USDA-ARS/ U.S. Wheat and Barley Scab Initiative FY08 Final Performance Report (approx. May 08 – April 09) July 15, 2009

Cover Page

PI:	Olin Anderson		
Institution:	USDA-ARS		
Address:	Genomics and Gene Discovery (GGD)		
	800 Buchanan St.		
	Albany, CA 94710		
E-mail:	oanderson@pw.usda.gov		
Phone:	510-559-5773		
Fax:	510-559-5777		
Fiscal Year:	2008		
USDA-ARS Agreement ID:	NA		
USDA-ARS Agreement	Maintain and Improve the U.S. Wheat & Barley Scab Initiative's		
Title:	Website		
FY08 USDA-ARS Award	\$ 37,238		
Amount:	φ 37,230		

USWBSI Individual Project(s)

USWBSI Research		ARS Adjusted Award
Category [*]	Project Title	Amount
EC-HQ	Maintain and Improve the U.S. Wheat & Barley Scab Initiative's Website.	\$37,238
	Total Award Amount	\$ 37,238

Principal Investigator

Date

MGMT – FHB Management

- GDER Gene Discovery & Engineering Resistance
- PBG Pathogen Biology & Genetics

- HWW-CP Hard Winter Wheat Coordinated Project
- VDHR Variety Development & Uniform Nurseries Sub categories are below:
- SPR Spring Wheat Region

FSTU - Food Safety, Toxicology, & Utilization of Mycotoxin-contaminated Grain

BAR-CP – Barley Coordinated Project

NWW – Northern Winter Wheat Region

SWW – Southern Sinter Wheat Region

Project 1: Maintain and Improve the U.S. Wheat & Barley Scab Initiative's 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.

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: Creation of the scabusa.org web portal

Impact: Over the years the U.S. Wheat & Barley Scab Initiative has continued to develop new features and services for users. This has resulted in a loosely connected set of online applications that were primarily accessed from the USWBSI website (http://scabusa.org). Several of the applications required accounts to edit online data. Multiple logins for users moving from one application to another was starting to become cumbersome. It was decided to create a single point of login for users and to merge the applications into a more seamless interface. New features were also to be added during this transition.

To facilitate this change, the static data pages and dynamic web applications were to be replaced by a completely dynamic web portal, similar to yahoo.com. The new Scabusa portal would allow for a user to login once and have access to the whole suite of applications and services available to the community. Since the programs would then be tightly integrated users could also customize data access to meet their interests and needs.

With these goals in mind, the Xoops web portal software (http://www.xoops.org/) that was currently in use for the scabusa.org site was to be expanded to encompass the whole site. Old applications were replaced with exact or near equivalent modules into the Xoops system. Due to the modular nature of Xoops, features were quickly incorporated, tested, and customized if needed. The past year has been spent testing and configuring the new system to go online during the FY09 year. The new site went live on June 16, 2009.

FY08 (approx. May 08 – April 09) PI: Anderson, Olin USDA-ARS Agreement #: NA

> The new scabusa.org portal increased the ease of use of the services and applications for users by closely associating them and proving a single point of access. Users are also able to customize how they access the data and what data is accessed. Additionally new services were added. These include a photo library, online chat with other scabusa.org users, and customizable web calendar.

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, J. Mundell, E. Walton and D. Van Sanford (Eds.). 2008. Proceedings from the 2008 National Fusarium Head Blight Forum, Indianapolis, IN; December 2-4. University of Kentucky, Lexington, KY.

Proceedings are available in PDF format on the USWBSI's Website (<u>http://www.scabusa.org/forum.html#forum08</u>)

Newsletters:

- Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Spring 2009. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 9, Issue 1.
- Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Fall 2008. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 8, Issue 2.
- All Newsletters are available in PDF format on the USWBSI's Website (<u>http://www.scabusa.org/news.html#newsletters</u>).

Press Releases:

<u>06-12-09 News Release</u>: Midwest Scab a 'Good News, Bad News' Scenario. <u>06-04-09 News Release</u>: Serious Scab Problems in Southern Wheat States.

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

If your FY08 USDA-ARS Grant contained a VDHR-related project, include below a list all germplasm or cultivars released with full or partial support of the USWBSI. List the release notice or publication. Briefly describe the level of FHB resistance. If this is not applicable (i.e. no VDHR-related project) to your FY08 grant, please insert 'Not Applicable' below.

Not applicable.

(Form FPR08)

This project is directly associated with the following two FY08 Projects:

Project Title – Project ID	Principal Investigator	ARS ID/Institution
Hosting the Manager of the USWBSI's Networking and	Kells, James	59-0790-4-128/Michigan State University
Facilitation Office - FY08-VA-008		-
U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website FY08-VA-008	Van Sanford, David	59-0790-6-056/University of Kentucky