

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY11 Final Performance Report
July 13, 2012**

Cover Page

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Fiscal Year:	FY11
USDA-ARS Agreement ID:	NA
USDA-ARS Agreement Title:	Maintain and Improve the U.S. Wheat & Barley Scab Initiative's Website.
FY11 USDA-ARS Award Amount:	\$ 38,500

USWBSI Individual Project(s)

USWBSI Research Category*	Project Title	ARS Award Amount
EC	USWBSI's Networking and Facilitation Office, and Website.	\$ 38,500
	Total ARS Award Amount	\$ 38,500

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: *USWBSI's Networking and 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?

Information sharing and access are key to the success of the Scab community. The U.S. Wheat & Barley Scab Initiative provides a publicly accessible server that hosts a comprehensive suite of services and applications to facilitate data access and dissemination. These applications and services are provided by server programs that 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.

The driving factors during the development of applications and services is ease of use for all users, increasing data access, and providing faster distribution of the latest scab related information. Services available to the public that allow for this include features such as mass mailing lists, image libraries, discussion boards, blogs, 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.

This project is directly associated with the following two FY11 Projects:

<u>Project Title – Project ID</u>	<u>Principal Investigator</u>	<u>ARS ID/Institution</u>
U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website.- FY11-VA-007	Kells, James	59-0206-9-057/Michigan State University
U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website.- FY11-VA-007	Van Sanford, David	59-0206-1-082/University of Kentucky

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): All of the old perl scripts had become outdated and required rewriting in a language (PHP) that is more compatible with the software running the USWBSI web site. These scripts were mainly those used by the general public to access databases and register for the annual forum.

Impact(1): The new scripts had updated user interfaces and more features than the previous versions. They are also more compatible with modern operating systems and programming languages. Additionally, several site-wide system variables and parameters were centralized. This leads to the scripts being easier to maintain and change as needed.

Accomplishment (2): Presented a poster and live demonstration highlighting the USWBSI website and its many features at the 2011 National Fusarium Head Blight Forum.

Impact(2): The poster alerted users to new features we have introduced and for several it allowed them to become aware of features they did not know existed. A tablet device was used to demonstrate how the website worked and to answer questions by actually showing the users the answer instead of describing it.

Accomplishment (3): Several new scripts were written for the administrative functions of running the site and managing data. They include new scripts to mass edit user groups and their permissions, a simplified folder permission editing script for the Electronic Pre-Proposal System (EPS), and several scripts required for the administration of forum registrations. The FHB Alert administrative interface was updated with the ability to send a mass email declaring the season opening and the ability to add new subscribers directly from the administrative page.

Impact(3): All of these scripts and changes help facilitate the administration of information and to streamline the workflow required to manage the various features associated with the USWBSI web site.

Accomplishment (4): The DON Labs website was moved from http://www.uky.edu/Ag/Wheat/wheat_breeding/USWBSI/DON_submission.html to the USWBSI server at this address <http://scabusa.org/don-labs/>. This required major editing to the pages and image map used to run the site.

Impact(4): The University of Kentucky had been maintaining this site for the USWBSI, but the person responsible for keeping it updated left the university. The USWBSI took over the responsibility of maintain the site to ensure the site was secure and content kept up to date for users.

Accomplishment (5): New firewall hardware was installed to further enhance the security of the USWBSI server.

Impact (5): A hardware failure of the old firewall caused the server administrator to purchase and install a new firewall system. This firewall was purchased and is maintained by the server administrator. This gives the server administrator greater capabilities to secure the server hardware from unauthorized access and attacks that may interrupt service.

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.). 2011. Proceedings from the 2011 National Fusarium Head Blight Forum, St. Louis, MO; December 4-6. University of Kentucky, Lexington, KY.

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

<http://www.scabusa.org/forum.html#forum11>

Abstracts:

E. De Wolf, P. Paul, D. Hane, S. Canty, D. Van Sanford, P. Knight and D. Miller. 2011. "Evaluating the Impact of the FHB Prediction Models and FHB Alerts, 2009-2011." In: S. Canty, A. Clark, A. Anderson-Scully and D. Van Sanford (Eds.), Proceedings of the 2011 National Fusarium Head Blight Forum. East Lansing, MI/Lexington, KY: U.S. Wheat & Barley Scab Initiative. p. 134.

D. Hane, S. Canty, D. Van Sanford and O. Anderson. 2011. Overview of the USWBSI Web Site." In: S. Canty, A. Clark, A. Anderson-Scully and D. Van Sanford (Eds.), Proceedings of the 2011 National Fusarium Head Blight Forum. East Lansing, MI/Lexington, KY: U.S. Wheat & Barley Scab Initiative. p. 171.

On-Line Article:

Lilleboe, D.. 2011, September. *Fusarium Head Blight in 2011: An Overview*. U.S. Wheat & Barley Scab Initiative. Website: http://scabusa.org/pdfs/USWBSI-Article_2011-Update_9-29-11.pdf

USWBSI Newsletters:

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Spring 2012. Fusarium Focus. U.S. Wheat & Barley Scab Initiative. Volume 12, Issue 1.

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Fall 2011. Fusarium Focus. U.S. Wheat & Barley Scab Initiative. Volume 11, Issue 2.

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

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

FY11 (approx. May 11 – May 12)

FY11 Final Performance Report

PI: Anderson, Olin

USDA-ARS Agreement #: NA

Press Releases:

9-29-11 News Release: Majority of Small Grain-Producing States Had Light 'Scab' Year in 2011

2-28-11 News Release: Fusarium Head Blight Alert System Goes Live in Early March

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

(http://scabusa.org/news.html#press_rel).