



# Pest e-alerts



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

Vol. 11, No. 27

<http://entopl.okstate.edu/Pddl/>

May 14, 2012

## Wheat Disease Update

Bob Hunger, Extension Wheat Pathologist



Not much different from around Oklahoma. Field days and trips during this past week to northern Oklahoma (Kildare north of Ponca City) and then west from there to Lahoma (15 miles west of Enid) showed that wheat was moving quickly to maturity. There was no (or only very little) green foliage left on any varieties. White heads and/or plants with a whitish cast were prevalent across northern Oklahoma, but only occasionally were symptoms of root rot found associated with these plants. Generally the bases of tillers, crowns, and roots were mostly creamy white in color. When a root rot was found, the symptoms were most typical of dryland root rot (Fig 1) with an occasional sharp eyespot (Fig 2).



**Fig 1.** Dryland root rot (healthy stem at top).



**Fig 2.** Sharp eyespot root rot lesions on wheat.

The Plant Disease & Insect Diagnostic Lab (PDIDL) received numerous wheat samples over the last week. Nearly all of these were from northern, northwestern, or the panhandle of OK. Again, only occasionally were symptoms indicative of root rot observed, and the whitish cast, white heads and/or white plants were likely due to a combination of drought and heat over the last couple of weeks combined with a mild winter that allowed many varieties to produce large numbers of tillers. An excellent and more detailed explanation of this has been written by Dr. Jeff Edwards (Small Grains Extension Agronomist, Oklahoma State University) and is available at: <http://extensionnews.okstate.edu/>. At this site, go to the article titled: DROUGHT NEWS: Environmental causes of white heads in wheat (dated 05-08-12).



**Kansas:** Dr. Erick De Wolf (Wheat Extension Pathologist, Kansas State University), 11-May: “The wheat in Kansas continues to develop ahead of schedule with most farmers and agronomists indicating the crop is 2-3 weeks ahead of schedule. Most of the wheat in KS is now moving through the grain filling stages of growth. Wheat in north central and northwestern KS was flowering and early stages of kernel development this week. The wheat is showing signs of rapid maturity in many areas of west central, southwestern and south central counties. The rapid maturity appears to be the result of periodic heat stress and persistent dry conditions in the past 2-3 weeks.

I observed active stripe rust in Ellis County near Hays (central KS) and Finney County in irrigated research plots near Garden City (southwest KS). Jeanne Faulk and Cody Miller, KSU Extension Agronomy Agents, report that stripe rust remains active in northwest and north central Kansas. The progress of stripe rust has slowed dramatically in other areas of the state where environment has accelerated the maturity of the wheat crop.

Leaf rust is also contributing to the decline of wheat in many south central counties. Research plots of varieties known to be susceptible to leaf rust now have disease severity greater than 40% on the flag leaves. Varieties affected include Overley, Jagalene, Jagger, Fuller, PostRock. Lower leaves have been destroyed in previous weeks by combinations of environment (hot-dry conditions), leaf spotting disease, stripe rust, leaf rust. Of these varieties, Fuller and PostRock still hold a reasonable amount of acres in the state.

Barley yellow dwarf has also been a significant issue again this year. The disease can be found in nearly all fields where it is causing moderate size patches. Some fields showing more than 60% incidence of BYD.

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

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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.