

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY13 Final Performance Report
July 15, 2014**

Cover Page

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Fiscal Year:	FY13
USDA-ARS Agreement ID:	59-0206-9-057
USDA-ARS Agreement Title:	Hosting the Manager of the USWBSI's Networking and Facilitation Office.
FY13 USDA-ARS Award Amount:	\$ 104,670

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.	\$ 104,670
	FY13 Total ARS Award Amount	\$ 104,670

Principal Investigator _____ 7/15/14
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?

Scab affects the industries and people involved in virtually every stage of the production, processing, and distribution systems of five market classes of wheat and barley across the U.S. The Networking and Facilitation Office (NFO) has been in existence since 1999. The goal of the NFO is to minimize the barriers to the success of the U.S. Wheat & Barley Scab Initiative arising from the administrative burdens and communication challenges. In FY13, there were 74 researchers working in 24 institutions (including ARS and NASS) across 26 states (including Washington, DC). The NFO is addressing this problem by 1) helping scientists and all interested parties, who in the past may have problems communicating with each other, to learn from each other by facilitating communications and communication system development; 2) identifying and implementing an internet-based communication and collaboration mechanisms; and 3) acting as a center of accountability and a rapid clearing house of scab-related information. The NFO provides administrative support to the various committees, as well as being responsible for the organization of the Initiative’s annual scientific conference. Finally, the NFO facilitates the annual resolution of a comprehensive national research plan and budget, and represents the Initiative’s only ‘fixed’ asset.

This project is directly associated with the following two FY13 Projects:

Project Title – Project ID	Principal Investigator	ARS ID/Institution
U.S. Wheat & Barley Scab Initiative’s Networking and Facilitation Office, and Website.- FY12-VA-004	Anderson, Olin	NA/USDA-ARS
U.S. Wheat & Barley Scab Initiative’s Networking and Facilitation Office, and Website.- FY12-VA-004	David Van Sanford	59-0206-9-054/ University of Kentucky

2. List the most important accomplishments and their impact (i.e. how are they 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):

One of the NFO’s most important accomplishments was the successful facilitation of the development of the USWBSI’s FY14 Research Plan and Budget, which was approved by USDA-ARS in April.

Impact:

One-hundred and twenty-nine research projects across five research areas (FHB Management, Food Safety, Toxicology and Utilization of Mycotoxin-contaminated Grain,

Gene Discovery and Engineering Resistance, and Variety Development and Host Resistance (primarily organized around three regional FHB nurseries)), four commodity-based coordinated projects (Barley, Durum, Hard Winter Wheat and Western (includes spring wheat and barley)), and the USWBSI Headquarters (Office and Website), received funding in the amount of \$4,898,469 to continue the fight against FHB.

Table 1. Summary of Meetings, Conference Calls and Workshops/Planning meetings facilitated by the Networking & Facilitation Office (NFO) during FY14.

Committee/Group	# of Meetings/ Conference Call (CC)	Description/Purpose of Meeting
Steering Committee (SC)	2 Meetings	4-16-13: Semi-Annual Meeting 12-9-13: Semi-Annual Meeting – Review FY14 Research Plan and Budget
Executive Committee (EC)	5 Meetings 2 CC	Meetings: 4-15-13: Prep-meeting prior to the SC’s meeting on 4-16-13 12-6-13: EC met with review panels to discuss their recommendations; 12-7-13.: EC discusses recommendations from review panels, etc. for FY14 Research Plan and Budget. 12-8-13: EC finalizes recommendation on FY14 Research Plan and Budget. 12-9-13: follow-up of Annual Forum and USWBSI’s recommendation for FY14 Research Plan and Budget. 6-18-13: Conference Call: Discuss USWBSI Business – FY14 Research Plan and Budget, setting of Working Caps, and program for Annual Forum. 2-14-14: Conference Call: Discuss options for allocating increased budget from Congress and finalizing FY14 research plan and budget.
Research Area Review Panels (RP)	RP – 5 CC	Review Panels (5 total) – Discuss/finalize their FY14 Funding Requests/Recommendations: FSTU – 11/13/13 GDER – 11/19/13 MGMT: Setting of mini Working Caps – 7/29/13 Review of Pre-Proposals - 11/8/13 PBG: 11/14/13
Research-based Planning Meetings	3 Planning Meetings	4-17-13 – Barley Coordinated Project Planning Meeting, St. Paul, MN 5-8-13– Durum Coordinated Project Planning Meeting, Fargo, ND 5-14-13 – Hard Winter Wheat Coordinated Project Planning Meeting, Manhattan, KS

