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

Cover Page

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Year:	FY2002 (approx. May 02 – April 03)
Grant Number:	59-0790-9-066
Grant Title:	Fusarium Head Blight Research
FY02 ARS Award Amount:	\$ 14,308

Project

Program		USWBSI Recommended
Area	Project Title	Amount
VDUN	Fusarium Head Blight Resistant Wheat Variety Development -	\$14,666
	Cornell.	\$14,000
	Total Amount Recommended	\$14,666

Principal Investigator	Date

FY02 (approx. May 02 – April 03)

PI: Sorrells, Mark Grant: 59-0790-9-066

Project 1: Fusarium Head Blight Resistant Wheat Variety Development - Cornell.

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

We continue to have problems controlling the variation in our evaluation nurseries. This past year we rebuilt our irrigation system and had good infection but it was uneven. This year, we have rebuilt the system again and it is currently being evaluated for distribution. Infection rates were better this past year but lodging was still a problem in some plots. Other diseases such as septoria are confounding the scores. Also, because of the variation in tiller number for different varieties, we have to count all of the plots to get percent infection. This is extremely time consuming, especially when lodging occurs. Consistency of the evaluation in different environments is clearly a problem that needs additional work. More rapid and accurate screening and evaluation methods are greatly needed.

2. What were the most significant accomplishments?

The new sources of germplasm from the other cooperating programs are very valuable and these have been crossed to locally adapted lines and varieties. We have expanded the size of our irrigation system to accommodate more breeding lines and populations. We now have reasonably reliable ratings for tolerance to FHB for current varieties.

FY02 (approx. May 02 – April 03)

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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.

Field Days

2002 Small Grains Management Field Day 2002 Plant Breeding Field Day

Informal Publications

2002 Cornell Small Grains Variety Trial Results 2002 Cornell Recommends for Field Crops