



Pest e-alerts



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Wheat Disease Update – May 5, 2018

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This past week I was at field days in southwestern Oklahoma (Apache and Altus), and northeastern Oklahoma (Afton). I didn't see a single leaf or stripe rust pustule at any location. Wheat in southwestern OK ranged from at flowering to kernel formation, and typically was short (less than knee high). There were a few exceptions to this, namely a couple fields near Apache that had been planted on summer fallow ground. Wheat in these two fields looked good with some powdery mildew on the low to mid-canopy. There also was evidence of root rot (white heads) that was caused by *Fusarium* (Figure 1). This root rot was at a low incidence. By contrast, wheat in northeastern OK was at flowering and typically was over knee-high, thick, and with high yield potential. On many varieties, powdery mildew was heavy in the low and mid-canopy, and in a few instances also was present on the flag leaf (Figure 2). Besides powdery mildew, *Septoria* leaf blotch was heavy throughout the lower leaves of most varieties. In northeastern OK it appears that if a fungicide is going to be sprayed, that needs to be applied as soon as possible.

Figure 1. *Fusarium* (dryland) root rot observed on a wheat tiller from a variety demo near Altus, OK. Note the reddish-purple color near the tiller base with fuzzy reddish-purple fungal growth also present inside the split stem (far right photo).



Figure 2. Powdery mildew on the flag leaf of a wheat plant in the variety trial near Afton, OK



Based on my observations this past week and the recent report from Dr. Clark Neeley (see below), it appears that rust pressure is low across Texas and Oklahoma. Based on Dr. Neeley's report, it appears that leaf rust has started to appear, but is still somewhat limited. Hence, although there still is time for the rusts (especially leaf rust) to impact Oklahoma, it does not appear there will be an early season (during heading) high rust pressure as in most years. I still would be watchful and if you have a variety known to be susceptible to leaf rust with good yield potential (>about 30 bu/acre) I recommend considering a fungicide application. Be sure however, that your wheat has not matured past the allowed time (as indicated on the label) for the fungicide you apply. Additional information related to foliar fungicides can be found on the fungicide label and 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>.

Reports from other states:



Texas – 4-30-2018; Dr. Clark Neeley; Small Grains/Oilseed Extn Specialist; Texas A&M AgriLife Extension. “I was attending field days across Central Texas last week and saw mostly leaf rust as I travelled around. Pressure was strong at Thrall, McGregor and Temple, TX, but wheat is pretty far along in all three locations.

Mostly in the milk and soft dough stage. I was in a variety trial and producer's field in Abbott, TX just north of Waco and leaf rust was nearly undetectable despite the field only receiving a Tilt fungicide application at topdress. Stripe rust was still active on 'Patton' border there, but teliospores were appearing and thus was shutting down. Did not find any stripe rust in any of the trial entries. I found no or negligible amounts of stripe rust on trial entries at all locations except McGregor. I did find low levels of stripe rust there on flag leaves of HRWW varieties 'TAM 304' and 'WB 4303' and SRWW variety 'USG 3120'. Will be at field days later this week and the following week in the Rolling Plains and Northeast Texas and will try to post updates then for those regions.”

Plant Disease and Insect Diagnostic Laboratory

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