Summary of MGMT Meeting Hilton Hotel Minneapolis, MN July 27, 2008

(Held in conjunction with the American Phytopathological Society's 2008 Annual Conference)

2008 state by state disease summary and comments on the FHB model

OH mild to low scab year, model worked well

ND low scab year, barley is close to harvest, but wheat is still susceptible

MN low scab year especially in the north of the state

NE eastern NE has high scab with 50% incidence, but rest of state has 15-20% incidence

IN 20% in plots but growers seeing less than 3ppm DON

KY very low with <1% incidence

PA low

MI low on average, model worked well

MT a lot of fields are irrigated and managed to give low scab

WI cold start and wet spring, starting to see some DON at elevators

NY mostly dry during flowering leading to low scab

AR more scab than most years

SD wet spring but low rain and temperatures at flowering resulting in low scab

IL 2-10% incidence

KS high in eastern 1/3 a minor wheat area, 10-20% incidence in central Kansas

NC low except in the NE corner of the state, model worked well.

Uniform Fungicide trials

This project is being led by Carl Bradley with help from Gary Yuen.

The major chemical companies have been contacted and no new chemistries have been offered for testing by the USWBSI group although it was acknowledged that preliminary testing of some new chemistries is being undertaken by some scientists with close links to industry.

Prosaro will be registered for use in '09. Maltiva (Caramba + Headline), a new fungicide combination, is unlikely to be sold for FHB control. Topguard (flutriafol) is available but is less effective. At least 5 generic tebuconazoles have come onto the market but there is no indication that they differ in their effectiveness and some are produced by Bayer. A decision was made not to attempt to test the generics for differences in effectiveness in the uniform trials due to the problems of detecting the likely very small differences.

2009 will include the same 7 core treatments as 2008. Protocols will be the same as 2008: susceptible variety, inoculation and irrigation, and at least 4 reps. Optional treatments include 1) testing timing of application, particularly in winter wheat where flowering can be staggered, 2) effect of headline at different timings to determine how late it can be applied before it will affect DON 3) mixtures of fungicides, e.g., generic Tebuconazole and Caramba.

The Biocontrol component of the UFT includes these options: 1) three *Bacillus* strains including a commercial product Tegro, 2) BCA plus Prosaro, and 3) a two-yeast mixture (not with fungicide as it is susceptible). A *Cryptococcus* that is being commercialized needs some larger-scale field testing to support its registration.

Integrated Management coordinated project

This project is being led by Pierce Paul with help from Marcia McMullen and Don Hershman.

Pierce Paul led an active discussion on the standard protocols required for the project participants. After much discussion about making more closely defined designs it was clear that, to make the research relevant to the cropping systems in the states in which it is be conducted, and taking into account individual operators' equipment restrictions, the protocols should continue as they have in the last 2 years of trials. There should be 3-6 varieties representing a range of resistance; fungicide treatment should be plus or minus Prosaro, the current best available control; residue treatment should be relevant to local cropping practices; plot size should be as large as possible with 10'x20' recommended; and borders should be used. Extensive discussion was held on the use of inoculation and irrigation, with the advantages being more consistent results and the disadvantage that the data could not then be used in the FHB model or in economic analysis. Most collaborators will continue to run the experiments under natural environmental and inoculum conditions.

The variation in protocol between participants could be catered for by the meta-analysis which will be undertaken on the whole data set. For testing of specific hypotheses where not all of the participants applied those treatments, subsets of data could be used.

Attendees

S. Neate	ND
T. Adhikari	
S. Ali	
S. Halley	
P. Paul	OH
R. Dill-Macky	MN
C. Hollingsworth	
C. Motteberg	
J. McMechan	
G. Yuen	NE
S. Wegulo	
K. Wise	IN
D. Hershman	KY
G. Kuldau	PA
D. Brown-Rytlewski	MI
M. Burrows	MT
P. Esker	WI
G. Bergstrom	NY
G. Milus	AR
J. Stein	SD
B. Bleakley	
L. Osborne	
E. DeWolf	KS
C. Bradley	IL
D. Schisler	
M. Draper	DC
C. Cowger	NC