U.S. Wheat and Barley Scab Initiative FY01 Final Performance Report (approx. May 01 – April 02) July 15, 2002

Cover Page

PI:	Erik L. Stromberg
Institution:	Virginia Tech.
Address:	Dept. of Plant Pathology, Physiology and Weed Science
	Blacksburg, VA 54061-0331
Email:	elstrom@vt.edu
Phone:	540-231-7871
Fax:	540-231-7477
Year:	FY2001 (approx. May 01 – April 02)
Grant Number:	59-0790-9-068
Grant Title:	Fusarium Head Blight Research
FY01 ARS Award Amount:	\$ 5,841

Project

Program Area	Project Title	Requested Amount
Chem/Bio	Evaluation of fungicides and biological agents for control of fusarium head blight in Virginia	\$ 5,000
	Total Amount Requested	\$ 5,000

Principal Investigator	Date

FY01 (approx. May 01 – April 02)

PI: Stromberg, Erik L. Grant: 59-0790-9-068

Project 1: Evaluation of fungicides and biological agents for control of fusarium head blight in Virginia

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

Uniform fungicide and biological agent treatment trials for fusarium head blight (FHB) control were established in the spring wheat/barley and in the winter wheat/barley regions of the United States, including Virginia. The establishment of a core set of treatments across a number of locations within the country permitted the evaluation of treatments for consistency over a wide number of environments and grain types affected by FHB. Because FHB does not occur every year in every location, regardless of attempts to ensure infection through added inoculum or misting systems, having trials across environments increases the chance of favorable disease levels for evaluation across multiple sites.

2. What were the most significant accomplishments?

In Virginia five foliarly applied fungicide(s) and two biological agents were evaluated for their ability to reduce the incidence and severity of fusarium head blight in soft red winter wheat. The soft red winter wheat cultivar Roane, treated with Baytan 30 Flowable for powdery mildew control, was no-tillage planted into corn residues on 31 October 2000. The applications were made on 2 May 2001 at Zadoks' Growth Stage 59.

All treatments significantly ($P \le 0.05$) reduced the incidence and severity of FHB and had a greater grain yield than the non-treated control. (See attached reprint, Fungicide and Nematicide Tests 57:CF13).

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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.



Report No. 57:CF13

Wheat: *Triticum aestivum*

Fusarium head blight: Fusarium graminearum

Evaluation of selected fungicides and biological agents for the control of fusarium head blight in Roane soft red winter wheat in Virginia, 2001.

VIEW/PRINT REPORT

E. L. Stromberg

Section: Cereal and Forage Crops

Keyword(s): Vomitoxin; DON; deoxynivalenol; fusarium head blight incidence and severity

Product(s): Folicur 3.6F; AMS 21619F; BAS 505 G; TrigoCor 1448; USDA,ARS Peoria biological agent; Stratego

250E

 $Active \ chemical (s): \ Tebuconazole; \ Unknown; \ \textit{Unknown}; \ \textit{Bacillus subtilis} is olate; \ Trifloxystrobin + Propiconazole \\$

Manufacturer(s): Bayer; BASF; Cornell University; USDA, ARS, Peoria, IL; Bayer

Geographical location: Virginia, United States

See attached reprint.