

**USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY12 Final Performance Report
July 16, 2013**

Cover Page

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Fiscal Year:	FY12
USDA-ARS Agreement ID:	59-0206-2-084
USDA-ARS Agreement Title:	Management of FHB and DON in Kentucky.
FY12 USDA-ARS Award Amount:	\$ 2,047*

USWBSI Individual Project(s)

USWBSI Research Category**	Project Title	ARS Award Amount
MGMT	Effects of Local Corn Debris Management on FHB and DON Levels (Year Two).	\$ 2,047
	Total ARS Award Amount	\$ 2,047

Principal Investigator

Date

* Partial funding for this research is under ARS agreement # 59-0206-1-082

** MGMT – FHB Management

FSTU – Food Safety, Toxicology, & Utilization of Mycotoxin-contaminated Grain

GDER – Gene Discovery & Engineering Resistance

PBG – Pathogen Biology & Genetics

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: *Effects of Local Corn Debris Management on FHB and DON Levels (Year Two).*

1. What major problem or issue is being resolved relevant to Fusarium head blight (scab) and how are you resolving it?

Determine the influence of local vs. remote sources of *F. graminearum* inoculum in areas with significant corn production/residue.

2. List the most important accomplishment and its impact (i.e. how is it being used) to minimize the threat of Fusarium head blight or to reduce mycotoxins. Complete both sections (repeat sections for each major accomplishment):

Accomplishment:

Generally, we have found that producing wheat no-till behind corn does not increase the FHB and DON risk compared to where wheat is planted into conventionally-tilled corn stubble, in areas where corn acreage is widespread.

Impact:

Growers need not fear they will increase the FHB/DON risk when planting wheat no-till, behind corn, which is the predominate wheat production system used in Kentucky.

Include below a list of the publications, presentations, peer-reviewed articles, and non-peer reviewed articles written about your work that resulted from all of the projects included in the grant. Please reference each item using an accepted journal format. If you need more space, continue the list on the next page.

Bergstrom, G. C., Cummings, J. A., Waxman, K. D., Bradley, C. A., Hazelrigg, A. L., Hershman, D. E. Nagelkirk, M., Sweets, L. E. and Wegulo, S. N. 2012. Effects of local corn debris management on FHB and DON levels in fourteen U.S. wheat environments in 2011 and 2012. IN: Proceedings of the 2012 National Fusarium Head Blight Forum, Orlando, FL.