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

**Cover Page**

<table>
<thead>
<tr>
<th>PI:</th>
<th>Donald Hershman</th>
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<tbody>
<tr>
<td>Institution:</td>
<td>University of Kentucky</td>
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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)**

<table>
<thead>
<tr>
<th>USWBSI Research Category**</th>
<th>Project Title</th>
<th>ARS Award Amount</th>
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</thead>
<tbody>
<tr>
<td>MGMT</td>
<td>Effects of Local Corn Debris Management on FHB and DON Levels (Year Two).</td>
<td>$ 2,047</td>
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<td><strong>Total ARS Award Amount</strong></td>
<td>$ 2,047</td>
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__Principal Investigator__          __Date__

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* 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 were 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.