

Entomology and Plant Pathology, Oklahoma State University 127 Noble Research Center, Stillwater, OK74078 405.744.5527

Vol. 10, No. 9

http://entoplp.okstate.edu/Pddl/

May 6, 2011

## **Wheat Disease Update**

Bob Hunger, Extension Wheat Pathologist



**Oklahoma**: A trip yesterday to central Oklahoma (El Reno area) then to Kingfisher and Marshal (west of Stillwater) confirmed that barley yellow dwarf is the most prevalent disease this year in Oklahoma. I saw very little leaf rust at any of these locations. Powdery mildew, although present, was definitely in the "shutdown" mode. Some fields and trials had what appeared to be damage from freeze and/or drought. At Lahoma (west of Enid), Dr. Brett Carver (OSU Wheat Breeder/Geneticist) reported

seeing some leaf rust but still at low levels, and also found a few isolated pockets of stripe rust. In these areas and at Stillwater, wheat is mostly at the milk to soft dough stage.

Around Stillwater where more moisture has been received, leaf rust is starting to increase (especially on susceptible varieties). Dr. Art Klatt (OSU Wheat Breeder/Geneticist) reported seeing active and severe powdery mildew, and increasing levels of leaf rust (20-30S range) on his trial planted in a bottom area. Similarly, leaf rust is increasing in the variety-demonstration trial planted at Stillwater, and in a fungicide trial.

Samples continue to come into the Diagnostic Lab that test positive for various combinations of wheat streak mosaic virus, high plains virus, Triticum mosaic virus, and BYDVs. Nearly all of these samples are from northwestern OK or the panhandle.

Kansas (Dr. Erick De Wolf, Wheat Plant Pathologist, KSU): Stripe rust was found in Labette county Southeast Kansas this week. Doug Jardin describes finding a small "hot spot" in the variety Hitch, which is one of the Yr17 varieties that had a lot of problems last year. The overall incidence of stripe rust was very low at this location, and it appears the stripe rust has not spread out of the hot spots yet. This area of the state has been cool and



wet recently. The wheat at this location ranged between boot and flowering. A trace amount

of leaf rust was observed in Reno County (central Kansas) May 4. The wheat at this location was been under considerable drought stress and the plants were rolling their leaves in response the dry soil conditions. The wheat at this location was heading. Barley yellow dwarf appears to be very common this year in south central and southeastern Kansas. I have observed numerous fields with patches of BYD ranging in size from 1ft to 20ft in diameter. Wheat streak mosaic is also being reported in more fields than we have seen in the last 4 years. The disease is severe is some fields near volunteer wheat and at trace levels in other fields.

## Dr. Richard Grantham

## **Director, Plant Disease and Insect Diagnostic Laboratory**

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 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, gender, 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, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural.