Pest e-alerts

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Wheat Disease Update – 5 April 2019

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Only slight changes as near as I can tell across Oklahoma regarding wheat diseases. Stripe rust appears to be absent, and leaf rust and powdery mildew are slow to get going. Scouting in Jagalene near Stillwater revealed stunted and yellowing spots heavily infested with aphids (both bird cherry-oat aphids and greenbug) as well as some 'new' leaf rust pustules up on higher leaves (Figure 1). This Jagalene, which was planted in early to mid-September, is well past GS 7 (two nodes visible). With rain again falling on much of the state this past week and forecast again for this coming weekend, leaf rust and powdery mildew likely will start to become more prevalent.

Figure 1. Yellowing, stunted 'spot' (left photo) in Jagalene wheat caused by aphid infestation (right photo). Also note 'new' leaf rust pustules up higher on leaves in photo to the right.

I am puzzled at the lack of powdery mildew this year. It seems like we have had the late winter and spring weather that would facilitate powdery mildew, but it continues to be mostly absent. The only aspect I can think that is preventing this is the late planting date last fall resulting in small wheat this spring. This late planted wheat does not have a thick, heavy canopy, which would result in lower humidity and perhaps less powdery mildew. However, even in the Jagalene I mention above (which typically is heavily infected with powdery mildew), I observed only sparse powdery mildew. This also was noted by John Fenderson (Technical Product Manager – WestBred), who conveyed to me, "Bob, I went south last week through SW OK, the rolling plains of TX down to San Angelo, and back up through the Blacklands of TX and never saw any disease of consequence. One irrigated field at Vernon that had some old lesions of powdery mildew. How can we possibly not have powdery in these thick, early planted fields with the temps and moisture?? Even in the Blacklands where the wheat is thick and lush no disease."

All the above observations are further confirmed by a report from David Nowlin (Extn. Educator; Caddo County in central Oklahoma) who indicated that he had, "Checked a few fields near Anadarko and Apache. No rust or powdery mildew. A trace of bird cherry oat aphid." Gary Strickland (Extn Educator; southwest OK) also indicated he is still seeing only light and scattered leaf rust pustules on senescing lower leaves, and has not seen any powdery mildew. He has continued to see winter grain mites, but thought that coming rain will help address those. The disease he has notice most has been leaf spotting caused by Septoria (most likely) or Stagonospora (Figure 2).

Figure 2. Pycnidia (spore bearing structures) on wheat leaves observed by Gary Strickland (Extn Educator; southwest OK)

Disease and Insect Diagnostic Laboratory

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