

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY10 Final Performance Report
July 15, 2011**

Cover Page

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Fiscal Year:	FY10
USDA-ARS Agreement ID:	59-0790-6-056
USDA-ARS Agreement Title:	U.S. Wheat and Barley Scab Initiative's Networking and Facilitation Office and Website.
FY10 USDA-ARS Award Amount:	\$ 149,316

USWBSI Individual Project(s)

USWBSI Research Category*	Project Title	ARS Award Amount
EC-HQ	U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website.	\$ 149,316
	Total ARS Award Amount	\$ 149,316


Principal Investigator

7/15/11
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
EC-HQ – Executive Committee/Headquarters

Project 1: *U.S. Wheat & Barley Scab Initiative'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 FY10, there were 85 researchers working in 26 institutions (including ARS) across 25 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:

<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.- FY10-IN-005	Anderson, Olin	NA/USDA-ARS
U.S. Wheat & Barley Scab Initiative's Networking and Facilitation Office, and Website.- FY10-IN-005	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 (1): One of the NFO's most important accomplishments was the successful facilitation of the development of the USWBSI's FY11 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 FY11 Research Plan and Budget.

Impact (1): One-hundred and sixty-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 \$ \$4,926,864 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 FY10.

Committee/Group	# of Meetings/ Conference Call (CC)	Description/Purpose of Meeting
Steering Committee (SC)	2 Meetings	5-25-10: Semi-Annual Meeting 12-9-10: Semi-Annual Meeting – Review FY11 Research Plan and Budget
Executive Committee (EC)	5 Meetings 1 CC	Meetings: 5-24-10: Prep-meeting prior to the SC's meeting on 5-25-10 12-6-10: EC met with review panels to discuss their recommendations; 12-7-10: EC discusses recommendations from review panels, etc. for FY11 Research Plan and Budget. 12-8-10: EC finalizes recommendation on FY11 Research Plan and Budget. 12-9-10: follow-up of Annual Forum and USWBSI's recommendation for FY11 Research Plan and Budget. 8-10-10: Conference Call: Discuss USWBSI Business – FY11 Research Plan and Budget, setting of Working Caps, and program for Annual Forum.
Research Area Review Panels (RP)	RP – 9 CC	Review Panels (6 total) – Discuss/finalize their FY10 Funding Recommendations: FSTU – 11/12/10, 11/19/10 and 11/23/10 GDER – 11/22/10 and 11/23/10 MGMT: Individual Pre-Proposals: 11/5/10 Integrated Management (IM) Coordinated Project (CP): 11/5/10 Uniform Fungicide/Biocontrol Trials (UT) CP: 11/10/10 PBG: 11/15/10
Research-based Planning Meetings and Conference Calls	1 Planning Meeting	4-9-10 – VDHR-Spring Wheat Region Coordinated Project Planning Meeting, Fargo, ND
VDHR-SWW	5 CC	Purpose of calls (see dates below) was to discuss sharing of germplasm and issues affecting the uniform scab nurseries. Dates of calls: 1/18/11, 1/25/11, 2/3/11, 2/10/11 and 3/3/11
FHB Alert System	2 CC	9/2/10 – Discuss draft survey questions for users of the FHB Alert System 1/6/11 - Discuss upgrade/expansion of the FHB Alert System.
Miscellaneous	1 CC	3/21/11 – discuss plans for developing populations from parents with some major scab resistance QTL

Accomplishment (2): In December of 2010, the NFO working with the Forum Organizing Committee facilitated the USWBSI's annual scientific Forum, which was held in Indianapolis, IN. Around 180 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 2010 National FHB Forum. Research results and findings were presented to the forum participants in the form of invited talks (18), and poster (83) 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.

Accomplishment (3): Significant changes (added two states and refined regions so growers and other users have information that is more customized to their geographic area) were made to the FHB Alert system with the aim of better servicing our end-users.

Impact (3): 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_2011.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 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, D. Ellis and D. Van Sanford (Eds.). 2010. Proceedings from the 2010 National Fusarium Head Blight Forum, Milwaukee, WI; December 7-9. University of Kentucky, Lexington, KY.

Proceedings are available in PDF format on the USWBSI's Website at:
<http://www.scabusa.org/forum.html#forum10>

Abstracts:

Hane, D., S. Canty, E. DeWolf, S. Crawford and D. Van Sanford. 2010. "The U.S. Wheat and Barley Scab Initiative's FHB Alert System." In: Canty, S., A. Clark, A. Anderson-Scully, D. Ellis and D. Van Sanford (Eds.). 2010. *Proceedings from the 2010 National Fusarium Head Blight Forum*, Milwaukee, WI; December 7-9. University of Kentucky, Lexington, KY. p. 177.

USWBSI Newsletters:

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Winter 2011. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 11, Issue 1.

Lilleboe, D., S. Canty, and D. Van Sanford (Eds.). Fall 2010. *Fusarium Focus*. U.S. Wheat & Barley Scab Initiative. Volume 10, Issue 2.

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

Press Releases:

2-28-11 News Release: Fusarium Head Blight Alert System Goes Live in Early March
6-30-10 News Release: 'Scab Smart' Helps Growers & Industry Understand & Manage Fusarium Head Blight.
5-10-10 News Release: Wheat & Barley Producers Can Sign Up for Scab Alerts.

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