



Pest e-alerts



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Wheat Disease Update

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Nothing new to report this week from Oklahoma. Last week's field day at Lahoma (15 miles west of Enid) revealed wheat nearly ready for cutting. Next week field days move to northwestern OK and the panhandle where there may still be some green leaves/stems. Over the last week, wheat samples continued to come into the Plant Disease & Insect Diagnostic Lab. Although dark lower stems indicative of dryland root rot could be found in some tillers and a couple of the samples tested positive for barley yellow dwarf virus, environmental stress involving drought and heat were felt to be the primary cause of the symptoms.

Kansas: Dr. Bob Bowden (Research Scientist, USDA-ARS, Manhattan, KS), 17-May: "On May 16, we visited the Kansas State University experiment station at Hutchinson, KS. Wheat was mostly at the milk to soft dough stage. The wheat stripe rust epidemic was winding down fast in the warm, dry weather. Active stripes could only be found on a few lines. The Yr17-virulent races were initially rare when observed two weeks ago, but had become more common in the plots on May 16. Leaf rust was coming on strong with cultivars Jagger, Jagalene, Overley, TAM110, etc. at 100S. We found one stem of McNair 701 with a few stem rust pustules. Leaves on most lines were dying and will pretty much be gone by next week."



Nebraska: Dr. Stephen Wegulo (Extension Plant Pathologist, Univ of Nebraska) 18-May: "Yesterday, May 17, I visited the small grains breeder nursery in Lincoln, Lancaster County. Wheat leaf rust had progressed from trace to low (less than 5% severity) a week to two weeks ago to more than 30% of flag leaves covered with pustules in some lines. Many lines had a complex of two or more diseases on flag leaves, notably stripe rust/leaf rust and Septoria/rust. Jenny Rees, Extension Educator in Clay County, informed me this morning that she has seen leaf rust in Clay County. On Tuesday May 15, I observed leaf rust in breeder nurseries at Mead (Saunders County). Stripe rust remains

the most widespread fungal disease affecting flag leaves; however, dry weather and warm temperatures have slowed down its development and spread. Most wheat fields in south central and southeast Nebraska are in the milk to dough stages of crop development. In western Nebraska, most fields are flowering or beginning the kernel development stage depending on the location.

The most prevalent virus diseases are barley yellow dwarf and wheat streak mosaic.”

USDA-ARS Cereal Disease Lab: St. Paul, MN) 21-May: CDL staff surveyed wheat rust in Kansas and Missouri May 14-18. Leaf and Stripe rust were found with at least trace severities in almost all fields. Stripe rust was inactive at fields in southern and central Kansas and Missouri, though some late sporulation was usually found at trace levels. Stripe rust had been very severe before becoming inactive in many fields. Leaf rust was observed at trace to 20% severities and at higher severities in small hotspots. Severities were highest in fields in northern and central Kansas. Stem rust was found at trace levels at three locations in central Kansas on variety Winterhawk in variety demonstration plots (Harper, Barber, and Ellsworth counties). Oat crown rust was found in Oat in southwestern Missouri and southern and central Kansas (grown as a nurse crop for alfalfa). Barley leaf rust was found on volunteer barley growing on the side of the road in Cooper county Missouri.



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