Wheat Disease Update
Bob Hunger, Extension Wheat Pathologist

This past week (Monday & Tuesday) I visited the Dr. Raymond Sidwell Station near Lahoma (Major Co.), and the variety trials near Cherokee (Alfalfa Co.) and Alva (Woods Co.) on my way to field days in the panhandle near Balko and Hooker (Texas and Beaver Co.). Except for the panhandle, wheat foliage is pretty much done for in Oklahoma. Wheat in the panhandle was mostly in the kernel forming stage. Diseases observed on the trip to the panhandle included stripe rust (some still actively sporulating), wheat streak mosaic/high plains, and barley yellow dwarf. Samples submitted to the Plant Disease and Insect Diagnostic Lab also have tested positive for these viruses. As indicated in the 14-May update, take-all/root rot has been confirmed from a couple samples received from across central and northern Oklahoma. Take-all has been confirmed, but it appears another root rot also may be involved. Jen Olson in the PDIDL is making isolations to help resolve exactly what is involved in terms of root rot disease. In south-central Oklahoma Aaron Henson (Tillman Co. Extension Educator) indicated to me that wheat is variable in maturity but he estimates that some harvesting should begin in 1.5 to 2 weeks. Heath Sanders (Area Extension Agron Spclt located in southwestern OK) indicated much the same – especially if the cool/wet weather becomes more seasonally hot and dry.
Kansas: Dr. Erick DeWolf (Extension Plant Pathologist, Kansas State University); May 18, 2016: “Wheat in central and south central Kansas is at the grain filling stages of growth with many fields at or near the milk stages of kernel development. Stripe rust is severe in many fields that were not treated with fungicides this year. Fields of susceptible varieties have stripe rust severity >80% on flag leaves in demonstration plots in Pratt, Kingman, Harper, Barber counties. The disease was also severe in Ellsworth county where a fungicide demonstration plot had nearly 100% severity of the flag leaves. The weather this week appears highly conducive for continued disease development and the risk of severe disease appears to be high in Northwestern and West Central KS where low levels of stripe rust have been reported on the flag leaves. Varieties with genetic resistance are performing well with disease reactions very similar to what we saw in previous years. To date, T-158, Gallagher, WB-Grainfield, TAM 114, WB Cedar, Sy- Monument have all had moderate levels of resistance to the disease. This suggests that the race structure of the stripe rust fungus is similar to last year. Low levels of leaf rust were observed in Kingman, Pratt, Barber and Harper Counties.”

Cereal Rust Bulletin from the Cereal Disease Lab in Minnesota; May 18, 2016: Highlights/reports in the Cereal Rust Bulletin include:

- Wheat stem rust was found in a nursery in south central Georgia.
- Wheat stripe is widespread in the U.S., now reported in 24 states.
- Oat crown rust has now been reported in Texas, Louisiana, Mississippi, Alabama and North Carolina.

You can see the entire report by clicking here.