



# Pest e-alerts



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## Wheat Disease Update

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**Oklahoma:** 14-Apr; Yesterday Brian Olson (A&P, Wheat Pathology) and I traveled different routes between Stillwater and Lahoma stopping at many fields. Wheat was mostly at growth stage 7-8, but an occasional field at GS 6-7 was noted. No rust was observed but we did see light and scattered powdery mildew and septoria along with occasional spots of light to moderate bird cherry-oat aphids. In plots around Stillwater this week, we did find some stripe rust on Jagalene again and have sent samples to Washington State for identification. In some plots (usually earlier

planted) powdery mildew is moderate to severe on lower leaves, but is absent in other plots. Still no leaf rust detected.

**Texas:** 14-Apr; Dr. Amir Ibrahim, Wheat Breeder, Texas A&M - Castroville.

Crops: Winter wheat, spring wheat, winter/facultative oat, and spring oat

Diseases: wheat yellow rust (WYR), wheat leaf rust (WLR), wheat powdery mildew (WPMD), wheat stem rust (WSR), and oat crown rust (OCR)



“The conditions at Castroville, TX (about 12 miles west of San Antonio) continue to be conducive to diseases, especially WYR. WYR has killed the entire leaf area of few highly susceptible genotypes such as TX05A001822. The nursery received about two inches of rain over the last 24 hours. Reliable WYR notes can be taken up to early next week, in my opinion, especially in early and medium maturing genotypes.

The Lr24 and Lr39/41 virulents are increasing in severity (> 60S). I expect WLR to intensify rapidly over the next 10 days. The presence of both WYR and WLR on the same leaf makes it

difficult to estimate the severity of the latter. Our crews will be back in Castroville beginning April 24th for WLR and OCR notes and selections.

PMD is also heavy here. Lines such TAM W-101, are covered with it in the lower to mid-canopy.

OCR has established very well in the oat trials, populations, and head-rows. We should be able to take good notes on the AFRI lines.

Notes on infection type and severity could be taken starting middle of next week and until end of April.

I have found WSR on both stem and flag leaf in a multitude of plants in a trap plot of 'McNair 701'."

08-Apr; Dave Long, Plant Pathologist, Cereal Disease Lab, MN. "Low levels of wheat stem rust were found on flag leaves of the stem rust susceptible cultivar McNair 701 at Uvalde in southern Texas. On the same flag leaves significant amounts (20%) of wheat leaf rust and wheat stripe were found. The rust appears to have been rain deposited in the last 7-10 days."

07-Apr; James Swart, Entomologist (IPM) & Dr. Curtis Jones, Agronomist, Texas AgriLife Extension & Texas A&M - Commerce. "Stripe Rust Alert – April 7, 2010 - A stripe rust epidemic is occurring across the region (north east of Dallas). We observed widespread infection levels near Royse City on Monday. The most susceptible variety appears to be AgriPro Magnolia. We also observed moderate infection levels in Crawford and USG 3295. All of these varieties exhibited good resistance to stripe rust last year, so there appears to be a race change in the stripe rust pathogen, *Puccinia striiformis*. Terrell LA 841 and Pioneer 25R57 appear to be resistant at this point."

05-Apr; Dr. Dave Worrall, Wheat Breeder, AgriPro. "We have heavy leaf and stripe rust in susceptible headrows at Vernon. We do not have any rust in any of the yield plots."

05-Apr; Dr. Amir Ibrahim, Wheat Breeder, Texas A&M - Castroville. "I toured our multi-state rust evaluation nursery located 12 miles west of San Antonio, TX on April 5, 2010. The majority of entries have headed except for some of the late types from the northern Great Plains. Both leaf and stripe rusts are present, with the later being more intense but not as intense as College Station, TX. Stripe rust is present on the flag leaf with TX06A001822 completely covered with a 100S rating. 'Jagalene', 'Jagger', 'Fuller', and 'TAM 112' are 50S, 25S, 30S, and 20S, respectively on the flag leaf. I have seen higher intensities in the spreaders and the head-rows. The day and night temperatures will not exceed 80o F and 60o F, respectively for the next seven days according to the forecast. Leaf rust is 30S and 70S on Jagalene on the flag leaf and mid-canopy, respectively. It is 10S and 20S (FL) on Fuller and Jagger, respectively. I expect it to intensify quickly during the next two weeks."



