

Wheat Disease Update – 18 January 2019
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From a wheat disease perspective, this fall and early winter was relatively quiet in Oklahoma. The extremely wet and cool conditions led to incidence of wheat discoloration that resulted in many samples being submitted to the lab for diagnosis. However, in the majority of those samples, no disease (fungal or viral) was identified, and the discoloration was attributed to the environment (wet and cool soils). I believe most of these fields have “grown-out” of the symptoms that were observed. There was one sample from Washita County received in early December that was positive for both *Wheat streak mosaic virus* and *High plains virus*. However, that was the only positive sample out of about ten samples submitted from across Oklahoma including Woods, Canadian, Dewey, Blaine and McCurtain Counties.

Light leaf rust was observed in Oklahoma in the fall, including around Stillwater (Payne County) and in Blaine County. These were scattered pustules on lower leaves, which typically occur in the fall in Oklahoma. Leaf rust likely is still around, but cold temperature through the winter should cause the infected leaves to die while it is too cold for infections to occur on new, younger leaves. However, be sure to keep your eyes open for leaf rust as well as stripe rust as we move into February, especially in central and southern Oklahoma. For more information, see my update dated 9-November-2018, which can be found at: <http://entopl.okstate.edu/pddl/2018/PA%2017-%2036.pdf>

Leaf rust also has been reported from other states. Dr. Stephen Harrison (Professor and Small Grains Breeder, Louisiana State University) reported finding light rust in Louisiana a week or so ago, but that rust should not impact Oklahoma. However, Dr. Clark Neely (Small Grains and Cool-season Oilseed Extension Specialist for Texas A&M AgriLife Extension) just reported finding leaf rust near College Station in southern Texas (Figure 1). Here is Dr. Neely’s report:

“I wanted to pass along the first reported case of leaf rust for 2019 in South Texas. The leaf rust was observed by Bryan Simoneaux in our College Station hard red winter wheat variety trial. It was found throughout the trial, but still fairly light pressure. There were reports of heavy leaf rust this past fall in the Texas High Plains around the Lubbock area on early planted wheat for grazing, but winter temperatures have taken care of it up there. Texas has endured an extremely wet fall and winter so far, so it is not surprising to see rust popping up and I would expect to continue to see rust with forecasters predicting a wet spring as well. We have had cool temperatures, but no harsh cold snaps to knock the disease back and very few nights below freezing so far in this part of the state.”

Figure 1. Leaf rust on wheat near College Station, TX recently observed by Dr. Clark Neely (Small Grains/Oilseed Extension Specialist - Texas A&M AgriLife Extension).



In summary, although leaf rust, wheat streak mosaic and high plains were detected this fall and early winter in Oklahoma, diseases were relatively scarce on wheat. This lack of disease should continue as we move into mid-winter, but producers across southern and central OK should be watchful as we move into February (especially mid to later February), as leaf rust has been observed in far southern OK.

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