

**U.S. Wheat and Barley Scab Initiative  
 FY02 Final Performance Report (approx. May 02 – April 03)  
 July 15, 2003**

**Cover Page**

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<b>Grant Number:</b>	<b>59-0790-9-030</b>
<b>Grant Title:</b>	<b>Fusarium Head Blight Research</b>
<b>FY02 ARS Award Amount:</b>	<b>\$ 75,649</b>

**Project**

<b>Program Area</b>	<b>Project Title</b>	<b>USWBSI Recommended Amount</b>
FSTU	Diagnostic Services for Vomitoxin (DON) in Wheat.	\$77,540
	<b>Total Amount Recommended</b>	<b>\$77,540</b>

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 Principal Investigator

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 Date

**Project 1: Diagnostic Services for Vomitoxin (DON) in Wheat.**

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

*Fusarium* Head Blight (FHB) or ‘scab’ is an important fungal disease of wheat and barley. The fungus can be stressed to produce a mycotoxin, deoxynivalenol (DON) or vomitoxin, in grains. At certain concentrations of vomitoxin, wheat and barley may be unacceptable for processing into human foods or animal feeds.

A major focus of the U.S. Wheat and Barley Scab Initiative (USWBSI) is the developing and managing of different systems to mitigate FHB infection. This grant provided vomitoxin (DON) analysis of samples submitted by scientists involved in wheat and barley USWBSI research.

2. What were the most significant accomplishments?

The laboratory completed vomitoxin analysis on over 4000 ( $n=4195$ ) ground feed samples. The samples were submitted from scientists in seven states, including North and South Dakota, Minnesota, Iowa, Nebraska, Missouri, and Arkansas. The laboratory performed broad spectrum analysis for 15 *Fusarium* mycotoxins by GC/MS screen when requested ( $n=12$  samples).

The laboratory also participated in the check sample system to compare data from vomitoxin laboratories in Michigan, North Dakota, Minnesota, and New York.

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.

Mostrom MS, Schwarz P, Don Y, Hart P. Diagnostic Vomitoxin (DON) Services in 2002/2003 Samples. *2002 National Fusarium Head Blight Forum Proceedings*, Erlanger, KY. December 7-9, 2002.