



# Pest e-alerts



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Vol. 11, No. 11

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

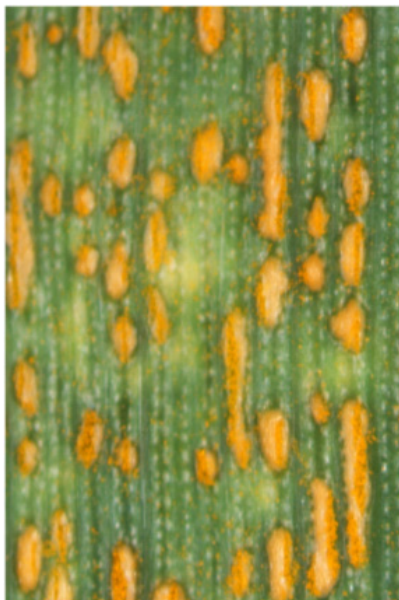
Mar 9, 2012

## Wheat Disease Update

Bob Hunger, Extension Wheat Pathologist

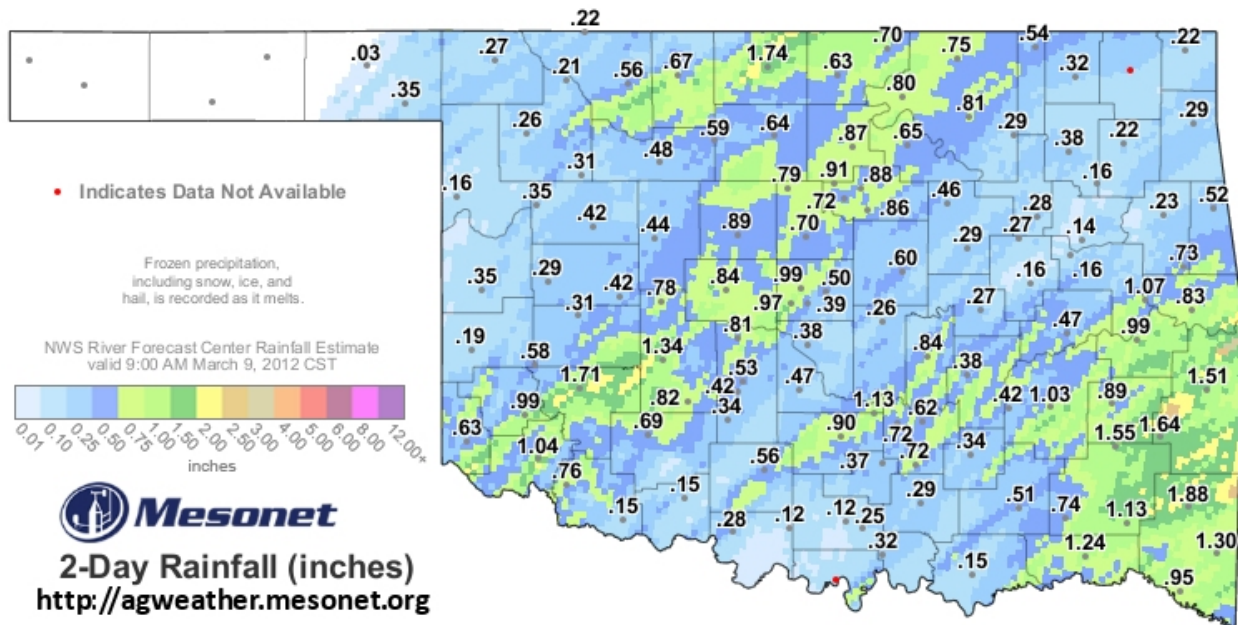


On Wednesday (07-Mar) I visited variety trials at Marshall (30 miles west of Stillwater), at Kingfisher (30 miles southwest of Marshall), and then traveled west/northwest to Watonga, Woodward and into the panhandle (Guymon/Goodwell). Marshall was dry with fairly large cracks developing. I could find a few first nodes (GS 6), but on many tillers I could not find a node. Powdery mildew and aphids were common; also some symptoms indicative of Septoria, but I could not be certain of that. No rust. At Kingfisher, the ground also was dry but cracks were just beginning to form. Here the wheat was thinner and I could find the first node on only a few tillers. As at Marshall, there was no rust. There also was powdery mildew and aphids, but at a much lower incidence than at Marshall. Between Kingfisher and the panhandle, wheat looked fairly good; however, the effects of the ongoing drought were obvious. I drove through Lahoma (10 miles west of Enid) on my return on 08-Mar. Rain fell over the main part of Oklahoma (see map next page) – anywhere from .5-1.75 in. Lahoma received about 0.6 in; Stillwater about 1 in. Fields were too muddy at Lahoma, but Dr. Brett Carver (OSU Wheat Breeder) indicated that earlier this week he observed heavy mildew in fields at Lahoma.