Accomplishment (2):

In December of 2013, the NFO working with the Forum Organizing Committee facilitated the USWBSI's annual scientific Forum, which was held in Milwaukee, WI. Approximately 185 scientists (including research associates, research technicians and graduate students), growers, and industry representatives from across the nation and around the world, as well as area leaders of the U.S. wheat and barley industry, attended the 2013 National FHB Forum. Research results and findings were presented to the forum participants in the form of invited talks (18), and poster (79) presentations accompanied by abstracts or papers published in the Forum proceedings. One afternoon was devoted to group discussions designed around the USWBSI's five research areas and three commodity-based coordinated projects.

Impact:

The annual Forum is the primary mechanism whereby USWBSI scientists and stakeholders come together to discuss both the progress being made, as well as problems that interfere, with the successful combat against this devastating disease.

Accomplishment (3):

The continued deployment of the FHB Alert System.

Impact:

The purpose of the alert system is to give growers and affiliated industry personnel better advanced notice of potential outbreaks and the risk of scab in their area, thus allowing for timely treatment of fields with fungicides. The FHB Alert system is linked to the FHB Forecasting Tool (<http://www.wheatcab.psu.edu/riskTool.html>). Commentary posted to the forecasting tool by state specialist is sent out to regional/national based list serves, posted on the USWBSI's blog site (<http://scabusa.org/modules/wordpress/>), and sent as text messages (SMS) to cell phones. Producers, crop consultants, grain processors and others can sign up for the alerts by going to the following web site address: http://scabusa.org/fhb_alert.php.

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 FY13 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. Salat, Y., and D. Van Sanford (Eds.). 2013. Proceedings from the 2013 National Fusarium Head Blight Forum, Milwaukee, WI; December 3-5. 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://scabusa.org/fhb-forum#forum13>

Abstracts:

De Wolf, E., P. Paul, S. Crawford, D. Hane, S. Canty, D. Van Sanford, P. Knight and D. Miller. 2012. "Impact of Prediction Tools for Fusarium Head Blight in the US, 2009-2013." In: S. Canty, A. Clark, Y. Salat, and D. Van Sanford (Eds.), *Proceedings of the 2013 National Fusarium Head Blight Forum*. East Lansing, MI/Lexington, KY: U.S. Wheat & Barley Scab Initiative. p. 106.

On-Line Article:

Lilleboe, D. 2014, March. *Initiative Aids Progress in Development of Barley Varieties with Improved Scab Resistance*. U.S. Wheat & Barley Scab Initiative. Website: http://scabusa.org/pdfs/USWBSI-Article_Barley-Success_3-31-14.pdf.

Lilleboe, D. 2014, January. *Scab Initiative's Support Key to HRS Wheat Variety Development*. U.S. Wheat & Barley Scab Initiative. Website: http://scabusa.org/pdfs/USWBSI-Article_HRS-Success_1-6-14.pdf.

Lilleboe, D. 2013, September. *FHB in 2013: From Benign to Serious*. U.S. Wheat & Barley Scab Initiative. Website: http://scabusa.org/pdfs/USWBSI-Article_2013-Update_11-11-13.pdf.

All Web-based articles are available in PDF format on the USWBSI's Website (http://scabusa.org/publications#pubs_articles).

USWBSI Newsletters:

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Winter 2014. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 14, Issue 1.

All Newsletters are available in PDF format on the USWBSI's Website (<http://scabusa.org/news#newsletters>).

FY13 (approx. May 13 – May 14)
PI: Van Sanford, David
USDA-ARS Agreement #: 59-0206-1-082

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Press Release:

2-28-14 News Release: Producers' Input Key in Scab Management Survey

1-6-14 News Release: Scab Initiative's Support Key to HRS Wheat Variety Development.

7-16-13 News Release: Early 2013 Scab Reports: Southern States.

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#press_rel).