Wheat Disease Update
Bob Hunger, Extension Wheat Pathologist

Oklahoma: Around Stillwater and most of Oklahoma, foliage has turned or has been killed from diseases including leaf rust, septoria, possibly bacteria, and/or spot blotch. Leaf rust approached levels in the 65-90% range just at the end of last week and today. However, mixed in with this were higher than typical levels of septoria. Also, a necrosis similar to septoria but without the pycnidia was fairly common. From these samples, streaming was observed which may indicate a bacterial infection, but no isolations were made. Another symptom commonly observed was a spot blotch type symptom, but no pathogen was isolated from these leaves. Stem rust also was found in plots of McNair 701 and in one other breeder line. Samples have been sent to the Cereal Disease Lab. Wheat on which stem rust was found was at the soft dough stage, and only a few spots within the plot had infected tillers.

I have seen Fusarium head blight (FHB=scab) in plots around Stillwater; mostly in the 1-2% range. By contrast, reports of severe FHB have come in from eastern, northeastern, and north central Oklahoma. In some of these instances, the late freeze and excessive moisture have all contributed to head discoloration. Last week in several fields in Kay County (north of Ponca City), Dr. Jeff Edwards (OSU Wheat Extension Agronomist) and I were in fields where nearly all the wheat had turned white from being in saturated soil for too long a time. FHB also was in these fields, but the extent of FHB infection was difficult to ascertain because of the bleaching of the plants. I also have had reports of FHB being found in southwestern OK, but at low levels.
For more information on FHB, go to: http://entopl.pokstate.edu/pddl/advisory.htm and look at volume 8, number 13 (May 19, 2009) edition of Pest E-alerts.

Viruses continue to be found in samples from northwest Oklahoma and the panhandle. The most prevalent virus found is barley yellow dwarf virus (BYDV), but positive results for Wheat streak mosaic virus, Triticum mosaic virus, and High plains virus have all been found.

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

Oklahoma State University, in compliance with Title IV and VII of the Civil Rights Act of 1964, Executive Order of 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, VP, Dean, and Director for Agricultural Programs, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of Agricultural Sciences and Natural Resources.