#### **USDA-ARS/**

## U.S. Wheat and Barley Scab Initiative **FY15 Final Performance Report**

**Due date:** July 15, 2016

**Cover Page** 

5 5 7 5 2 1 <b>18</b> 5				
Principle Investigator (PI):	David Garvin			
Institution:	USDA-ARS			
E-mail:	David.garvin@ars.usda.gov			
Phone:	612-625-1975			
Fiscal Year:	2015			
USDA-ARS Agreement ID:	N/A			
USDA-ARS Agreement Title:	Coordination of the Uniform Regional Scab Nursery for Spring			
	Wheat Parents.			
FY15 USDA-ARS Award Amount:	\$ 3,998			

**USWBSI Individual Project(s)** 

USWBSI Research Category*	Project Title	ARS Award Amount
VDHR-SPR	Coordination of the Uniform Regional Scab Nursery for Spring Wheat Parents	\$ 3,998
	FY15 Total ARS Award Amount	\$ 3,998

June 10, 2016

Principal Investigator

Date

\* 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

PI: Garvin, Dave

USDA-ARS Agreement #: N/A

**Project 1:** Coordination of the Uniform Regional Scab Nursery for Spring Wheat Parents

## 1. What are the major goals and objectives of the project?

The major objective of this project is to oversee multisite FHB evaluations of spring wheat germplasm from academic, industry, and government breeding programs. The major goal is to develop and release a research report summarizing the year's results. An additional goal is to use this project as a means of facilitating germplasm exchange among breeding programs to accelerate develop scab resistant varieties.

# 2. What was accomplished under these goals?

- 1) major activities: The URSN was grown for the 21<sup>st</sup> year in 2015. Entries were contributed by university, industry, and national wheat breeding programs.
- 2) specific objectives: Germplasm was contributed by university, industry and government breeding programs. This material was evaluated for FHB resistance at six different locations in the U.S.
- 3) significant results: FHB resistance data from each location was successfully obtained and subsequently provided for use in developing the annual report.
- 4) key outcomes or other achievements: The Report of the 2015 Uniform Regional Scab Nursery for Spring Wheat Parents , which summarizes findings of the individual locations and cross-location means was developed and disseminated to nursery participants.

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

This project does not have a component related to training and professional development.

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

The aforementioned annual report was provided to the USWBSI for posting on their website, and also provided to the Graingenes website as an additional publically accessible website.

PI: Garvin, Dave

USDA-ARS Agreement #: N/A

#### **Training of Next Generation Scientists**

**Instructions:** Please answer the following questions as it pertains to the FY15 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 FY15 award period?

- 2. Did any graduate students in your research program supported by funding from your USWBSI grant earn their Ph.D. degree during the FY15 award period?
- 3. Have any post docs who worked for you during the FY15 award period and were supported by funding from your USWBSI grant taken faculty positions with universities?

  no

4. Have any post docs who worked for you during the FY15 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

PI: Garvin, Dave

USDA-ARS Agreement #: N/A

# Release of Germplasm/Cultivars

**Instructions:** In the table below, list all germplasm and/or cultivars released with <u>full or partial</u> support through the USWBSI during the <u>FY15 award period</u>. 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

PI: Garvin, Dave

USDA-ARS Agreement #: N/A

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

Refer to the FY15-FPR\_Instructions for listing publications/presentations about your work that resulted from all of the projects included in the FY15 grant. If you did not have any publications or presentations, state 'Nothing to Report' directly above the Journal publications section.

Journal publications.

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

Other publications, conference papers and presentations.

GARVIN, D.F, AND BLANKENHEIM, Z. 2016. Report of the 2015 Uniform Regional Scab Nursery for Spring Wheat Parents. The report is made available at the USWBSI web site (<a href="http://www.scabusa.org/">http://www.scabusa.org/</a>) and through the GrainGenes web site (<a href="http://wheat.pw.usda.gov">http://wheat.pw.usda.gov</a>).

Status: Yes

Acknowledgement of Federal Support: Yes