Pest e-alerts

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Wheat Disease Update – April 26, 2018

Corrected – please note text in bold, italics, and underlined

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Although reports of powdery mildew continue to come in from around the state, perhaps the more important news is that other foliar diseases have started to become active. On Apr-24, Septoria tritici blotch (Figure 1) was prevalent on lower leaves throughout the variety trial near Walters, OK. Walters is located in southwestern Oklahoma about 20 miles south of Lawton & 10 miles north of the Texas border. Although interesting, Septoria tritici blotch is not the disease of primary concern as in this trial there also was active leaf rust on lower leaves (Figure 2) and stripe rust on the leaves just below the flag leaf. Dr. Brett Carver (OSU Professor/Wheat Breeder) and Branden Watson (OSU PaSS Graduate Student) also reported active stripe rust at various levels in trials located near Chickasha, OK in central Oklahoma (Figure 3). The photo from Dr. Carver (the right photo in Figure 3) shows much more severe stripe rust than was seen near Walters. These observations indicate that both stripe and leaf rust are increasing through southern and central Oklahoma. This activity will increase through the coming weeks as the forecast indicates continued moisture (rains and dew) coupled with moderate temperature. Wheat in southern Oklahoma was approaching or was actively flowering, so the option of using a fungicide to protect yield potential either is at hand or may be too late. ***Typically foliar fungicides should be applied for wheat rust control between flag leaf emergence and complete head emergence (Feekes' growth stage 10.5). Some fungicides (e.g., Aproach, Headline, Nexicor, Priaxor, and Twinline) are so labeled. However, some fungicides (Tilt, Quilt Xcel, and Trivapro) are labeled for a later application (Feekes 10.5.4, which is the end of flowering with the kernel watery ripe). Many others no longer have a growth stage deadline, but rather are limited by a pre-harvest restriction. That is, there must be a certain number of days that elapse between application and harvest. For some fungicides (Caramba, Folicur, Proline 480, and Prosaro) this is 30 days. For Absolute Maxx, it is 35 days, and for Aproach Prima, it is 45 days. For some fungicides it is a combination of growth stage and days between application and harvest.*** For specific information, please consult the label for the fungicide. Additional information related to foliar fungicides also can be found in OSU Current Reports 7668, Foliar Fungicides and Wheat Production in Oklahoma, which is available at:
http://dasnr22.dasnr.okstate.edu/docushare/dsweb/Get/Document-4987/CR-7668web2018.pdf.

Figure 1. Septoria leaf blotch on lower wheat leaf in the variety trial near Walters, OK.

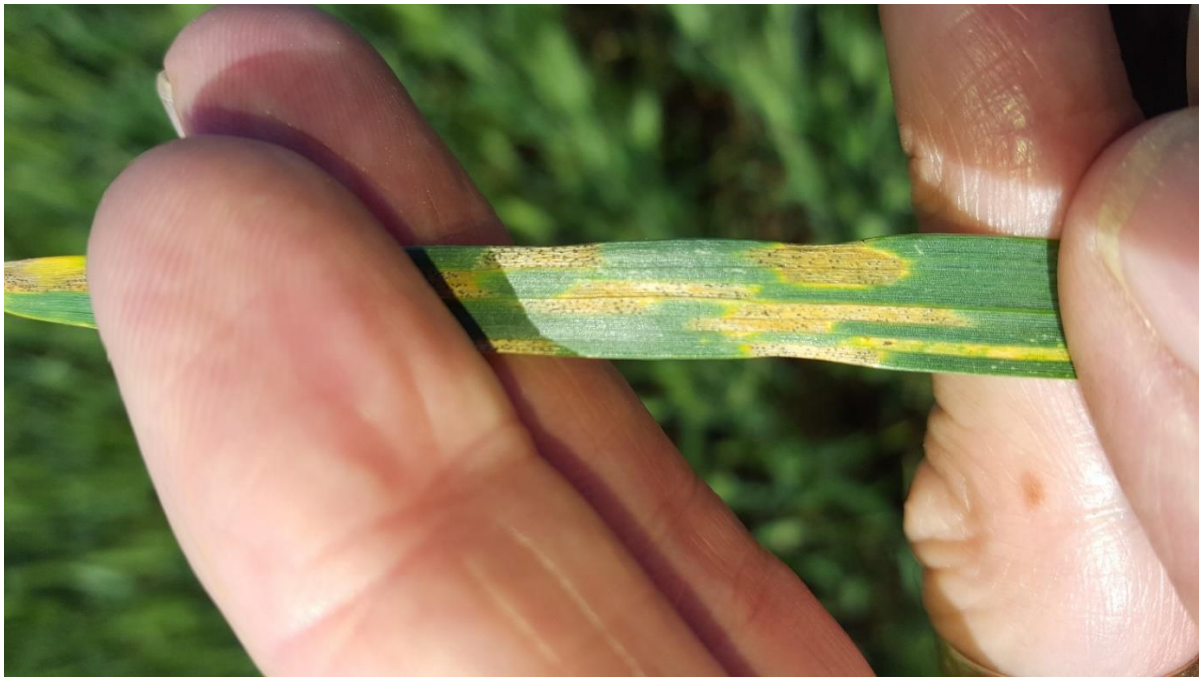

Figure 2. Leaf rust on lower wheat leaves near Walters, OK on April 24, 2018.

Figure 3. Stripe rust on a wheat leaf (not a flag leaf) near Chickasha, OK on April 24, 2018 (left photo credit to Mr. Branden Watson; right photo credit to Dr. Brett Carver).

Plant Disease and Insect Diagnostic Laboratory

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