## 2017 West Central Texas Wheat Rust Update March 20, 2017 San Angelo, TX

David R. Drake Ph.D. email: drdrake@ag.tamu.edu

General Situation: The wheat crop is generally in very good condition with excellent fall and winter growth. Some varieties are ahead of normal in plant growth stage with earlier planted and earlier maturing varieties in boot to heading stage. All varieties observed had jointed. With continued warmer weather, moisture stress will become an issue without precipitation to take the crop into flowering and grain fill.

Insects: some aphids and mites were observed but abundant natural enemies appear to be keeping the pests below economic thresholds. Several fields of oats and some wheat were infected with Barley Yellow Dwarf Virus (BYDV) indicating there were aphid infestations infected with BYDV in the fall and winter months.

Disease: Stripe Rust can be found but not in the heavy early season levels of the past two years and appears to only be a concern in more susceptible varieties. Warmer temperatures have and are expected to continue to favor leaf rust. See Figure 1 with a leaves showing both stripe and leaf rust. In certain fields with susceptible varieties, closed canopies, and good moisture conditions leaf rust is increasing and a fungicide treatment should be considered. A generic propiconazole or tebuconozole at 4 fl. oz. per acre are most economical and should be targeted at the emerging to fully emerged flag leaf growth stage. Fungicide treatments in previous years conducted at Millersview, Abilene, and Coleman have shown that on rust susceptible varieties yield and test weight increases have been achieved with a single fungicide application. Varieties with genetic resistance to rusts have not shown yield increases with fungicide applications. Current rust ratings for wheat and a listing of foliar fungicides in Texas can be found at <a href="http://varietytesting.tamu.edu">http://varietytesting.tamu.edu</a> or <a href="http://amarillo.tamu.edu">http://amarillo.tamu.edu</a>. Previous year's rust updates can also be found on <a href="http://sanangelo.tamu.edu/agronomy">http://sanangelo.tamu.edu/agronomy</a>.

Figure 1. Wheat leaves from March 2017 with both stripe rust (lighter in color and covering a larger area aligned with the veins) and leaf rust (darker and only in spots).



Table 1. Wheat rust evaluations by location, varieties, and rust levels surveyed on March 15, 16, & 20, 2017 in West Central Texas. Varieties with greater than 50% of leaf area covered with pustules were rated as "Heavy". Rating of "Present" were given for 10-49% of leaf area infested. All others were rated as "Clean".

	Leaf Rust March 2017		Other variety disease notes	
	Abilene	San Angelo	Coleman	
Abilene Ag Exp	-	Heavy	-	Stripe rust at SA
Bentley	Present	-	Present	
Cedar	Present	-	Heavy	
Duster	Clean	Clean	-	
Fannin	Present	Heavy	Present	
Gallagher	Clean	Clean	Present	
Grainfield	Heavy	-	Heavy	Heavy stripe rust Abi and Col
Greer	Present	-	Clean	
Iba	Present	-	Present	
Longhorn	-	Present	-	Stripe rust at SA
OK 11D25056	-	-	Present	
Razor	Clean	Present	Clean	
SY Flint	Heavy	-	-	
SY Grit	Heavy	-	-	
TAM 113	Present	-	Clean	
TAM 114	Present	Clean	Clean	
TAM 204	Clean	Heavy	Heavy	
TAM 304	Clean	-	Clean	
TAM 305	-	Clean	-	
TAM 401	Clean	-	-	
WB 4303	Heavy	-	-	
WB 4458	Heavy	Heavy	Heavy	
WB 4511	Present	-	-	
WB 4721	Present	-	-	
WeatherMaster	Present	Present	Clean	

<sup>(-)</sup> not tested at that location