

Wheat Disease Update – 16 March 2019  
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Not much change in wheat diseases in Oklahoma over the last 10-14 days as temperature has stayed low. However, more mild (and typical) temperature is forecast for the next 7-10 days, so I would expect wheat foliar diseases to start to increase, especially in southern and central OK. This change in weather combined with reports of leaf rust in Oklahoma and increasing stripe and leaf rust in southern and central Texas (see below) indicates that it won't be long before rust will be increasing in Oklahoma.

Here are some excerpts from a report provided on 08-Mar by Dr. Amir Ibrahim, Small Grains Breeder/Geneticist, Texas A&M University:

From far southern TX:

“The naturally inoculated Rust Evaluation Nursery at Castroville, TX looks good. Hard red winter (HRW) and soft red winter (SRW) wheat range from tillering to beginning of stem elongation.

Stripe rust (caused by *Puccinia striiformis* f.sp. *tritici*.) is present and uniform across the field in the mid to upper canopy of both classes. HRW and SRW varieties susceptible to stripe rust have been rated 60 to 70S. Leaf rust (caused by *Puccinia triticina* Erikss.) is uniform across the field in the lower to mid canopy of HRW and SRW, and ranges from 80 to 100S in the lower canopy of susceptible varieties. We have not seen this high leaf rust severity by mid-March in a long time.”

From southern & central TX:

“Uvalde seems to be the first location where we detect wheat stripe rust in Texas every year. Level of stripe rust at Uvalde is similar to Castroville, but leaf rust is not as severe. Both stripe and leaf rust are also active at College Station and McGregor, TX.

Dr. Ibrahim's report agreed with a report on 06-Mar from Dr. Clark Neely, Small Grains and Oilseed Extension Specialist, Texas A&M AgriLife Extension, where he stated that,

“Stripe rust is becoming more prevalent in Central Texas with several reports coming out of McLennan and Hill Counties. We continue to see frequent rainy, overcast conditions favorable for development, however we experienced a hard freeze Monday night (lows around 20°F) followed by highs in the 30's and 40's for the past two days which should help to slow it down. Highs will rebound into the 70's by tomorrow and stick around with more rain forecasted this weekend.”

Figure 1. Leaf rust and stripe rust symptoms on the same leaves of 'TAM 112' hard red winter wheat at Castroville, TX (8-Mar-2019; Dr. Amir Ibrahim, Texas A&M).

