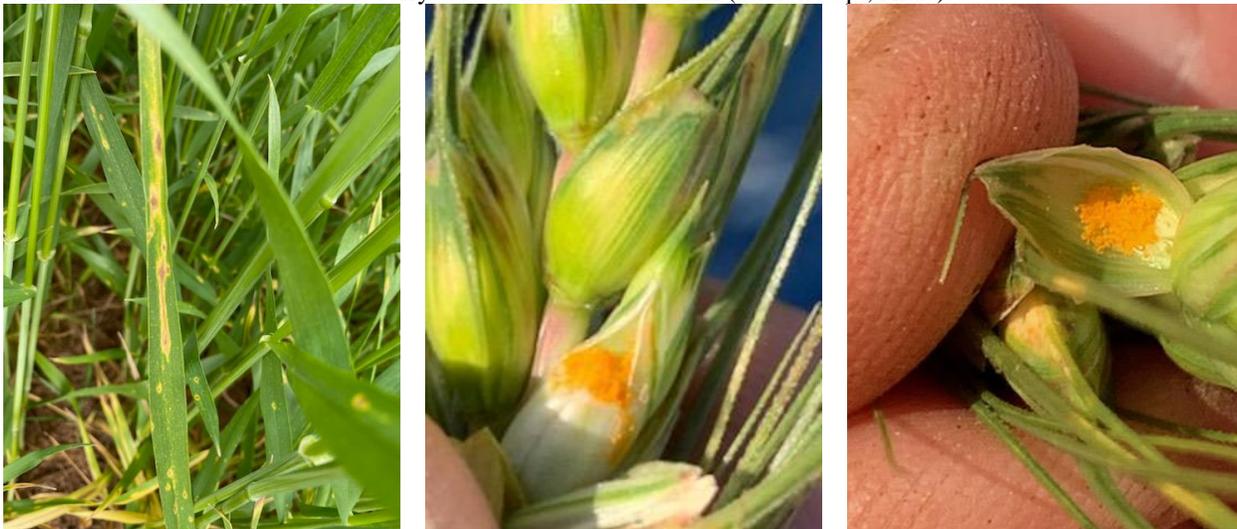


Wheat Disease Update – 10 May 2021
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Wheat tours last week included Homestead (Blaine County; west-central OK), Afton (Ottawa County; northeastern OK), Sentinel and Tipton (Washita and Tillman Counties, respectively; southwestern OK) and Kildare and Lamont (Kay and Grant Counties, respectively; north-central OK). At Homestead, Dr. Amanda de Silva (OSU Small Grains Agronomist) saw primarily tan spot (Figure 1) as this trial was planted in a field of wheat after wheat. Sentinel was fairly free of foliar diseases, but the trial at Tipton was severely infected with stripe rust. The incidence and severity of stripe rust at Tipton also was observed by Dr. Brett Carver (OSU Wheat Breeder/Geneticist) who indicated that he saw severe stripe rust in his trials at Tipton as well. Near Chattanooga OK, also in SW OK, there was a report of stripe rust occurring in wheat heads (Figure 1, center photo and photo to the right). Over the years, I have occasionally observed this in Oklahoma, and it typically is a signal that stripe rust has been severe. As far as I know, the grain is not infected, but rather it is the plant tissue surrounding the grain. These reports of severe stripe rust contrast with what Dr. de Silva and I observed at Afton, Kildare, and Lamont where little foliar disease of any type was observed. We did however see symptoms indicative of barley yellow dwarf at all locations and some indicative of the mite-transmitted virus diseases such as wheat streak mosaic and high plains disease.

Figure 1. Tan spot (photo on left) observed on May 3rd by Dr. Amanda de Silva (OSU Small Grains Agronomist) in the variety trial at Homestead, OK in west-central OK. Center and photo to the right show stripe rust that has infected and is sporulating in a wheat head. The photo credit for these two photos goes to Leon Fisher and came to me via Jerry Goodson and Mike Schulz (Station Supt, Altus).



This week will be spent at wheat field days in central, north central, and northwestern OK including trials near Cherokee, Kingfisher, Thomas, Alva, and Lahoma. A complete schedule of the remaining field days can be viewed at: <http://wheat.okstate.edu/virtual-plot-tour/2021OSUWheatFieldTours.pdf>