Wheat Disease Update
Bob Hunger, Extension Wheat Pathologist

Oklahoma: Most concern and efforts are focused on assessing damage from the freeze of last week; however, the weather over the last 7-10 days has been more conducive to foliar disease development. So, although foliar diseases currently are at a low incidence in Oklahoma, their prevalence may start to increase over the next couple of weeks.

On 10-Apr in plots around Stillwater, I saw mostly only powdery mildew on lower leaves of susceptible varieties. Some leaf rust pustules also were observed on lower leaves of susceptible varieties Jagalene and Jagger, but I did not find pustules on any other varieties. The most prevalent disease was barley yellow dwarf, which was fairly common in the early-planted variety demo as well as in other wheat plots that were planted in September or early October.

From other locations in Oklahoma, Jen Olson (Plant Disease Diagnostician) has had samples come into the lab that have tested positive for barley yellow dwarf virus (panhandle and southwestern OK), high plains virus (panhandle), wheat streak mosaic virus (central OK), and Triticum mosaic virus (southwestern OK).

Reports from other parts of Oklahoma are as follows:
Panhandle (Rick Kochenower, Area Res & Extn Agron Spec): Foliar diseases are still minimal; did get just over an inch of rain this past weekend; some insect activity including Russian wheat aphid and brown wheat mite.

Northwest/northcentral (Roger Gribble, NW District Area Extn Agron Spec): Light powdery mildew is all that has been observed.
Southwest (Mark Gregory, Area Extn Agron Spec): Foliar diseases are at a low level.

Northeast/east (George Driever, Area Pest Management Spec): Powdery mildew is present, but still no or little rust. Wet weather may change that.

**Updates from other states:**

**Kansas:** Dr. Erick DeWolf; Wheat Pathologist, Kansas State University (13-Apr): Scouting activities in South Central and Central Kansas the week of April 6-10 indicate that leaf rust remains at low levels. The wheat in this area is currently at Feekes 5 to 6 (j jointing) in most fields with the most advanced fields at Feekes 7 (two nodes visible). No leaf rust, stripe rust or stem rust were observed in variety test plots or commercial fields in Sumner (South Central), Reno or Harvey Counties. Only trace to low levels of powdery mildew and tan spot were found. In general, the level of foliar diseases including leaf rust appears to be lower than the 2007 and 2008 growing seasons.

Weather had been dry this winter and early spring, but moisture has returned to many parts of the state in recent weeks. This moisture may stimulate additional disease development or bring rust diseases in from states to our South. Some of the most advanced fields in South Central Kansas were likely impacted by freezing temperatures early last week. We will continue to monitor the disease situation and provide additional updates soon.

**Louisiana:** Dr. Stephen Harrison, Wheat Breeder, Louisiana State University (09-Apr). I found heavy (fall infection) wheat stem rust over several plots at Winnsboro, Louisiana on April 8. The stem rust was heavy across 4-5 plots (500 square feet) and had not generally spread to the rest of the nursery. The varieties are about a week past heading on average so there is time for spread across the field.

**Arkansas:** Dr. Gene Milus, Plant Pathology, University of Arkansas (15-Apr). I visited plots at Fayetteville and Kibler yesterday. Most plots are in boot stage with a few almost headed. BYD appears to be the most serious disease even in plots treated with a high rate of Gaucho. Powdery mildew and Septoria tritici blotch are moving up the plants in some plots. Some lines in Chen’s stripe rust nursery look like they may be killed by mildew. No leaf rust or stripe rust was found. Reports from extension personnel elsewhere in the state indicate that wheat generally looks good. Septoria and powdery mildew are the most prevalent diseases with scattered bacterial streak, stripe rust and leaf rust.

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

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