

USDA-ARS / USWBSI
FY03 Final Performance Report (approx. May 03 – April 04)
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Cover Page

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Year:	FY2003 (approx. May 03 – April 04)
FY03 ARS Agreement ID:	59-0790-3-080
FY03 ARS Agreement Title:	Uniform fungicide trials on Fusarium head blight of wheat and barley in Minnesota.
FY03 ARS Award Amount:	\$ 12,519

USWBSI Individual Project(s)

USWBSI Research Area*	Project Title	ARS Adjusted Award Amount
CBC	Uniform fungicide trials on Fusarium head blight of wheat and barley in Minnesota.	\$ 12,519
	Total Amount Recommended	\$ 12,519

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

Project 1: *Uniform fungicide trials on Fusarium head blight of wheat and barley in Minnesota.*

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

Fungicide trials to test for chemical suppression efficacy were conducted at the Northwest Research and Outreach Center in Crookston, Minnesota on spring barley and hard red spring wheat cultivars. This research represented only one location in a uniform study that encompassed multiple research sites across small grain growing regions throughout the U.S. This organized, multi-state cooperative effort to determine Fusarium head blight (FHB) control efficacy for select, experimental fungicidal products tests product efficacies in a number of unique environments. As a result, experimental fungicides were exposed to a variety of disease control challenges. As a result, performance parameters of tested products were well documented. These yearly trials provide timely, non-biased evaluations of products by land-grant university researchers. Effective FHB control strategies minimize disease-related losses for growers, bolster economies of agriculturally-dependent communities, and provide a dependable source of small grains for consumers in the State of Minnesota, the United States and beyond.

2. What were the most significant accomplishments?

Conducting a Uniform Fungicide Trial in Minnesota was of paramount importance to producers in this state since small grain crops in Minnesota were some of the hardest hit during the scab epidemics during the early 1990's. Testing products in an environment that supports the increased disease levels normally present in Crookston (also the site for the state-funded scab disease nursery) allows growers access to locally-produced information concerning up and coming fungicidal products. Fungicide treatments from the 2003 Uniform Fungicide Trials were given the "acid" test since scab disease pressure was severe. Those treatments that failed to manage the disease in wheat and barley were identified without question.

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 you grant. Please reference each item using an accepted journal format. If you need more space, continue the list on the next page.

Hollingsworth, C.R. and C.D. Motteberg. 2003. Efficacy of fungicides in controlling Fusarium head blight on spring wheat, 2003. Fungic. Nematicide Tests 59:CF020.

Hollingsworth, C.R. and C.D. Motteberg. 2003. Efficacy of fungicides in controlling foliar diseases on spring wheat, 2003. Fungic. Nematicide Tests 59:CF019.

Hollingsworth, C.R. and C.D. Motteberg. 2003. Uniform fungicide trials on Fusarium head blight of wheat and barley in Minnesota. Pages 84-86 in: Proc. 2003 Natl. Fusarium Head Blight Forum. Bloomington, MN.

Hollingsworth, C.R. 2004. Uniform fungicide trials for suppressing FHB. Prairie Grains 58: 39.

Hollingsworth, C.R. 2004. 2003 Uniform Fungicide Trials on Fusarium head blight in Minnesota. Univ. Minnesota. MN Crop News MNCN37.

Extension presentations:

Hollingsworth, C.R. 2004. Fungicidal product testing for the control of scab on wheat. Ag Professional Update. 9 Feb. Crookston, MN.

Hollingsworth, C.R. 2004. Fungicidal product testing for the control of scab on wheat. Ag Professional Update. 12 Feb. Morris, MN.