

**U.S. Wheat and Barley Scab Initiative  
 FY02 Preliminary Final Performance Report (approx. May 02 – April 03)  
 July 15, 2003**

**Cover Page**

<b>PI:</b>	<b>William Nganje</b>
<b>Institution:</b>	<b>North Dakota State University</b>
<b>Address:</b>	<b>Department of Agribusiness and Applied Economics      221D Morrill Hall      P.O. Box 5636      Fargo, ND 58105</b>
<b>E-mail:</b>	<b>wnganje@ndsuent.nodak.edu</b>
<b>Phone:</b>	<b>701-231-7459</b>
<b>Fax:</b>	<b>701-231-7400</b>
<b>Year:</b>	<b>FY2002 (approx. May 02 – April 03)</b>
<b>Grant Number:</b>	<b>59-0790-0-075</b>
<b>Grant Title:</b>	<b>Fusarium Head Blight Research</b>
<b>FY02 ARS Award Amount:</b>	<b>\$ 29,576</b>

**Project**

<b>Program Area</b>	<b>Project Title</b>	<b>USWBSI Recommended Amount</b>
EC/HQ	Economic Impact of Scab on Wheat and Barley: Update 1993-2001.	\$30,315
	<b>Total Amount Recommended</b>	<b>\$30,315</b>

William Nganje  
 Principal Investigator

07/14/2003  
 Date

**Project 1: Economic Impact of Scab on Wheat and Barley: Update 1993-2001.**

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

The major problem that is being addressed in this project is to estimate the economic losses caused by Fusarium Head Blight (for 1993-2001) for U.S. wheat and barley producers. The problem is being resolved by estimating yield losses and quality-related price discounts by states and by region. Secondary economic losses in wheat and barley producing regions affected by scab are also estimated. GIS maps are developed to characterize the distribution of primary scab losses over time and space.

2. What were the most significant accomplishments?

Primary and secondary economic impact on hard red spring wheat (HRS), durum wheat, soft red winter wheat (SRW), and barley (from 1993 through 2001) has been completed for all major wheat and barley producing states in the U.S. A graduate MS thesis is near completion and we are in the final stage of writing the technical report.

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.

This project has generated two peer reviewed publications an MS thesis (new completion) and a technical report is new completion.

Nganje, William and Demcey Johnson. "Economic Impacts of Fusarium Head Blight in Malting Barley: Blending Margins and Firm-Level Risks." *Agriculture, Food & Research Issues, A Journal of the Canadian Agricultural Economics Society*. Number 4(2003) p.16-26.

Nganje, William, Dean Bangsung, Larry Leitritz, William Wilson, and Napoleon Tiapo. "Estimating Regional Economic Impacts of Fusarium Head Blight in Wheat and Barley." Accepted for Publication April 2003, *Review of Agricultural Economic*.

MS Thesis By Diomo Motuba. "Distribution of Scab Losses over Time and Space and Implications for Grain Marketing." Anticipated Completion Date: August 2003.

Nganje, William, Dean Bangsung, Larry Leitritz, William Wilson, and Diomo Motuba. "Economic Impact of Scab on Wheat and Barley: Update 1993-2001." Fourth Coming Technical Report, Department of Agribusiness and Applied Economics.