Also at Stillwater, two infections of stripe rust were found this week. Dr. Art Klatt (OSU wheat breeder/geneticist) found a focus infection about a couple feet in diameter but only found this one. Brian Olson (Wheat pathology A&P) found a single plant showing stripe rust pustules. So far, no leaf rust. Soilborne and spindle streak symptoms are fading quickly. There appears to be heavy mildew and BYDV in many fields and trials – especially in those planted earlier (Sep through early Oct). Wheat definitely is way ahead of normal. In 2010 and 2011, the early application of fungicide (GS-6) was made on 26-Mar and 16-Mar, respectively. In 2012, this early

application needed to be applied this past week (06-Mar) but high winds and then rain made that impossible. The variety in this trial is Jagger, which does come out of dormancy early. However, this year it has come out extremely early.



**Texas:** Rex Herrington, (Research Associate, Texas A&M), 7-Mar: “Here in South Central Texas, we have had the 2nd wettest February on record, and around 13-15 inches of rain since January 1. We have 4-5 more inches forecast Thurs-Sun. I went to our field 7 miles west of College Station this morning to collect a stripe rust sample, and saw that wheat LR is increasing rapidly on susceptibles from just a few days ago, and heavy flecking was seen on most resistant lines. I haven't seen any indication of a LR race change. Powdery mildew is heavy on some lines. No more stripe rust was found. Some of the early wheat lines are in the boot, and a few are heading. Oat crown rust is breaking out in multiple spots in two fields on the Nora oat borders. Last year, due to the drought, we didn't have a single pustule of oat crown rust here for the first time in 34 years. Bryan Simoneaux, who was working in Uvalde, called yesterday and said that he found one hot spot (3' x 5') of stripe rust in the populations block of our nursery while he was spraying alleys. He plans to send the samples overnight today.”



**Arkansas:** Dr. Jason Kelly, (Wheat and Feed Grains Extension Agronomist, University of Arkansas) 08-Mar: “Reports of stripe rust have been steadily coming in over the last week and now is being reported in 17 counties in Arkansas. Realistically stripe rust is throughout the delta region and has been reported as far north as the Missouri Boot Heel. To date there have been no reports of stripe rust on the western side of the state. With the strong southerly winds we have had the last few days, spores have to be spread throughout the region and points much further

north.” (For more information on variety reaction and spraying for stripe rust as developed by Drs. Kelly and Gene Milus in Arkansas, go to their website at: <http://www.uaex.edu>).

**Louisiana:** Dr. Stephen Harrison, (Wheat Breeder/Geneticist, LSU) 09-Mar: “I found a small stripe rust center in Baton Rouge and Boyd Padgett has reported several infected fields so we need to continue to monitor fields. Leaf rust is widespread in susceptible varieties in Baton Rouge and powdery mildew is very heavy. Oat crown rust is also very heavy in the Baton Rouge nurseries with a lot of time left for the epidemic to develop. I’m sure the ground will be orange with spores under susceptible oat varieties by April. I have received one call on crown rust in a grower field in a fairly resistant variety. Septoria glume blotch is also common in the Baton Rouge nurseries.



On 07-Mar, “Wheat powdery mildew is as bad as I have seen in the past ten years. We normally do not have much powdery mildew due to temperature fluctuation along the Gulf coupled with high rainfall. Many plots in the yield trials have 60%+ coverage. Leaf rust is also pretty severe on susceptible entries, with a few entries in the USDA Uniform Southern Nursery having as high as 70% leaf coverage. I found a single, small stripe rust center in Baton Rouge yesterday, although I am sure there are more present that I missed. Stripe rust does not appear to be as much of an issue in Louisiana this year as it is in Arkansas and Mississippi, perhaps due to warmer temperatures and heavy rainfall. I have heard of just a few incidences of stripe rust in grower fields. The wheat plots are generally ugly due to excess growth (very leafy, lazy, lodged, plants), some late freeze damage, and quite a few entries that may not head out due to lack of vernalization.”



**Washington:** Dr. Xianming Chen, (Wheat Pathologist, USDA-ARS, Pullman, WA) 05-Mar: “On March 1, I was checking wheat fields in Whitman, Columbia, Walla Walla, Benton, and Franklin counties in Washington, mostly south of Highway 26. Plants ranged from two-leaf stage to early jointing (Feekes 1-5), depending upon planting time and region. In most wheat fields, plants were still in winter dormancy and did not grown much compared to growth stages in early November, but became uniform especially in late planted fields. No rust was found in any of the checked fields. There was no obvious winter injury or other diseases.”

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**Dr. Richard Grantham**  
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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.