PLENARY SESSION

Chairperson: Dave Van Sanford

OVERVIEW OF THE 2009 WHEAT CROP QUALITY WITH RESPECT TO VOMITOXIN IMPACT G.M. Stewart

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ABSTRACT

CII annually surveys three classes of wheat (HRS, HRW and SRW) in the United States for numerous quality factors. Also included in this survey is vomitoxin testing basis historical area composites.

Within this crop year, particularly in the Mid-Atlantic States, areas of concern have been identified. A brief overview of the seventeen states covered in this year's crop survey will identify these pockets of concern.

In the Soft Red Winter area, increased testing was requested by the clients of CII to help discover these patterns. High vomitoxins levels (>5.0 PPM) were identified in Ohio and Maryland. (Pennsylvania was not included in this survey, but the laboratory has some isolated samples from PA that ranged much higher than 5.0 PPM). A general review of the Soft Red Winter area illustrates a very widespread vomitoxin issue that was present in all states surveyed.

In the Hard Red Winter area, testing was continued on a composite basis with little change anticipated in the usual troublesome areas. As expected, increased vomitoxin was identified in eastern Kansas and South Dakota.

Hard Red Spring wheat testing identified only a few pockets, predominantly again in South Dakota.

In addition to providing the data in the form of graphics (maps) and some numerical data tables, the difficulties with collection, interpretation and sampling will be brought to light within this overview.

Quality issues that arise from the scab damage such as weak gluten and poor color bring about necessary creativity from both the buyer and miller to maintain the flour quality level that the end user has come to expect. The method to achieve that goal on the part of the buyer is appropriate purchases to be able to blend off and clean out the damaged kernels. The miller must monitor cleaning house procedures to eliminate the scab kernels. However, difficulty will persist on the scab kernels that are not as shriveled as the majority, thus carrying through the vomitoxin. The yield loss associated with the light and shriveled kernels illustrates the dramatic and persistent economic impact of the *Fusarium* problem.