

Wheat Disease Update – 2 May 2023  
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Wheat tours during the last week of April in southwestern Oklahoma (Tipton, Altus), south-central Oklahoma (Walters), and central Oklahoma (Apache and Chickasha) showed wheat in these areas to be at heading/flowering stages. On April 21, stripe rust was first observed at the OSU South Central Research Station in Chickasha (Grady County), Oklahoma (**Figure 1**). Natural infection was found on the susceptible wheat variety ‘Pete’ with a disease incidence of ~ 5%. On April 28, the disease incidence on Pete increased to ~ 15% due to cool temperatures and precipitations during the last week of April. Dr. Brett Carver (OSU wheat breeder) also reported a very low incidence of stripe rust in Lahoma (Garfield County).



**Figure 1.** Stripe rust on the susceptible winter wheat ‘Pete’ at the OSU South Central Research Station in Chickasha, Oklahoma (April 21, 2023).

The rain and cool temperatures during the last week of April favored the appearance of other fungal foliar diseases including *Septoria tritici* blotch, spot blotch, powdery mildew, and loose smut. On April 28, I observed low incidence of *Septoria tritici* blotch (**Figure 2**) in Chickasha mainly on the lower-mid canopy. On April 28, spot blotch (caused by *Bipolaris sorokiniana*, **Figure 3**), was present in low incidence and severity in Chickasha (Grady County). Low incidence of spot blotch was also observed in Apache (Caddo County) on April 27 by Mike Schulte (Oklahoma Wheat Commission executive director) and Dr. Amanda Silva (OSU Small Grains Extension Specialist). *Bipolaris sorokiniana* can also cause common root rot which has been prevalent in 2022-2023 in Western Oklahoma.



**Figure 2.** *Septoria tritici* blotch symptoms in research plots at the OSU South Central Research Station in Chickasha, Oklahoma (April 28, 2023).



**Figure 3.** Spot blotch symptoms in research plots at the OSU South Central Research Station in Chickasha, Oklahoma (April 28, 2023).

On April 28, I also observed a few hotspots of powdery mildew in a research trial in Chickasha on lower leaves. A few heads showed symptoms of loose smut in Chickasha on April 28 (**Figure 4**). After, the recent precipitations, we recommend continuous disease scouting for diseases. Although, environmental conditions are conducive for diseases, disease pressure is considered very low currently to consider fungicide applications.



**Figure 4.** Loose smutted heads were observed in Chickasha, Oklahoma (April 28, 2023).