



PST e-alerts



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Wheat Disease Update

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Harvest is well underway in Oklahoma with a report this morning indicating 17% of the crop has been harvested. Hence, diseases are no longer in the forefront except for the possibility of head scab. I had several calls in late April and May (especially from northeastern and east-central OK) related to concerns about head scab this year. Now that harvest is commencing, a few additional calls have come in describing "tombstones" (white, chalky wheat kernels) or pinkish colored wheat grains in harvested wheat. In fact, I found an occasional pinkish kernel in grain from my fungicide trial, but no more than one kernel in thousands.



I would call your attention to two publications from OSU on head scab and vomitoxin. These are [PSS-2145 Fusarium Head Blight \(Head Scab\) of Wheat: Questions and Answers](#) which Dr. Jeff Edwards and I updated in 2013. Many of the most common questions pertaining to head scab and associated mycotoxins can be found there. [PSS 2136 Considerations When Rotating Wheat Behind Corn](#) is a related fact sheet focusing more on potential problems that can arise when wheat is planted into corn stubble. Both can be accessed at: <http://osufacts.okstate.edu>. Once at this site, simply type in the fact sheet indicators (PSS-2145; PSS-2136) into the search box toward the upper right of the screen.

I also have been asked about testing for vomitoxin (the most common toxin associated with head scab). The Oklahoma Animal Disease Diagnostic Lab at Oklahoma State University does accept samples to test for mycotoxins. These samples are sent to a lab at South Dakota State University that has expertise in mycotoxin testing. I also was asked about the availability of commercial kits for testing that can be done on-farm. There are many commercial tests available – both qualitative tests that will give a “present” or “not present” indication, and quantitative tests that provide a level of toxin present. Most of these kits are advertised as “easy to use,” but I have not had experience with any of them. I did find a link that describes these kits and their specific uses. This link is to GIPSA (Grain Inspection, Packer and Stockyards Administration), which is a unit in the USDA so it should be non-biased. This link should be of use if you are searching for kits to test for a mycotoxin such as vomitoxin. Be aware that this link provides a description for kits that are used for more mycotoxins than just vomitoxin, whose more scientific name is deoxynivalenol (DON). For more info visit this link:

http://www.gipsa.usda.gov/fgis/metheqp/GIPSA_Approved_Mycotoxin_Rapid_Test_Kits.pdf

Reports/excerpts of reports from other states: I opted to not include updates from specific states. Suffice it to say that my impression is that stripe rust is the most widely prevalent foliar disease in all states sending out reports at this time, including Washington, Idaho, Wisconsin, Michigan, Colorado, the Dakotas, and Nebraska. Perhaps this is best stated by Dr. Steve Baenziger (Wheat Breeder; Unvi of Nebraska), who indicated, “On those plants lucky enough to have leaves free of stripe rust are getting infected with leaf rust.”

Dr. Richard Grantham - Director, Plant Disease and Insect Diagnostic Laboratory

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