

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY17 Final Performance Report
Due date: July 31, 2018**

Cover Page

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| Principle Investigator (PI): | David Garvin |
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| Phone: | 612-625-1975 |
| Fiscal Year: | 2017 |
| USDA-ARS Agreement ID: | N/A |
| USDA-ARS Agreement Title: | Coordination of the Uniform Regional Scab Nursery for Spring Wheat Parents. |
| FY17 USDA-ARS Award Amount: | \$ 1,155 |

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. | \$ 1,155 |
| | FY17 Total ARS Award Amount | \$ 1,155 |



Principal Investigator

7-17-18

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

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? *Address items 1-4) below for each goal or objective.*

1) major activities: The URSN was grown for the 23rd year in 2017. 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. and Canada.

3) significant results: FHB resistance data from all six locations was successfully obtained and subsequently provided for use in developing the annual report.

4) key outcomes or other achievements: The Report of the 2017 Uniform Regional Scab Nursery for Spring Wheat Parents, which summarizes findings of the individual locations and cross-location means, is being developed and will be disseminated to nursery participants in the summer of 2018. Initial results were distributed in spring 2018 to 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 annual report will be provided to the USWBSI for posting on their website, and also provided to the GrainGenes website as an additional publicly accessible website. It will be available at these sites (<http://www.scabusa.org/>) and (<http://wheat.pw.usda.gov>).

Training of Next Generation Scientists

Instructions: Please answer the following questions as it pertains to the FY17 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 FY17 award period?

no

2. Did any graduate students in your research program supported by funding from your USWBSI grant earn their Ph.D. degree during the FY17 award period?

no

3. Have any post docs who worked for you during the FY17 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 FY17 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

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 FY17 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 |
|----------------------------|-------------|--|------------------------|------------------|
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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 FY17-FPR_Instructions for detailed instructions for listing publications/presentations about your work that resulted from all of the projects included in the FY17 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.

NOTE: Directly below each reference/citation, you must indicate the Status (i.e. published, submitted, etc.) and whether acknowledgement of Federal support was indicated in publication/presentation.

Journal publications.

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

Other publications, conference papers and presentations.

Garvin, D.F. 2018. Report of the 2017 Uniform Regional Scab Nursery for Spring Wheat Parents.

Status: Will be released in summer 2018.

Acknowledgement of Federal Support: NO.