

FY21 Performance Progress Report

Due date: July 26, 2023

Cover Page


USDA-ARS Agreement ID:	58-0206-9-178
USDA-ARS Agreement Title:	U.S. Wheat & Barley Scab Initiative's Networking & Facilitation Office and Website
Principle Investigator (PI):	Ruth Dill-Macky
Institution:	University of Minnesota
Institution UEI:	KABJZBBJ4B54
Fiscal Year:	2021
FY21 USDA-ARS Award Amount:	\$439,091
PI Mailing Address:	University of Minnesota, Department of Plant Pathology 495 Borlaug Hall, 1991 Upper Buford Circle St. Paul, MN 55108
PI E-mail:	ruthdm@umn.edu
PI Phone:	651-399-0947
Period of Performance:	5/1/21 - 4/30/24
Reporting Period End Date:	4/30/2023

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	\$439,091
FY21 Total ARS Award Amount		\$439,091

I am submitting this report as an: Annual Report

I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.



Principal Investigator Signature

7/25/23

Date Report Submitted

† BAR-CP – Barley Coordinated Project
 DUR-CP – Durum Coordinated Project
 EC-HQ – Executive Committee-Headquarters
 FST-R – Food Safety & Toxicology (Research)
 FST-S – Food Safety & Toxicology (Service)
 GDER – Gene Discovery & Engineering Resistance
 HWW-CP – Hard Winter Wheat Coordinated Project

MGMT – FHB Management
 MGMT-IM – FHB Management – Integrated Management Coordinated Project
 PBG – Pathogen Biology & Genetics
 TSCI – Transformational Science
 VDHR – Variety Development & Uniform Nurseries
 NWW – Northern Soft Winter Wheat Region
 SPR – Spring 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 research project?

The objectives of the Networking and Facilitation Office (NFO) are to:

- 1) Maintain and enhance the management and accountability of USWBSI's resources
- 2) Facilitate and enhance communication within the Initiative and with its stakeholders
- 3) Administer the process of developing the Initiative's annual research plan and budget
- 4) Manage and implement all meetings and conferences

2. What was accomplished under these goals or objectives? (For each major goal/objective, address these three items below.)

a) What were the major activities?

Objective 1

- Facilitated Executive Committee and Steering Committee funding and strategy meetings and coordinated all onsite meeting logistics in December 2022, April 2023, and all virtual meetings throughout the year. (Table 1)
- Developed onboarding slide deck for all new EC/SC members to offer high level overview of USWBSI and operational components.
- Facilitated the USWBSI Policies & Procedures updates and operational recommendations including addition of DEI statement for consideration by Executive Committee/Steering Committee, updates were ratified and posted.
- Updated online Executive Committee/Steering Committee operations tracking sites.
- Onboarded new Administrative & Grant Support Coordinator to facilitate grant and database management processes.
- Hired an Undergrad Student for support of onsite NFHB Forum materials, trained them in, and directed project activities.
- Updated Independent Contractor required documentation/contract requirements for two independent contractors.
- Updated user login system with better feedback for users when encountering errors, users were also given the ability to edit their accounts.
- Revised financial tracking for NFO budget, submitted comprehensive reallocation and no cost extension request after careful analysis with financial manager, request was approved.

Objective 2

- Coordinated development and implementation of overall communications plan with communications team (UMN Communications Coordinator and USWBSI Research Technical Specialist Contractor), initial phase focused on extension, crop consultants and grower groups. New Communication Plan Advisory Team activated. New FHB Tool Talk periodic emails initiated to amplify key FHB messages to influencers.
- Worked with advocacy volunteers on focused letters requesting support for Farm Bill funding increase and response letter to President's budget. Identified 37 key "signers" for their letter campaign indicating strong support for USWBSI funding.
- Published *FHB Disease Impact Update* in November 2022.
- Published *Fusarium Focus* Newsletters - distributed three times/year.
- Published updated USWBSI Impacts - one-pager for key stakeholders.
- Updated USWBSI infographics on critical data points in information for stakeholders.

- Published monthly feature articles on researchers and advocates highlighting contributions and promoting efforts.
- Coordinated rebroadcast of Scabinar (USWBSI webinar) for growers, crop consultants and extension personnel on current FHB management techniques, built continuing education credits (CEU) quiz option and ensured certified crop advisor (CCA) credential body has documentation for user CEU credit requests, promoted.
- Offered a series of Graduate Student/Post-Doc/Early Career webinars and activities via the Scabnet platform, to provide educational, career and social opportunities for new FHB scientists.
- Maintained ScabSource, a publications database for tracking of relevant FHB research.
- Publicized the opening of FHB Risk Tool for the 2023 season, incorporating enhancements.
- Updated the USWBSI's YouTube channel, with available recordings/content.
- Maintained scabusa.org website with key content.

