USDA-ARS | U.S. Wheat and Barley Scab Initiative

FY21 Performance Progress Report

Due date: July 26, 2022

Cover Page

Principle Investigator (PI):	Santiago Mideros	
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Phone:	217-265-6340	
Fiscal Year:	2021	
USDA-ARS Agreement ID:	59-0206-0-144	
USDA-ARS Agreement Title:	Integrated Management of Wheat in Illinois	
5V20 1100 A ADO A	422.544	
FY20 USDA-ARS Award Amount:	\$22,644	
Recipient Organization:	University of Illinois	
	Department of Crop Sciences	
	1102 S. Goodwin Ave., N533B Turner Hall	
	Urbana, IL 60801	
DUNS Number:	41544081	
EIN:	37-6000511	
Recipient Identifying Number or	AG060	
Account Number, if any:		
Project/Grant Period:	6/1/21 - 5/31/23	
Reporting Period End Date:	5/31/2022	

USWBSI Individual Project(s)

USWBSI Research Category*	Project Title	ARS Award Amount
MGMT-IM	Integrated Management of FHB in Illinois Wheat	\$22,644
FY21 Total ARS Award Amount		\$22,644

I am submitting this report as an:	□ Annual Report	🗵 Final 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.						
Jastideres.	25	July2022				
Principal Invest gator Signature	D	ate Report Submitted				

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

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

Project 1: Integrated Management of FHB in Illinois Wheat

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

Assess the utility of Miravis Ace® compared to Caramba®, Prosaro®, and Proline® and develop a better sense of the application window for this new fungicide.

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?

- In October of 2020, a field trial was planted in Urbana, Illinois. The trial was established with two winter wheat varieties and inoculated in April of 2021. Trials were sprayed with Miravis Ace at three development points (10.3, 10.5.1, 10.5.1+5), Prosaro, BAS8400F, and two controls. Harvest occurred in June 29 of 2021. Data was compiled in late summer of 2021.
- As soon as I became the PI on this grant (February of 2021), I made sure that the
 personnel that have been conducting the work for this project be on the payroll of this
 project. The salary of a research specialist has been charged to this project since
 February of 2021.

b) What were the significant results?

• Incidence and disease severity were evaluated once in Urbana. At harvest, percent moisture, test weight, and yield were recorded. FDK was obtained from harvested samples.

c) List key outcomes or other achievements.

- Field trials successfully completed in 2021.
- Data was collected, aggregated, and sent to Dr. Paul for analysis and publication.
- **3.** What opportunities for training and professional development has the project provided? Three undergraduate students were trained and participated on seed preparation, field preparation (e.g. staking), planting, fungicide application, ratings for disease, FDK ratings, and sample preparation for DON analysis.
- 4. How have the results been disseminated to communities of interest?

Results from this project have not been disseminated to communities of interest yet.

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PI: Mideros, Santiago | Agreement #: 59-0206-0-144

Publications, Conference Papers, and Presentations

Please include a listing of all your publications/presentations about your <u>FHB work</u> that were a result of funding from your FY21 grant award. Only citations for publications <u>published</u> (submitted or accepted) or presentations <u>presented</u> 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#];

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

accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

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.

In addition to the required inclusion in this report, to increase the visibility of your work we encourage you to also submit your publications in the new <u>USWBSI ScabSource Publication Database</u>, an open-access resource for all FHB researchers to reference.