

# MEASURE AND MANAGE

## Vomitoxin Testing – 2006 Wheat

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Vomitoxin or Deoxynivalenol (D.O.N) is the mycotoxin produced by the fusarium graminearum fungus that causes head scab in wheat. There is a positive correlation to the presence of head scab and production of vomitoxin. However the amount of vomitoxin produced can vary greatly as both fusarium infection and vomitoxin production are highly weather dependant.

Agri-Food Laboratories offers a toxin testing service using the ELISA test methods. This service provides for a rapid assessment of the DON levels in wheat prior to sale or storage. In addition to DON we can also analyze for Zearalenone, T2 and Aflatoxin however it is DON that is of primary concern for wheat.

DON is not evenly distributed in the grain. This fact makes it absolutely imperative that a representative sample be submitted for analysis. Submitting a sample from a single location may result in unreliable results.

It is best to sample from a moving stream of grain at the unloading facility and grab samples at random as the load is be emptied. Collect at least 20 grab samples and place in a clean container and from that submit a half kilogram sample size to Agri-Food Laboratories. Ziploc freezer bags are sufficient.

There are number of management steps that can be taken to reduce the potential problems that may emerge in storage. Even if you have used folicur, testing is still a good idea as folicur only reduces and does not eliminate the risk of scab infection.

- At harvest set the combine to remove shriveled kernels
- Dry grain to 13.5% moisture to prevent further mold growth in storage
- Store suspect grain isolated from clean grain
- Analyze grain going into storage to know that you are storing a desirable product for end use