – April 04)
July 15, 2004

Cover Page

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Year:	FY2003 (approx. May 03 – April 04)
FY03 ARS Agreement ID:	59-0790-9-069
FY03 ARS Agreement Title:	Uniform Fungicide Trial to Identify Products Effective Against Fusarium Head Blight.
FY03 ARS Award Amount:	\$ 5,854

USWBSI Individual Project(s)

USWBSI Research Area*	Project Title	ARS Adjusted Award Amount
CBC	Uniform Fungicide Trial to Identify Fusarium Head Blight Effective Products.	\$ 5,854
	Total Amount Recommended	\$ 5,854

Principal Investigator

Date

* BIO – Biotechnology
CBC – Chemical & Biological Control
EDM – Epidemiology & Disease Management
FSTU – Food Safety, Toxicology, & Utilization
GIE – Germplasm Introduction & Enhancement
VDUN – Variety Development & Uniform Nurseries

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

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 effective against Fusarium Head Blight. A given set of fungicides is being evaluated for consistency of performance across a number of wheat classes and varieties, barley classes and environments. For the past several years the trial has been expanded to include biological materials as well as chemical fungicides. The set of fungicides and biologicals was applied to three 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 for the annual 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. Environmental conditions were favorable for the development of FHB in the trial. Levels of FHB varied greatly between varieties in the trial. Septoria leaf blotch was also present throughout the trial area. Data on FHB severity and incidence, counts on scabby kernels and results for DON analysis are being compiled for analysis. Trial results should be particularly meaningful this year.

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 your 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 2003, Columbia, MO

Update on Field Crop Diseases at Crop Management Conference, December 2002, Columbia, MO

Update on Field Crop Diseases during Commercial Pesticide Applicator Recertification, January 2003, Kansas City and Columbia, MO

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

Hail School, June 2002, Columbia, MO

Wheat Meetings and Field Days, Portageville, Jackson, Novelty, Lamar and Passaic, MO during the spring of 2003

Publications:

Sweets, L. E. 2003. Evaluation of fungicides for the control of Fusarium head blight and leaf diseases on 'Elkhart' 'Pioneer variety 2540' winter wheat in Missouri. 2003 National Fusarium Head Blight Forum Proceedings. pp. 109-111

Missouri data included in:

Hershman, D.E. and E. A. Milus. 2003. Analysis of the 2003 uniform wheat fungicide trials across locations. 2003 National Fusarium Head Blight Forum Proceedings. pp. 76-80.