

Wheat Disease Update – 05 June 2009
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Here are a few more reports from Kansas and Nebraska that may be of interest.

Kansas; Dr. Erick DeWolf, Wheat Extension Pathologist, Kansas State Univ.:

06-04-2009: I wanted to provide you with a short update on the head scab situation in Kansas. It appears that the SE portion of the state is experiencing severe scab again this year. I have been able to confirm fields between 20 to 80% incidence in fields near the borders with MO and OK. As we move west along the OK border the incidence of head scab appears to drop off significantly and ranges from 1 to 5% in fields in south central Kansas. The impact of head scab will be significant and some fields will not be harvested. The lower levels in South central Kansas will likely be enough to cause price discounts and questions regarding seed quality.

Stem rust was observed at low levels in Ellsworth county (central KS) on Monday June 1. The lesions were observed on the variety Winterhawk previously known to be susceptible to the predominate races of stem rust in the U.S. The infection was concentrated in a small foci with lesions on both stem and leaves.

06-03-2009: Light amounts of wheat stem rust were found in infection centers 1 foot in diameter on the hard red winter wheat Winterhawk in Stafford county in south central Kansas on June 2. Light amounts of wheat stem rust were also found on Winterhawk in Belleville (Republic county) in north central Kansas on June 3. The crop was at half to full berry growth stage.

High levels of wheat leaf rust were found in south central and east central Kansas on susceptible cultivars in commercial fields in early June.

Nebraska; Dr. Stephen Wegulo, Extension Specialist, Univ. of Nebraska:

06-05-2009: This morning during the Annual Hard Winter Wheat Breeders Field Day at UNL's Agricultural Research and Development Center near Mead, I saw low levels of leaf rust on some entries in the southern and northern regional performance nurseries. On my way back to Lincoln, I visited three commercial wheat fields. All three fields had leaf rust at very low levels. It appears leaf rust is now widespread at least in southeastern NE. On Sunday I will head west to the NE Panhandle to do our annual wheat disease survey on Monday and Tuesday. I will update you on what I find.

06-03-2009: Yesterday (June 3), P. Stephen Baenziger, UNL small grains breeder, alerted me to leaf rust in the state variety trial and breeding nurseries at Havelock Farm in Lincoln. I surveyed the plots and found leaf rust in several varieties/lines ranging from trace to over 80% severity on the lower leaves of Overley. I have not seen leaf rust in commercial fields but I have heard reports of it being seen in some. Yesterday I also looked at a field about 5 miles southeast of Lincoln. Sections of this field had up to 40% incidence of Fusarium head blight (Fig. 1). This is the first field in which I have found a significant level of scab. Rain during the last week of May and the first two days of June created conditions favorable to disease development in southeastern Nebraska.

Wheat Disease Update – 02 June 2009

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Not much to report from Oklahoma (one comment below from Rod King in Muskogee County), but I have included a few observations from other states in which you might be interested.

Oklahoma; Rod King, Extension Educator, Muskogee County: I am finding head scab in about 40% of the wheat crop in Muskogee County. Most of the fields that are infected are severe. I don't know if anyone has reported about it from our County or not. I love the updates they have been very helpful. We are also having tremendous bird pressure on some of our wheat this year, much more than normal.

Kansas; Dr. Erick DeWolf, Wheat Extension Pathologist, Kansas State University:

06-01-2009: Low levels of stripe rust were observed in Reno county (central KS) and Sumner county (south central, Kansas) this weekend. The disease was detected in research plots of varieties known to be susceptible to stripe rust with an incidence of less than 2%. Lesions were 2 to 3 cm long and actively producing spores suggesting that the infections had taken place at least 3 weeks ago.

The wheat in these areas of Kansas are in the milk stages of kernel development, and it seems unlikely that stripe rust will be serious issue in commercial wheat fields this year. However, there is probably enough spore production to have low levels of stripe rust occur in northern states.

05-29-2009: Leaf rust has continued to increase in parts of south central Kansas and can be found at low levels in central, north central and west central.

Severity in susceptible varieties ranges from 5 to 20% in the south central region where the wheat is now moving through the milk stages of kernel development. Severity in central Kansas ranges from trace to 5% severity in susceptible varieties.

To date resistance in Fuller and Santa Fe appear to be holding. However, we continue to see evidence that the resistance in the variety PostRock is breaking down. Overlay, the variety planted on the most acres in Kansas, appears to be fully susceptible to leaf rust this year. In previous years, Overlay had given a susceptible reaction to leaf rust but the races that can overcome its source of resistance typically arrived late. Stripe rust was observed at trace levels in Kansas in Saline county (central Kansas) on May 22. No reports of stem rust to date in Kansas. Both leaf rust and stripe rust appear to be at lower levels than the previous two years.

Illinois; Dr. Carl Bradley, Asst. Professor & Extension Specialist, University of Illinois: I am coordinating a disease survey for wheat that just initiated this week. We still have fields in northern Illinois that have not yet flowered, so the totals for the state will not come for some time. This week, I surveyed wheat fields in Randolph, Washington, Jefferson, Wayne, Clay, Jackson, and Pope counties all in southern Illinois. I could find FHB in every field (approximately 30 fields were surveyed in total so far). I do not have all of the numbers compiled, but glancing at the datasheets, FHB incidence in wheat heads ranged from about 6% to over 60% depending on the field. Glume blotch is also in every field and at fairly high incidences and severities as well. As I was surveying fields, I felt that I could pick out those that were sprayed with a fungicide and those that were not based on the disease levels. Our survey is not complete, and I'll have more complete information later.