

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY12 Final Performance Report
July 16, 2013**

Cover Page

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Fiscal Year:	FY12
USDA-ARS Agreement ID:	NA
USDA-ARS Agreement Title:	Maintain and Improve the U.S. Wheat & Barley Scab Initiative's Website.
FY12 USDA-ARS Award Amount:	\$ 61,500

USWBSI Individual Project(s)

USWBSI Research Category*	Project Title	ARS Award Amount
EC-HQ	US Wheat & Barley Scab Initiative's Networking & Facilitation Office and Website.	\$ 61,500
	Total ARS Award Amount	\$ 61,500

Principal Investigator

Date

* MGMT – FHB Management
 FSTU – Food Safety, Toxicology, & Utilization of Mycotoxin-contaminated Grain
 GDER – Gene Discovery & Engineering Resistance
 PBG – Pathogen Biology & Genetics
 BAR-CP – Barley Coordinated Project
 DUR-CP – Durum Coordinated Project
 HWW-CP – Hard Winter Wheat Coordinated Project
 VDHR – Variety Development & Uniform Nurseries – Sub categories are below:
 SPR – Spring Wheat Region
 NWW – Northern Soft Winter Wheat Region
 SWW – Southern Soft Red Winter Wheat Region

Project 1: *US Wheat & Barley Scab Initiative's Networking & Facilitation Office and Website.***1. What major problem or issue is being resolved relevant to Fusarium head blight (scab) and how are you resolving it?**

The U.S. Wheat & Barley Scab Initiative provides a suite of services with the goal of aiding the scab community by making information easily accessible. It does this through a centralized web server that uses the latest technologies to provide rapid access to the latest information. Some examples of these technologies are live SMS text messaging updates, emails and blogs of current field conditions, mailing lists for general scab related discussions, image libraries, and access to the USWBSI database, just to name a few. The centralized nature of these services also provides for easier public access and rapid feature development as well as simplified maintenance and administration.

To improve upon these services, the project continues to develop and use new technologies with the goal of providing as much information as possible in an easily digestible manner. New services and features are added as they become available and improvements to the current suite of services is an ongoing process. Many of the applications and services provided by server are created by the project's webmaster and programmer. Several open source and commercial applications are also used and heavily customized to meet the goals of the U.S. Wheat & Barley Scab Initiative.

2. List the most important accomplishment and its impact (i.e. how is it being used) to minimize the threat of Fusarium head blight or to reduce mycotoxins. Complete both sections (repeat sections for each major accomplishment):**Accomplishment (1):**

Rewrote all scripts used to access the databases hosting information on Grants, Contacts, Projects, Documents, and Institutions. Both the public and administrative scripts were rewritten.

Impact:

The old web accessible scripts were written in the perl language. Due to the old age of the scripts, some of the language used in them is no longer supported by modern versions of perl. The scripts were rewritten using the PHP programming language. This allowed us to increase the security of the scripts and of the server itself by using modern security methods. During the rewrite an improved user interface was created. New features were also added to the scripts to aid in navigation, searching, and to improve data retrieval speed.

Accomplishment (2):

Several new administrative functions were added to the server to improve upon security, prevent spam, and ease administration duties.

Impact:

A great deal of time was being wasted cleaning up fake registrations and dealing with spam in the various mailing lists. Some new programming functions were added to the site scripts that greatly reduce the instances of these types of issues and keeps spam from being sent to

the community. A new unified administration page was also created to allow the NFO a single login point and a single web page to access all administrative functions. This will save time by reducing the number of logins and ease in keeping track of administrative URLs. Previously, each page had its own login interface. Now they all use the Scabusa.org content management software's login abilities to verify the user.

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.

Forum Proceedings:

Canty, S., A. Clark, A. Anderson-Scully, and D. Van Sanford (Eds.). 2012. Proceedings from the 2012 National Fusarium Head Blight Forum, Orlando, FL; December 4-6. East Lansing, MI/Lexington, KY: U.S. Wheat & Barley Scab Initiative.

Complete Proceedings are available in PDF format on the USWBSI's Website at:

<http://www.scabusa.org/forum.html#forum12>

Abstracts:

D. Hane, S. Canty, D. Van Sanford and O. Anderson. 2012. "Overview of the USWBSI Web Site." In: S. Canty, A. Clark, A. Anderson-Scully and D. Van Sanford (Eds.), *Proceedings of the 2012 National Fusarium Head Blight Forum*. East Lansing, MI/Lexington, KY: U.S. Wheat & Barley Scab Initiative. p. 157.

On-Line Article:

Lilleboe, D.. 2012, September. *Fusarium Head Blight a Minimal Issue in 2012*. U.S. Wheat & Barley Scab Initiative. Website: http://scabusa.org/pdfs/USWBSI-Article_2012-Update_10-9-12.pdf.

USWBSI Newsletters:

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Spring 2013. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 13, Issue 1.

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Fall 2012. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 12, Issue 2.

All Newsletters are available in PDF format on the USWBSI's Website

(<http://www.scabusa.org/news.html#newsletters>).

FY12 (approx. May 12 – May 13)

PI: Anderson, Olin

USDA-ARS Agreement #: NA

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Press Release:

4-23-13 News Release: Scab Initiative Challenges Funding Elimination.

All Press Releases are available in PDF format on the USWBSI's Website
(http://scabusa.org/news.html#press_rel).