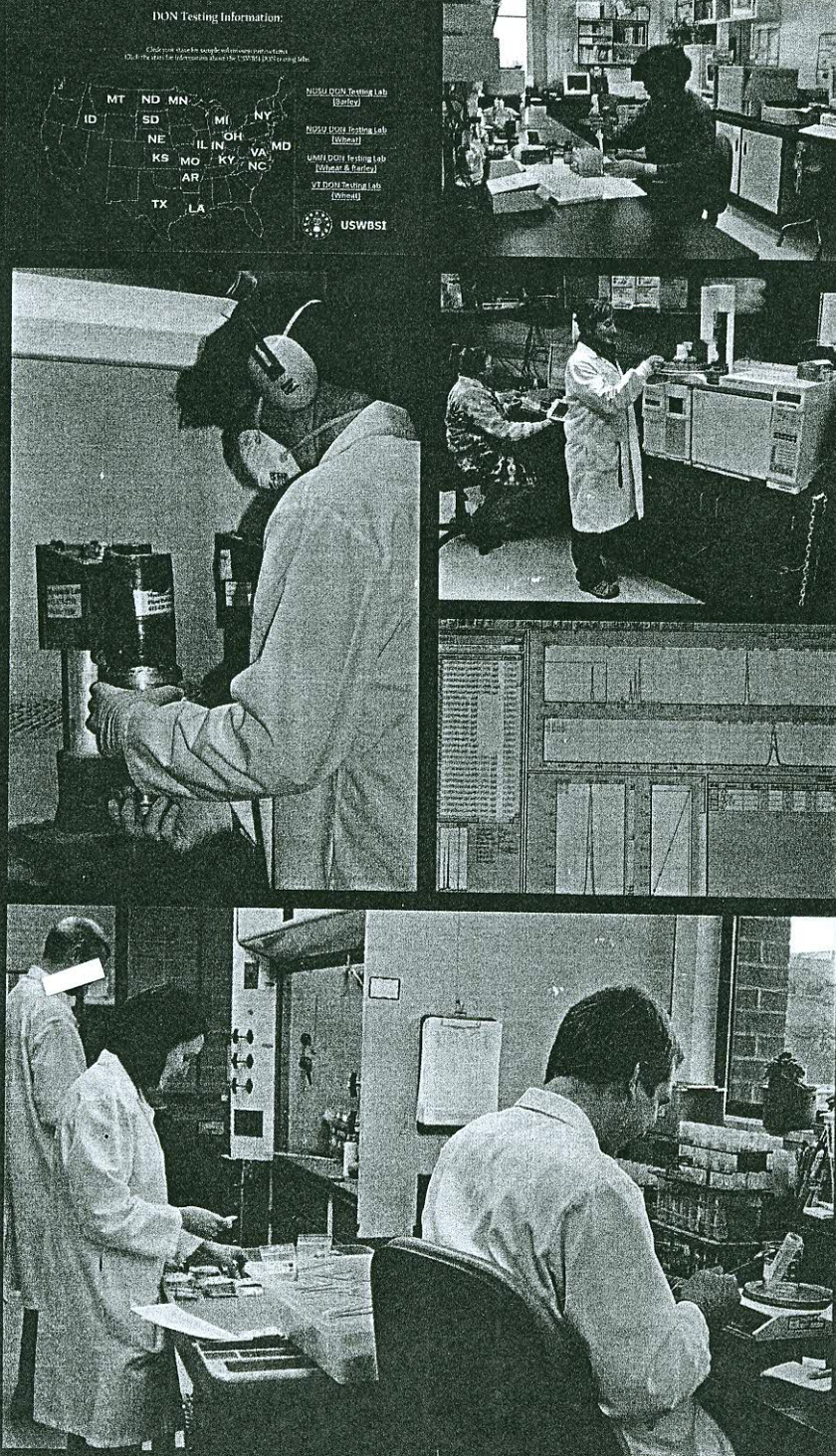# Proceedings of the 2009 National Fusarium Head Blight Forum

Wyndham Orlando Resort • Orlando, Florida USA
7-9 December, 2009

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Sample Reference:

Dalitso Yabawalo, Mohamed Mergoum and William Berzonsky. 2009. "Chromosome Location of Fusarium Head Blight Resistance in 'Frontana' Spring Wheat." In: S. Canty, A. Clark, J. Mundell, E. Walton, D. Ellis and D. Van Sanford (Eds.), Proceedings of the National Fusarium Head Blight Forum; 2009 Dec 7-9; Orlando, FL. Lexington, KY: University of Kentucky. pp. 161-164.

RISK MAPPING FUSARIUM HEAD BLIGHT OF WHEAT IN BRAZIL
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ABSTRACT

Available epidemiological knowledge was previously used for developing a simulation model to predict Fusarium head blight infection risk in southern Brazilian conditions. The model has been successfully validated and incorporated into a web-based system to warn of FHB risk within-season using both site-specific observed and 5-day forecast weather. We have further used the model to assess disease risk under the influence of climate variability, especially under the effect of El Niño southern oscillation, and management practices (sowing dates) by using historical (50-year) records of weather data for a single location. We are now working on the development of tools to map disease risks over a broader geographic region. FHB risk maps are computer-generated images depicting the risk using special interpolation techniques within points indicated by the geographical location of automated weather stations. The final risk maps are made by color transparency layers which overlays a geographic map. Besides extending risk information for a large geographical region the use of intuitive images representing epidemic risks may facilitate dissemination and understanding of risks to guide decision-making on FHB management. In addition, maps may be useful for the fine tuning of wheat zoning and for the identification of post-harvest areas with lower probability risk of mycotoxin contamination.