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Wheat Disease Update

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Nothing really new to report from Oklahoma. Nathalia Grachet (OSU Plant Pathology Graduate Student) did find one wheat leaf in her trial on which there were several leaf rust pustules. This leaf was in a trial that was irrigated about 4 days a week for the last month or so in an attempt to induce foliar disease. I guess you could say we were successful.

Wheat around Stillwater is quickly turning – mostly at soft to medium dough. I had a sample brought in from south-central OK (just north of the Red River) that looks nearly turned and is at hard dough. I would suspect that what harvest is going to occur in southern Oklahoma is not far from starting.

Arkansas: (Dr. Gene Milus, Professor/Small Grains Pathologist, University of Arkansas) 21-May-2014: I visited plots at Marianna (near Memphis), Newport (north of Little Rock), Kibler (near Fort Smith) and Fayetteville this week. Most varieties are in milk to early soft dough stages. At Fayetteville, some late-emerged plots are just now flowering. Weather is hot, dry and windy, so it may be a challenging grain-fill period.



Bacterial streak was the most prevalent disease at each location and was most severe at Kibler. The only stripe rust is in inoculated plots at Fayetteville, but there is not enough to get reliable data yet. A trace of leaf rust was found on Havoc at Marianna and Newport, and a sample is being sent to Jim Kolmer. A low incidence of FHB was found at Marianna.

Nebraska: (Dr. Stephen Wegulo, Extn Plant Pathologist, Univ of Nebraska) 12-May-2014: Wheat in Nebraska is mostly at Feekes 8/9 to Feekes 10 and mostly free of fungal leaf diseases. Over the last two days I observed trace amounts of tan spot and *Septoria* at Lincoln and Mead (about



30 miles north and slightly east of Lincoln). Bacterial streak was present at low incidence and moderate to high severity in wheat and triticale at Lincoln, and at high incidence (nearly 100% of plants) and severity (up to 60% on affected leaves) in an oat field at Mead. I also observed low levels of wheat streak mosaic at Lincoln and Mead. Samples submitted to the Plant & Pest Diagnostic Clinic over the last

few weeks have tested positive for wheat soilborne mosaic. To date there have been no observations of rust diseases in the state.

Louisiana: (Dr. Steve Harrison, Wheat and Oat Breeder, Louisiana State Univ) 22-May-2014: The cool winter and spring resulted in lower and later occurrence of wheat and oat rusts than is normal for Louisiana. Stripe rust pressure was very low with the exception of a few very susceptible varieties. Leaf rust came in late and did not develop in variety trial plots until well into the grain filling period. I doubt that many wheat fields were sprayed with fungicides in Louisiana this year. Wheat leaf rust did develop to fairly high levels in late April and early



May as plants approached physiological maturity, but yield impact would be pretty minor.

Heavy rainfall during the winter caused some issues with downy mildew and flooding of low spots. We had some significant rainfall events with strong winds during March and April during jointing to flowering. These resulted in pretty significant pressure form *Xanthomonas*, which was probably our most significant disease this year. We also had fairly widespread FHB in many fields, more so that in most years.

Harvest season began about 10-14 days late this year due to the cool spring but combines are running in south Louisiana.

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