Objective 3

- Developed the USWBSI's FY23 Research Plan & Budget that was approved by USDA-ARS in April 2023: The plan included 136 research projects across six (6) research areas (FHB Management; Food Safety & Toxicology; Gene Discovery & Engineering Resistance; Pathogen, Biology & Genetics; Transformational Science; and Variety Development & Host Resistance (that includes 3 sub-groups Spring Wheat, Northern and Southern Winter Wheat Coordinated Projects)), three commodity-based coordinated projects (Barley, Durum, and Hard Winter Wheat), and the USWBSI Headquarters (NFO/Website). The recommended funding amount totaled \$8,655,897.
- Established Equipment Request procedure for existing PIs, coordinated review and incorporated into FY23 awards.
- Conducted USWBSI Action Plan comprehensive review, streamlined processes incorporating onsite Steering Committee for stakeholder input, followed by in-depth evaluation by committees; coordinated compilation of revisions into final updated Action Plan and posted. Reworked project descriptions, building into RFP and included on committee websites all references linking to Action Plan.
- Developed materials and communications for first time with two-path submission process for FY24RFP and YR3 submissions. Outlined process for PI submissions, clearly delineating steps for those PIs with continuation requests and those with new pre-proposals.
- Redesigned the Submission Portal to merge the submission process for new pre-proposals and continuation requests. This created a unified interface for users. New features for users were added that include automatic file uploads and form saving, error prevention code, simplified forms, and a section for notes. The new system was also more tightly integrated with the projects database for more automation and fewer data entry errors.
- Managed Performance Progress Report solicitation and submissions, utilizing the Qualtrics system for form/uploads (auto-reminders).
- Monitored PI agreement spending status, built in series of notifications to bring awareness to PIs on remaining funds compared to agreement end date. Established communications to identify needed No Cost Extension on FY21 agreements to ensure objectives were met and full spend out of awards was attained. Worked with PIs on needed budget reallocations given unexpected circumstances.
- Established new communication with university financial contacts to ensure prompt completion of the financial reports required for closeout of agreements.

Objective 4

- Facilitated 2022 National Fusarium Head Blight (NFHB) Forum onsite planning and logistics in Tampa, Florida. More than 200 attendees from five countries participated. Two keynote presentations, a grower perspective and 13 invited presentations provided valuable updates. In addition, two poster sessions facilitated 75 scientific poster presentations allowing for both onsite interactions and offsite access through a virtual poster room. Other key elements included:
 - Worked with the Forum Organizing Committee to develop onsite program model.
 - Built out registration payment system via UMN tool incorporating added and required features for onsite meeting.
 - Enhanced Abstract Viewing tool to allow for ongoing archive of abstracts.
 - Held an Early Career Meetup Social facilitating Graduate Students and Post-docs to interact and build connections.
 - Implemented several changes to the Forum Poster system. The poster judging competition was moved to an online system. The online Poster viewing system was updated with a new file system layout, author language, and database schema changes. File uploads for Forum speakers were improved. Poster administration scripts were updated with new features that include status tracking for file requirements and a notes section.
 - Conducted survey of attendees to track interests/adjustments for future planning.
- Solicited and investigated venue options for NFHB Forum; visited top contenders and began negotiations for 2024 NFHB Forum site selection.
- Supported two virtual update and planning meetings for the GDER/PBG Community and the Hard Winter Wheat Community.

b) What were the significant results?

- The FY23 Research Plan & Budget was finalized, and the awards distributed on time.
- Updated USWBSI Action Plan was completed and is driving FY24 project submissions.
- New communication plan was activated, impact being tracked.
- National FHB Forum was successfully held in-person after two-years of virtual forums.
- The 2022 Scabinar's content are being offered again in 2023 for CEUs to extend reach.
- Funded PIs are being proactively notified regarding financial updates and progress is being monitored providing ability to address concerns before agreement end dates.
- Systems were simplified for users providing a better, more intuitive, user interface which leads to fewer errors; users can now more easily update information related to their activities.
- Administration of data was improved with more automation and more informative interfaces.
- Effective community interactions were implemented enhancing overall efforts.

c) List key outcomes or other achievements.

A summary of committee meetings, conference calls, research-based workshops and committee nominations, appointments and elections that were organized, facilitated and/or supported by the NFO are provided in Tables 1 and 2.

Table 1. Summary of Administrative Meetings and Research-based Workshops/Planning meetings facilitated or supported by the Networking & Facilitation Office (NFO).

