

WHEAT RUST DISEASE UPDATE IN TEXAS (March 5, 2009)

Last Wednesday and Thursday, I did some traveling in the Lower Rio Grande Valley to look at wheat and other production fields for rusts and other diseases. This area is 225-275 miles South of Castroville and San Antonio. Below is some information from that trip and from other locations I visited or collected information from.

LOWER RIO GRANDE VALLEY (Week of February 23, 2009)

In Hidalgo County, the second southernmost county in Texas, wheat was heading. In other fields, wheat was at a similar stage but some was at the boot stage. Leaf rust was present at low levels and in the lower canopy. No more than 3% leaf area covered by pustules in lower canopy. I could not account for the varieties planted but Spring wheat Verde is a commonly sold one for the Rio Grande Valley. Some of these fields are furrow or flood irrigated. Dryland fields had lower incidence of leaf rust.

There were several fields where wheat and other cereals are grown as wind barriers in vegetable commercial production fields. They were also at heading stage and had trace levels of rust. A couple fields with such wheat had no leaf rust at all. In Cameron County, the southernmost county in Texas, I visited a wheat field planted with Verde that is probably the southernmost grain production field in the continental U.S. The crop was at heading stage, and looked pretty good. This was a furrow irrigated field. Leaf rust was at trace levels.

Along the banks of the Rio Grande River (US side) there were plenty of grasses (weeds) but none showed any type of leaf rust.

In Willacy County, Tom Isakeit (Extension Plant Pathologist), reports trace levels of leaf rust on wheat. Willacy County is one county north of Cameron County.

Speculation: Since wheat is planted in November in the Lower Rio Grande Valley, older leaves were infected with leaf rust, and other rusts were present in other crops and their volunteer crops (ie. soybean, sugarcane), it would be likely that some wheat leaf rust had survived in this area of Texas from November to January. Will check this area earlier next year.

TEXAS PANHANDLE (No leaf rust yet as of week of March 2, 2009)

Due to drought, the wheat does not look as healthy as it should. No leaf rust has been observed in Randall and Potter counties, where Amarillo is located. Leaf rust had been observed as late as end of November 2008 in some fields. No reports of leaf rust along the border with the Oklahoma Panhandle and Western Oklahoma. Wheat samples from that area had no leaf rust at all. No reports along the New Mexico Border in the Texas Panhandle.

BLACKLANDS (Leaf rust update, week of February 23, 2009)

In addition to reports from Rex Harrington 2-4 week ago, Marty Jungman, Texas AgriLife Extension Agent-IPM, reports leaf rust and powdery mildew around the Waco area (McLennan County) and Hill County (county north of McLennan County and 50 miles south of Fort Worth). Levels of rust infection in two fields of Coronado were mostly low (3-4%) but two fields of Doans had 7 and 10% infections on lower leaves. However, most fields had trace levels of leaf rust or no leaf rust at all. This area has been reporting wheat leaf rust at trace levels since early January 2009.

BRAZOS VALLEY (Leaf rust update, week of March 2, 2009)

In College Station, Rex Herrington has mentioned to me that leaf rust “hasn't increased much here at CS” since his last report 2 weeks ago where “LR was present, but very light in TAM110 borders” . However, rain is in the forecast from Sun-Wed and weather is warming up.

COASTAL BEND (Leaf rust since early January 2009)

In Wharton County (60 miles SW of Houston) leaf rust has been observed at trace to low levels since early January 2009 as had been reported by Gaylon Morgan, State Small Grains Extension Agronomist. I did see some trace levels of rust when I was there in mid January as well.

NOTES:

Due to the severe drought we are facing in most of Texas, it is fair to say that fields with any significant levels of leaf rust are most likely irrigated. Most dryland fields do not look very healthy at all. Over 95% of the State of Texas is experiencing some form of drought whether mild or severe.

By Mid-February, up to 10 counties around San Antonio were “in exceptional drought”, the worst of the categories. About 100 counties in Texas (out of 254) had been ranked as “abnormally dry”. The same goes for several counties around Dallas-Ft. Worth.

The crop report as published in “Texas Wheat Producers” Jan/Feb 2009 Newsletter: “Texas wheat producers seeded 5.9 million acres for the 2009 winter wheat crop, up 2 percent from last year, and down 5 percent from 2007. Across the state concern is rising over the highly stressed state of wheat crops due to lack of precipitation. Statewide wheat conditions were rated as 62 percent poor to very poor, with only 27 percent rated fair and 11 percent good to excellent. Also, for the first time this year, the wheat crop condition index fell below last year's with 35 percent of acres reported as normal, compared to 36 percent last year.”

We are expecting warmer and wetter days ahead of us and that might have an impact on incidence of leaf rust in Texas in several parts of the state.

Below is the predicted chance of precipitation (%) From March 5 until March 14 for cities close to where wheat is grown. Precipitation was zero (0) for the first four days of the month. (Weather data obtained from [www. weather.com](http://www.weather.com)). All cities listed will have temperatures in the 80s for one or more days.

Amarillo (0,0,0,10,10,10,30,60,60,10)

Brownsville (10,10,10,10,10,10,60,60,60,60)

Castroville (10,10,10,30,40,30,40,60,60,10)

College Station (10,10,10,40,40,60,60,60,60,30)

Commerce (10,10,10,40,40,50,50,60,60,10)

Dallas (10,10,10,30,40,60,60,60,60,10)

Lubbock (0,0,0,10,10,0,10,60,60,0)

Overton (10,10,10,40,40,60,50,60,60,10)

Pearsall (10,10,10,30,40,30,30,60,60,10)

Plainview (0,10,0,10,10,0,0,10,30,0)

San Angelo (0,0,0,10,30,30,30,60,60,10)

Waco (10,10,10,40,40,60,60,60,60,10)

Wharton (10,10,10,30,30,30,40,60,60,30)

Vernon (0,0,10,10,10,10,10,60,10,0)

Ron French

Extension Plant Pathologist

Dept. of Plant Pathology & Microbiology

Texas AgriLife Extension-Texas A&M System

6500 Amarillo Blvd. W., Amarillo, TX 79106

Phone: 806-677-5600 Fax: 806-677-5644

rdfrench@ag.tamu.edu

Visit: <http://amarillo.tamu.edu/programs/plantpathtce/>

March 6, 2009

The information given herein is for educational purposes only. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service personnel is implied.
Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.
The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating