USDA-ARS/
U.S. Wheat and Barley Scab Initiative
FY05 Final Performance Report (May 05 – May 07)
July 16, 2007

Cover Page

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| Fiscal Year: | 2005 |
| FY05 ARS Agreement ID: | 59-0790-4-126 |
| FY05 Agreement Title: | Control Wheat Scab with Improved Fungicide Application Technology. |
| FY05 ARS Award Amount: | $9,756 |

USWBSI Individual Project(s)

<table>
<thead>
<tr>
<th>USWBSI Research Area*</th>
<th>Project Title</th>
<th>ARS Adjusted Award Amount</th>
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<tbody>
<tr>
<td>CBC</td>
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<tr>
<td>Total Award Amount</td>
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Principal Investigator Date

* BIO – Biotechnology  
CBC – Chemical & Biological Control  
EDM – Epidemiology & Disease Management  
FSTU – Food Safety, Toxicology, & Utilization  
GIE – Germplasm Introduction & Enhancement  
VDUN – Variety Development & Uniform Nurseries  
(Form – FPR05)
Project 1: Control Wheat Scab with Improved Fungicide Application Technology.

1. What major problem or issue is being resolved and how are you resolving it?

   The primary objective of the research is to maximize the efficacy of the FHB fungicide by determining the optimum application parameters. Field studies have been developed to determine the effect of AI application rate, application volume, drop size, and nozzle orientation.

2. List the most important accomplishment and its impact (how is it being used?). Complete all three sections (repeat sections for each major accomplishment):

   Accomplishment:
   The research team has determined several of the optimum application parameters: such as drop size, application volume, and nozzle orientation.

   Impact:
   Growers will have additional information need to set up the FHB spray equipment for improved efficacy.

As a result of that accomplishment, what does your particular clientele, the scientific community, and agriculture as a whole have now that they didn’t have before?

   Two new NDSU extension publications will be available to growers before the 2007 spray season. One professional journal publication (ASABE Transactions) has been approved for publications and will be in print by the Dec 2007 FHB meeting.
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.

Note:

1. Scot Halley and Vern Hoffman will provide detailed references

2. Approximate $1000 was still in my account after I retired and the project terminated in April 2007.