

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

Cover Page

| | |
|------------------------------------|---|
| PI: | David Van Sanford |
| Institution: | University of Kentucky |
| Address: | Department of Plant Science 327 Plant Science Bldg. Lexington, KY 40546-0312 |
| E-mail: | dvs@uky.edu |
| Phone: | 859-257-5020 ext. 80770 |
| Fax: | 859-257-7125 |
| Fiscal Year: | FY11 |
| USDA-ARS Agreement ID: | 59-0206-1-082 |
| USDA-ARS Agreement Title: | U.S. Wheat and Barley Scab Initiative's Networking and Facilitation Office and Website. |
| FY11 USDA-ARS Award Amount: | \$ 145,961 |

USWBSI Individual Project(s)

| USWBSI Research Category* | Project Title | ARS Award Amount |
|----------------------------------|---|-------------------------|
| EC | USWBSI's Networking and Facilitation Office, and Website. | \$ 145,961 |
| | Total ARS Award Amount | \$ 145,961 |



Principal Investigator

7/10/12

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?

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 FY11, there were 84 researchers working in 26 institutions (including ARS) across 26 states. 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 FY11 Projects:

| Project Title – Project ID | Principal Investigator | ARS ID/Institution |
|--|-------------------------------|---|
| U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website.- FY11-VA-007 | Anderson, Olin | NA/USDA-ARS |
| 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 |

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: One of the NFO's most important accomplishments was the successful facilitation of the development of the USWBSI's FY12 Research Plan and Budget, which was approved by USDA-ARS in April. See attached table (1) which includes meetings, conference calls, etc. facilitated by the NFO that led to the development of the FY12 Research Plan and Budget.

Impact: One-hundred and fifty-eight 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 (organized around three regional FHB nurseries) , three commodity-based coordinated projects (Barley, Durum and Hard Winter Wheat), and the USWBSI Headquarters (Office and Website), received funding in the amount of \$4,816,323 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 FY11.

| Committee/Group | # of Meetings/ Conference Call (CC) | Description/Purpose of Meeting |
|---|--|--|
| Steering Committee (SC) | 2 Meetings | 4-13-11: Semi-Annual Meeting 12-6-11: Semi-Annual Meeting – Review FY12 Research Plan and Budget |
| Executive Committee (EC) | 5 Meetings 2 CC | Meetings: 4-12-11: Prep-meeting prior to the SC’s meeting on 4-13-11 12-3-11: EC met with review panels to discuss their recommendations; 12-4-11: EC discusses recommendations from review panels, etc. for FY12 Research Plan and Budget. 12-5-11: EC finalizes recommendation on FY12 Research Plan and Budget. 12-6-11: follow-up of Annual Forum and USWBSI’s recommendation for FY12 Research Plan and Budget. 6-30-11: Conference Call: Discuss USWBSI Business – FY12 Research Plan and Budget, setting of Working Caps, and program for Annual Forum. 3-12-12: Conference Call: Discuss options for handling 30% cut to USWBSI’s FY12 funding, and finalize FY12 research plan and budget. |
| Coordinated Project Committees (CPC)/Research Area Review Panels (RP) | CPC/RP – 9 CC | Coordinated Project Committees and Review Panels (6 total) – Discuss/finalize their FY12 Funding Requests/Recommendations: VDHR-SPR – 8/2/11 and 9/28/11 VDHR-NWW – 8/3/11 VDHR-SWW – 8/18/12 FSTU – 11/16/11 GDER – 11/18/12 MGMT: Individual Pre-Proposals: 10/31/11 Integrated Management (IM) CP: 11/1/11 PBG: 11/18/11 |

| Committee/Group | # of Meetings/ Conference Call (CC) | Description/Purpose of Meeting |
|----------------------------------|--|--|
| Research-based Planning Meetings | 5 Planning Meetings | 3-11-11 – Joint meeting of the Northern and Southern Soft Winter Wheat Coordinated Projects, Wooster, OH 3-29-11 – VDHR-SPR Coordinated Project Planning Meeting, Brookings, SD 4-4-11 – Durum Coordinated Project Planning Meeting, Fargo, ND 4-12-11 – Barley Coordinated Project Planning Meeting, St. Paul, MN 5-12-12 – Hard Winter Wheat Coordinated Project Planning Meeting, Lincoln, NE |

Accomplishment (2): In December of 2011, the NFO working with the Forum Organizing Committee facilitated the USWBSI’s annual scientific Forum, which was held in Indianapolis, IN. Approximately 205 crop 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 2011 National FHB Forum. Research results and findings were presented to the forum participants in the form of invited talks (17), and poster (94) 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 (2): 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.

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>).

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).