Committee/Group	Number of Meetings/ Nominations	Description/Purpose of Meeting/Nominations (Elections-Appointments)
Steering Committee (SC)	2 Meetings	12-06-22: Annual Meeting – Review and approval of EC’s recommended FY23 Research Plan and Budget. 04-14-23: SC Strategy Meeting (in Minnesota)
Executive Committee (EC)	13+ Meetings	11-28-22: EC Meeting with BAR-CP Committee Chair EC Meeting with DUR-CP Committee Chair EC Meeting with HWW-CP Committee Chair EC Meeting with VDHR-SPR Committee Chair EC Meeting with VDHR-NWW Committee Chair EC Meeting with VDHR-SWW Committee Chair 11-29-22: EC Meeting with MGMT Committee Chairs EC Meeting with PBG Committee Chairs EC Meeting with FST Committee Chairs EC Meeting with GDER Committee Chairs 12-03-22: EC Meeting – Discussion on FY23 Continuations; Final FY23 Research Plan and Budget developed 02-17-23: EC Meeting – Special Meeting to review communications plan and update on advocacy efforts 04-13-23: EC Strategy Meeting (in Minnesota) Monthly: USWBSI Co-Chair Meetings – Priorities
FY23 Review Panels (RP)	11	11-22: All review panels scheduled their own consensus meetings.
Research-based Planning Meetings	2	04-27-23: Planning Meeting for GDER/PBG 05-16-23: Planning Meeting for HWW-CP
Forum Organizing Committee (FOC) Planning Meetings	10	06-10-22: FOC Co-Chair 2022 Draft Program Review 06-24-22: FOC Co-Chair Keynote Discussion 07-08-22: FOC Co-Chair Keynote Discussion 09-06-22: FOC Co-Chair Keynote Discussion 09-30-22: Past Chair Recognition Planning 09-16-22: FOC Final Program Review/Poster Submission 11-11-22: FOC Prep for onsite 12-04-22: FOC Co-Chair Practice Session 03-17-23: FOC Co-Chair 2023 Planning Meeting 03-29-23: FOC 2023 Kick-off Meeting

Table 2. Summary of USWBSI Nominations and Elections during award period.

Executive Committee	3 Appointments	Executive Committee Appointments: Winter Wheat, Durum and Milling Industry. All were elected.
Research Committees	13 Appointments	Research Committees appointments/re-appointments: MGMT: 2 members, vice-chair FST: 2 members, vice-chair GDER: 1 member, chair and vice-chair PBG: 2 members, chair and vice-chair
Coordinated Project Committees	9 Appointments	Coordinated Project Committees appointments/re-appointments: BAR-CP: 2 members, chair DUR-CP: 1 member HWW-CP: 1 member VDHR-SPR: 1 member VDHR-NWW: 1 member, chair VDHR-SWW: chair

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

Offered opportunities for students/post-docs to interact during the 2022 National FHB Forum as well as year-round. Forum activities included poster sessions for interaction between authors and attendees, all poster authors also provided a preview video for the Virtual Poster Room offering additional visibility of their work and serving as a preparatory tool for their interactions. Two students volunteered to organize a year-round early career group. with communications facilitated via ScabNet. A targeted listserv was initiated, and two webinars were held one featuring tools and techniques for effectively leveraging LinkedIn, the other on developing a career within USDA-ARS. The students also held (virtually) a social trivia event night.

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

Information is disseminated through the USWBSI’s listservs, website, emails, blogs, FHB-alerts, online articles, Forum proceedings, extension-based materials, press releases, social media and newsletters.

Publications, Conference Papers, and Presentations

Please include a listing of all your publications/presentations about your FHB work that were a result of funding from your FY21 grant award. Only citations for publications published (submitted or accepted) or presentations presented during the **award period** should be included.

Did you publish/submit or present anything during this award period?

- Yes, I've included the citation reference in listing(s) below.
 No, I have nothing to report.

Journal publications as a result of FY21 grant award

List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Include any peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like.

Identify for each publication: Author(s); title; journal; volume: year; page numbers; status of publication (published [include DOI#]; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

Books or other non-periodical, one-time publications as a result of FY21 grant award

Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Identify for each one-time publication: Author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

Other publications, conference papers and presentations as a result of FY21 grant award

Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication.

NFHB Forum Proceedings

Bjerkness, M. (Ed). (2022). *Proceedings of the 2022 National Fusarium Head Blight Forum*; Virtual. December 5-6, 2022. Retrieved from:
<https://scabusa.org/forum/2022/2022NFHBForumProceedings.pdf>

USWBSI Newsletters

Hoffstetter, A., and Bjerkness, M. (Eds.). 2023. *Fusarium Focus. U.S. Wheat & Barley Scab Initiative*. Volume 23, Issue 1. https://scabusa.org/pdfs/fus-focus_newsletter_V23-I1_2-2023.pdf

Hoffstetter, A., and Bjerkness, M. (Eds.). 2023. *Fusarium Focus. U.S. Wheat & Barley Scab Initiative*. Volume 23, Issue 2. https://scabusa.org/pdfs/fus-focus_newsletter_V23-I2_5-2023.pdf

Other Publications

Hoffstetter, A. 2022, November. *FHB Disease Impact Update: 2022 Conditions and Proactive Growers Reduce Fusarium Head Blight Impact Across U.S.*
https://scabusa.org/pdfs/2022_FHB_DiseaseImpactUpdate.pdf

Hoffstetter, A., and Bjerkness, M. (Eds.). 2022. *USWBSI Impacts*. <https://scabusa.org/uswbsi-impacts>