### Cover Page

| Principle Investigator (PI): | Ann Blechl |
| Institution: | USDA-ARS |
| E-mail: | ann.blechl@ars.usda.gov |
| Phone: | 510-559-5716 |
| Fiscal Year: | 2016 |
| USDA-ARS Agreement ID: | N/A |
| USDA-ARS Agreement Title: | Maintain and Improve the U.S. Wheat & Barley Scab Initiative's Website. |
| FY16 USDA-ARS Award Amount: | $45,000 |

### USWBSI Individual Project(s)

<table>
<thead>
<tr>
<th>USWBSI Research Category</th>
<th>Project Title</th>
<th>ARS Award Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-HQ</td>
<td>US Wheat &amp; Barley Scab Initiative's Networking &amp; Facilitation Office and Website.</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

**FY16 Total ARS Award Amount** | $45,000

---

* 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

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

The goal of this project is to manage the U. S. Wheat and Barley Scab Initiative's (USWBSI) website and internet services. These services include, but are not limited to, email services for the USWBSI project and mailing lists for the community, SMS text alert associated with the FHB Alert System, image gallery services, and a content-rich web presence. The funds received for this project support 75% of a full-time position (i.e. systems administrator/programmer).

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

1) major activities
   - The image gallery formerly associated with the USWBSI website was replaced with the third party Flickr website.
   - All web services associated with the initiative have been converted to secure encrypted SSL (https).
   - The initiative's twitter feed is now being auto published to the website and is being updated more frequently.
   - A new spam and email abuse prevention system was put in place on the initiative's email server.

2) specific objectives

   Flickr is a free service for image hosting and manipulation that offers several benefits over the old system. We switched to Flickr to take advantage of their user interface which allows for easier administration of bulk image upload, storage, and sharing.

   Security is a major concern with all internet connected computers. We switched the servers over to a 100% encrypted interface.

   We wanted to make better use of the official USWBSI twitter account.

   Spam and abuse of the initiatives email server and listservs is an ongoing problem. We needed to implement new procedures to reduce the amount of spam successfully sent to the various email addresses associated with the Initiative. We also need to limit the amount of abusive connections that were attempting to use the Initiative's email server as a spam bot.

3) significant results

   The use of Flickr allowed us to move existing images to their servers, set up various photo albums, and used their free slideshow software to embed galleries on the USWBSI website. This significantly decreased the time required to perform these tasks.
Website encryption prevents usernames and passwords from being sent unencrypted through a user's web browser when logging in. This will reduce the chance a user account may be compromised which could also lead to data destruction and tampering.

We have started posting more public information to twitter. The official Initiative twitter feed is now posted live to the USWBSI website's homepage. This allows users to see tweets without the need for a twitter account or software.

Spam abuse and malicious connection have been greatly reduced since new blacklists and validity checks were applied to all incoming email and connections.

4) Key outcomes or other achievements

These activities have eased administrative requirements of the systems administrator. This has allowed for more time for content creation and site improvements related to user interfaces and usability. Increasing the security of the system has reduced the risk of downtime associated with a compromised server.

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

Not applicable to this project.

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

These results are mostly concerned with administrative activities and do not require dissemination. The Flickr slideshows, twitter feed, and secure web site are all available on the initiative's homepage.
Training of Next Generation Scientists

Instructions: Please answer the following questions as it pertains to the FY 16 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 FY 16 award period? N/A
   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 FY 16 award period? N/A
   If yes, how many?

3. Have any post docs who worked for you during the FY 16 award period and were supported by funding from your USWBSI grant taken faculty positions with universities? N/A
   If yes, how many?

4. Have any post docs who worked for you during the FY 16 award period and were supported by funding from your USWBSI grant gone on to take positions with private ag-related companies or federal agencies? N/A
   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 USWB SI during the FY 16 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.

<table>
<thead>
<tr>
<th>Name of Germplasm/Cultivar</th>
<th>Grain Class</th>
<th>FHB Resistance (S, M S, M R, R, where R represents your most resistant check)</th>
<th>FHB Rating (0-9)</th>
<th>Year Released</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(Form – FPR16)
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.

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

Other publications, conference papers and presentations.

Acknowledgement of Federal Support: Not applicable for this award.