



# Pest e-alerts



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## Wheat Disease Update

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Wheat varies around Stillwater, but mostly is at flag leaf emerged with the heads approaching the boot. Brian Olson (my technician) reported mostly the same at Lahoma (15 miles west of Enid in north-central OK). Yesterday I was in wheat fields near Talala, OK in NE OK, and wheat there ranged from flag leaf emerging to awns starting to appear. Also, more wheat is showing or starting to show drought stress across much of the state.

Regarding disease, stripe rust remains the most prevalent disease with actively sporulating pustules still quite evident. I don't believe there has been much movement/increase in stripe rust because the weather has not been conducive (no free moisture on leaves). Gary Strickland (Extension Educator; Jackson Co. in SW OK) indicated the same thing to me earlier this past week, i.e., that foliar disease (primarily stripe rust) seems to be in a "holding pattern." At Lahoma, Brian indicated seeing stripe rust but only rarely on the flag leaves; mostly on leaves below the flag and at varying degrees of severity. I also have seen leaf rust pustules on lower leaves around Stillwater, but at low frequency. Powdery mildew also has become more apparent around Stillwater but only in a few locations. Also around Stillwater and in northeast OK yesterday, I saw colonies of greenbug but not in great numbers. However, because of these aphids and earlier high numbers of aphids (especially bird cherry-oat aphids), I am starting to see more and more "hot spots" of barley yellow dwarf (see photo to right).





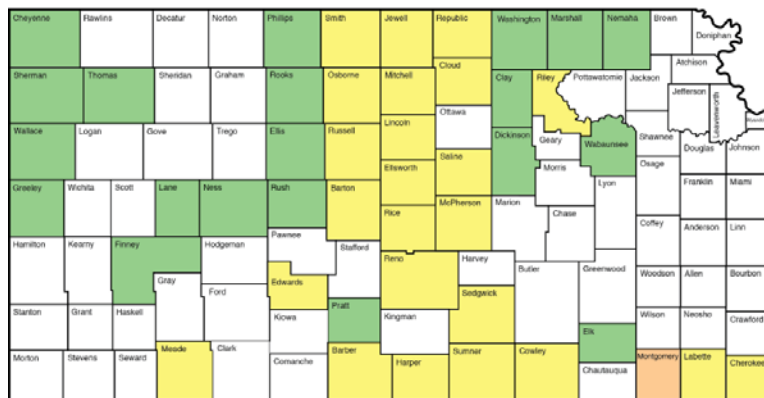
**Texas:** Dr. Amir Ibrahim, (Professor & Small Grains Breeder/Geneticist, Texas A&M AgriLife Research), Apr 8, 2016 [This is from a report on the Rust Evaluation Nursery located near Castroville, TX]: “Wheat leaf rust (*Puccinia triticina*) has spread uniformly in our trials, populations, and disease screening rows. Wheat stripe rust (*Puccinia striiformis* f.sp. *tritici*) has uniformly spread in the lower canopy across the field at Castroville in February but warming temperatures have slowed it or stopped it, and it is inactive at this point at Castroville. Stripe rust has caused significant damage to the lower canopy in susceptible types. Symptoms can still be seen on the flag leaves of very susceptible wheats such as “Redhawk”. The wheat lower canopy does not contribute significantly to grain yield, but such significant damage to the lower canopy will be reflected in yield somehow even though no symptoms can be detected on the upper canopy in general and flag leaves specifically.

**Kansas:** Dr. Erick DeWolf (Extension Plant Pathologist; Kansas State University; Manhattan, KS); Apr 8, 2016: “The wheat crop in Kansas is now at the flag leaf emergence stage of growth in much of southern and central Kansas. The crop is at mid to late joining in the west central and northwestern regions of the state. Stripe rust continues to be my primary focus this week with new reports from additional counties and further disease development in central Kansas. The disease is still limited to the lower leaves for the most part with occasional mid canopy leaves with trace levels. The incidence stripe rust on the lower leaves of susceptible varieties ranges from 1-30%.



Leaf rust was observed at multiple locations in central Kansas this week also. Leaf rust is also on the lower leaves with only trace levels found in most plots. I did observe a few fields and plots in Reno and McPherson county with incidence of leaf rust approaching 90% on the lower leaves. The severity of the infection was still low (<10%) in most cases. The dry conditions may be slowing the spread temporarily but growers should be watching this situation carefully. Be prepared to apply a fungicide if disease continues to progress. Attached are distribution maps for Kansas as of April 8th, 2016.”

**Distribution of Wheat Stripe Rust**  
April 8, 2016



**Disease Risk**  
■ Stripe rust not observed  
■ Stripe rust observed on lower leaves  
■ Stripe rust observed on upper leaves

Disease distribution map based on reports from: E. De Wolf, R. Laffont, D. Shinn, L. Haug, S. Stovall, E. Aker, M. Buchanan, G. Combs, A. Foster, S. Campbell, J. Cox, J. Gibson, J. Falk, James, J. Green, M. Gleason, D. Halloran, R. Hein, J. James, A. Johnson, K. Larson, C. Long, I. Maxwell, C. Miller, M. Rogger, Z. Simon, S. Wild

