

**USDA-ARS/  
U.S. Wheat and Barley Scab Initiative  
FY16 Final Performance Report  
Due date: July 28, 2017**

**Cover Page**

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<b>Fiscal Year:</b>	2016
<b>USDA-ARS Agreement ID:</b>	N/A
<b>USDA-ARS Agreement Title:</b>	Curation of Data for USWBSI's Breeder Database.
<b>FY16 USDA-ARS Award Amount:</b>	\$ 6,750

**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.	\$ 6,750
	<b>FY16 Total ARS Award Amount</b>	<b>\$ 6,750</b>

  
Principal Investigator

25 July 2017  
Date

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\* MGMT – FHB Management  
 FST – Food Safety & Toxicology  
 GDER – Gene Discovery & Engineering Resistance  
 PBG – Pathogen Biology & Genetics  
 EC-HQ – Executive Committee-Headquarters  
 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 are the major goals and objectives of the project?**

The sole purpose of this project is to facilitate uploading and troubleshooting of wheat and barley data from USWBSI public breeding programs to the Breeder's Database (BrDbase).

**2. What was accomplished under these goals?** *Address items 1-4) below for each goal or objective.*

1) major activities

The data contained in the Wheat Breeder's Database (formerly <http://triticeatoolbox.org/bd/>) was transferred over to T3/Wheat (<https://triticeatoolbox.org/wheat/>) and the standalone Wheat Breeder's Database was retired. The process of moving data from the Barley Breeder's Database (<https://triticeatoolbox.org/bdb/>) to T3/Barley (<https://triticeatoolbox.org/barley/>) is currently underway.

2) specific objectives

- a. curating data
- b. uploading data
- c. developing tutorials
- d. transferring barley data to T3/Barley

3) significant results

The wheat phenotype data produced from the project is now contained within a larger database that holds both phenotype data and genotype data.

4) key outcomes or other achievements

Breeders are able to analyze their data in the context of the broader range of phenotypic data that is available in T3/Wheat, and can now benefit from the genotypic data available in T3/Wheat.

**3. What opportunities for training and professional development has the project provided?**

The T3 curator met with breeders at the 2016 National Fusarium Head Blight Forum to discuss ways that the presentation of the data in T3 could be enhanced for members of the US Wheat & Barley Scab Initiative, enhancing the curator's knowledge about scab and the needs of the community.

**4. How have the results been disseminated to communities of interest?**

The data in T3 is publicly available online and around 1,000 unique sessions are logged on T3 each month. A breakout session was held at the 2016 National Fusarium Head Blight Forum to instruct participants on how to access data in T3 and how to contribute data to the database.

## **Training of Next Generation Scientists**

**Instructions:** Please answer the following questions as it pertains to the FY16 award period. The term “support” below includes any level of benefit to the student, ranging from full stipend plus tuition to the situation where the student’s stipend was paid from other funds, but who learned how to rate scab in a misted nursery paid for by the USWBSI, and anything in between.

- 1. Did any graduate students in your research program supported by funding from your USWBSI grant earn their MS degree during the FY16 award period? No**

**If yes, how many?**

- 2. Did any graduate students in your research program supported by funding from your USWBSI grant earn their Ph.D. degree during the FY16 award period? No**

**If yes, how many?**

- 3. Have any post docs who worked for you during the FY16 award period and were supported by funding from your USWBSI grant taken faculty positions with universities? No**

**If yes, how many?**

- 4. Have any post docs who worked for you during the FY16 award period and were supported by funding from your USWBSI grant gone on to take positions with private ag-related companies or federal agencies? No**

**If yes, how many?**

### Release of Germplasm/Cultivars

**Instructions:** In the table below, list all germplasm and/or cultivars released with full or partial support through the USWBSI during the FY16 award period. All columns must be completed for each listed germplasm/cultivar. Use the key below the table for Grain Class abbreviations. *Leave blank if you have nothing to report or if your grant did NOT include any VDHR-related projects.*

Name of Germplasm/Cultivar	Grain Class	FHB Resistance (S, MS, MR, R, where R represents your most resistant check)	FHB Rating (0-9)	Year Released

Add rows if needed.

**NOTE:** List the associated release notice or publication under the appropriate sub-section in the ‘Publications’ section of the FPR.

**Abbreviations for Grain Classes**

- Barley - BAR
- Durum - DUR
- Hard Red Winter - HRW
- Hard White Winter - HWW
- Hard Red Spring - HRS
- Soft Red Winter - SRW
- Soft White Winter - SWW

## **Publications, Conference Papers, and Presentations**

**Instructions:** Refer to the FY16-FPR\_Instructions for detailed instructions for listing publications/presentations about your work that resulted from all of the projects included in the FY16 grant. Only include citations for publications submitted or presentations given during your award period. If you did not have any publications or presentations, state 'Nothing to Report' directly above the Journal publications section.

### **Journal publications.**

Not applicable for this project.

### **Books or other non-periodical, one-time publications.**

Not applicable for this project.

### **Other publications, conference papers and presentations.**

Gave presentation and provided training to USWBSI PIs with breeding programs on the updated T3 Database which now incorporates the Breeders Datafarm developed for the USWBSI. 2016 National Fusarium Head Blight Forum, St. Louis, MO. December 4-6, 2017.