**Louisiana:** 07-Apr; Dr. Stephen Harrison, Wheat & Oat Breeder, Louisiana State University.

“We are spraying a lot of fields for stripe rust control in Louisiana and stripe rust is occurring in varieties that have not had a stripe rust problem in the past. We will definitely need to sort out stripe rust reactions when this season is over. Stripe rust severity in some varieties is running as high as 70% at Baton Rouge and Crowley, LA. Weather conditions remain favorable and stripe rust is still active.”

**Kansas:** 13-Apr; Dr. Erick DeWolf, State Extension Specialist, Kansas State University.



“Wheat leaf rust was observed on April 9th near Hutchinson, Kansas. This is the first report of leaf rust in central Kansas for 2010. The disease was found in research plots intended for variety screening and a variety performance test. The leaf rust is still limited to the lower canopy, and the incidence and severity of the disease remains low (< 2%). The varieties affected include Overlay and Lakin. Lakin is an older variety now used mostly for research purposes, but Overlay still holds considerable acreage in the state. Both varieties are known to be susceptible to leaf rust.

Weather conditions the past two weeks have not been conducive for the continued spread of the disease with temperatures in the 80’s and lack of rainfall in most areas. The crop is still at or near the jointing stages of growth in many fields. Most agronomists suggest that the crop is behind in growth and development although the warm temperatures may “push” the crop ahead.

No stripe rust or stem rust had been found to date in Kansas.”



**Arkansas:** Dr. Gene Milus, Wheat Pathologist, University of Arkansas.

8-Apr; “I surveyed plots and fields at Biscoe and Lonoke (east of Little Rock) and at Newport (north of Little Rock). Growth stage was 7-8. No diseases were found except for one overwintering spot of stripe rust at Lonoke that was found previously by Extension personnel. (I would have never found this one.) Most of the overwintering spots that I saw during the past 3 days were

“cold spots” or “warm spots” rather than “hot spots”. That is, the infection type on upper leaves was MR or MS rather than fully susceptible. Adult-plant resistance seems to be

expressing. I know of no fields planted to varieties known to be very susceptible. Bird-cherry oat aphids were found in most fields, but no BYD symptoms were seen yet.”

7-Apr: “Stripe rust is widespread in Arkansas south of I-40 but mostly at low levels. Weather has been mostly dry, WINDY and likely unfavorable for rust infection during past week or so. Areas of Arkansas received trace to abundant rainfall today, and weather is supposed to be cool/mild and sunny for coming week. At Kibler (near Fort Smith), one overwintering hot spot and scattered young lesions on upper leaves were found in the variety test plots. Growth stage mostly 6, some 7. Also light powdery mildew and abundant bird-cherry oat aphids. At Lewisville (near Texarkana), many hot spots were evident in a demo plot surrounded by a field of Fannin that also had many hot spots. Growth stage mostly 9. Plants seemed to be under some drought stress that also affected rust development. Rust had not moved out of hot spots yet, making evaluations difficult. However, there does seem to at least one new race. The branded variety Renegade had lots of hot spots but had been moderately resistant previously. Also plentiful bird-cherry oat aphids and BYD infection centers. At Bayou Meto (near Stuttgart) a few hot spots and scattered young infections were found across 10 fields. Growth stage 8-9. Frequent bird-cherry oat aphids. Early symptoms of BYD. Some downy mildew in low spots. No leaf rust or Septoria leaf blotch were found. The biggest problem is that there is not much wheat planted here this year.”

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