USDA-ARS/

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

Due date: July 15, 2016

Cover Page

| Principle Investigator (PI): | Jean-Luc Jannink | | | |
|------------------------------|---|--|--|--|
| Institution: | USDA-ARS | | | |
| E-mail: | JeanLuc.Jannink@ars.usda.gov | | | |
| Phone: | 607-255-5266 | | | |
| Fiscal Year: | 2015 | | | |
| USDA-ARS Agreement ID: | N/A | | | |
| USDA-ARS Agreement Title: | Curation of Data for USWBSI's Breeder Database. | | | |
| FY15 USDA-ARS Award Amount: | \$ 9,486 | | | |

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. | \$ 9,486 |
| | FY15 Total ARS Award Amount | \$ 9,486 |

| | 7/15/16 |
|------------------------|---------|
| 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

FY15 Final Performance Report

PI: Jannink, Jean-Luc

USDA-ARS Agreement #: N/A

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?

1) major activities

In the Breeder's Database for wheat data (http://triticeaetoolbox.org/bd/) 11 phenotype trials were loaded, comprising 3082 data points. These trials included 192 germplasm lines, assessed for 16 phenotypic traits.

2) specific objectives

- a. curating data
- b. uploading data
- c. developing tutorials

3) significant results

Developed new protocols for uploading data to streamline the process. The prototype for a new tutorial was developed that will simplify the uploading process for users.

4) key outcomes or other achievements

Breeders were able to access a broader range of phenotypic data and thus able to make more informed crosses.

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

Not applicable for this project.

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

Not applicable for this project

PI: Jannink, Jean-Luc

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? 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 FY15 award period? No

If yes, how many?

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

If yes, how many?

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

If yes, how many?

FY15 Final Performance Report

PI: Jannink, Jean-Luc

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

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.