



Institute of
Barley and
Malt
Sciences

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DON (Vomitoxin) prediction tools available

Dr. Marcia McMullen, Professor of Plant Pathology at North Dakota State University has issued valuable information on tools to help with prediction and treatment of Fusarium Head blight in barley and wheat. With high humidity and predicted high temperatures, this information can be very helpful to producers. Dr. McMullen's information follows.

RISKS OF FHB (SCAB) IN WHEAT AND DON (VOMITOXIN) IN BARLEY

Wheat: On June 29, the NDSU Small Grain Disease Forecasting site (www.ag.ndsu.nodak.edu/cropdisease) and the national FHB forecasting web site (www.wheatcab.psu.edu) indicated a moderate to high risk of scab infection in moderately susceptible to even moderately resistant wheat varieties that are flowering, over the entire eastern 2/3 of the state. The national model web site (housed at psu.edu) also has a tool for looking at 24-72 hour forecasts, which indicated a diminishing risk of Fusarium infection over the next 72 hours, primarily because of the higher temperatures and windy conditions predicted. But weather forecasts also indicate very high dewpoints in the evening, which potentially favor FHB infection. Growers need to know the growth stage of their winter wheat and spring wheat crops. Even some spring wheat fields along the southern tier of counties have started to head out now. Continued vigilance for FHB risk will be warranted for some time.

Barley: NDSU added a barley DON prediction model to the NDSU small grain disease forecasting web site (www.ag.ndsu.nodak.edu/cropdisease/) this year. This model was developed by Dr. Jeff Stein, former SDSU plant pathologist, using considerable data from ND. The information is accessed by going to the NDSU web site, clicking on the Barley DON model, and then the NDAWN weather station of interest. Data from NDAWN sites in the eastern two-thirds of ND on June 29th showed moderate to high risk of potential DON being formed in fully headed barley. Barley in full head emergence growth stage should be treated with Prosaro, Caramba or Proline to reduce the risk of FHB (scab) infection and DON accumulation. Some barley fields are fast approaching this stage in some areas now.