

South Texas Rust Report

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Castroville, TX

In early March, both leaf and stripe rusts were developing with some wheat varieties containing both. The highest ratings for both rusts were up to an 8 using a 0-9 scale and about 5-10% of south Texas lines had scorable symptoms. Less than 1% of lines were heading, 2% at flag leaf, and the rest at stem elongation. With continued moisture and warm temperatures, both rusts were expected to continue developing at a rapid pace.





The site was visited again in late March and both leaf and stripe rust had continued to develop. Rust disease pressure had reached high levels at this point.



Stem rust was observed in wheat on April 11 and is expected to continue to develop.



Selections are ongoing from both wheat breeding programs in Amarillo and College Station at Castroville, Texas since April 7th.



(Amy and Russell selecting SRWW)



(Abdullah, Daniel, Gigi, and Luke select HRWW)

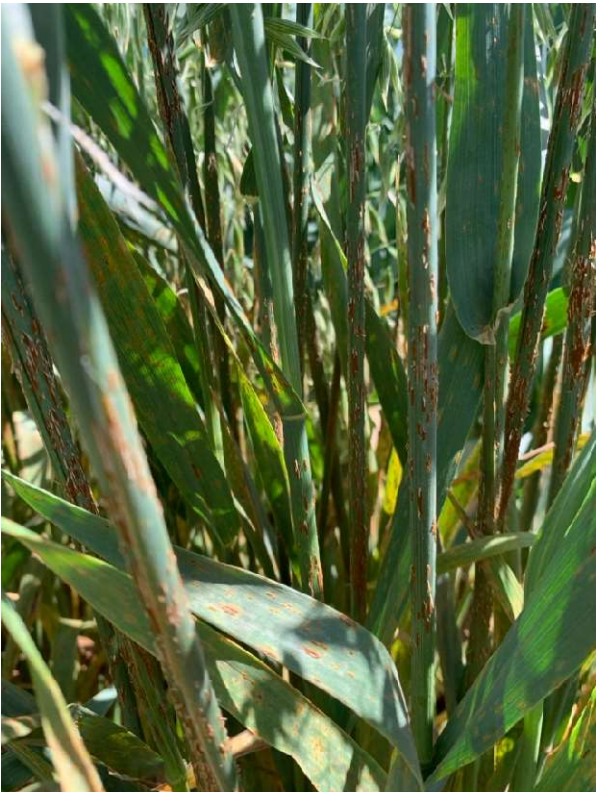
(Breeder Jackie Rudd selecting HRWW)



(Jason selects triticale)



Oat crown rust and stem rust was also observed in late March/ early April



McGregor, TX

In early March, stripe rust was the most prominent disease with severity rated as high as a 6 on a 0-9 scale. Leaf rust was present to a lesser extent but was expected to continue developing with the rising temperatures. By early April, leaf rust had become very severe with some varieties rated an 8 for the disease on the flag leaf.



College Station, TX

Stripe rust was observed in early March, but not nearly to the severity as Castroville or McGregor. Powdery mildew was present to a higher degree at this site compared to the other two, but still not to severe levels.



Chillicothe, TX

Stripe rust was found earlier than normal in Chillicothe and has continued to spread at a rapid rate, along with other diseases such as Barley Yellow Dwarf Virus and potentially dryland root rot. The UAV image below was taken by Shannon Baker, senior research associate and PhD student working with the Amarillo breeding program, on April 4 at this site. The color differential from green to yellow indicates the severity of these combined diseases and the high contrast between resistant and susceptible varieties.



Samples for stripe, leaf, and stem rusts were collected cross all aforementioned locations and sent to Xianming Chen, Oluseyi Fajolu, and Yue Jin for identification of races.

Please feel free to contact us if you have any questions.

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