



Pest e-alerts



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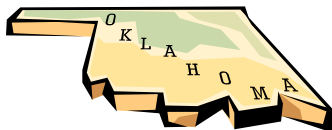
Vol. 9, No. 5

<http://entopl.okstate.edu/Pddl/>

Mar 15, 2010

Wheat Disease Update

Bob Hunger, Extension Wheat Pathologist

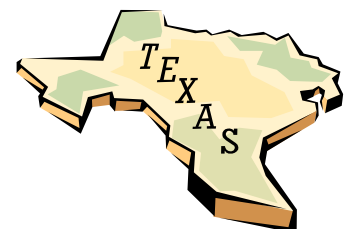


Oklahoma: Still no reports of rust or powdery mildew in Oklahoma. In southwestern and central Oklahoma, Mark Gregory (SW Area Extension Agronomist), Gary Strickland (County Educator, southwestern OK), and Meryl Hysinger (grower, southwestern OK) all indicated they have not seen any active leaf or stripe rust, or powdery mildew. They also indicated that wheat looked outstanding and was ranging from actively jointing to just getting close to that stage depending on if it was early or late planted. Scattered and light bird cherry-oat aphid numbers have been observed; not at alarming levels by any means, although their presence now may help explain the occurrence of barley yellow dwarf virus later on. Gary also indicated that he saw numerous fruiting bodies of the fungus that causes tan spot in his no-till trial, but that was typically the case and usually did not result in significant tan spot later on (not a favorable environment in southwest OK as move into late March and April). Dr. Brett Carver (OSU Wheat Breeder) indicated that his breeder nursery located near Granite, OK (southwestern OK) was clean of any foliar diseases as of last Friday (12-Mar).

Here around Stillwater, no rust or powdery mildew has been seen over this past week and the wheat has really begun to noticeably green-up although growth is coming only slowly.

Finally, Ray Sidwell [Station Superintendent – Lahoma (northcentral OK)] indicated that there was “some mildew on lower leaves but not major. Minor amount of tan spot and septoria. Minor amount of flecking.”

Texas: On 10-Mar-2010, Rex Herrington (Research Associate, Dept. of Soil & Crop Sciences, Texas AgriLife Research, College Station, TX) sent the following update indicating leaf and stripe rust in southern Texas. However, wheat breeders from Texas I talked to earlier this week indicated that they had not found any leaf or stripe rust, or powdery mildew in northern Texas (either in the panhandle or in the



area south of Oklahoma).

“We had 0.2" rain last night at College Station, while the Waco area had up to 2.5" in spots. We have a 50% chance tomorrow. Temps are starting to warm up, and a lot of the wheat is jointed already, and actively growing. There are a lot of GB's reported in the area West of San Antonio. I heard of 1 field of spring wheat 30 miles SW of Castroville with heavy stripe rust. No oat CR has been observed or reported yet. A crop consultant found LR at Castroville on lower leaves and stripe rust on middle leaves.”

On 15-Mar-2010, I received the following update from Dr. Ron French, Extension Plant Pathologist, Texas A&M University.

“Last week I did some traveling around the state, from Amarillo (NW Texas) and SE through Ft. Worth, and south through Waco, College Station, south of Austin, around the San Antonio area, and back to Amarillo. Wheat leaf rust was found at trace levels five miles west of Wichita Falls. This location is in Wichita County, and 120 miles NW of Fort Worth. Other close but more southern locations had leaf rust as well, but at trace levels too. Wheat observed was at Feekes 5-6. This location is approximately 15 miles south of the Oklahoma border, and south of Grandfield, OK. No stripe rust was observed. Few pustules were observed. However, newly or almost erumpent uredia could be observed breaking through the tissue. I did see trace levels of leaf rust around San Marcos (Hays County, south of Austin), but powdery mildew was more prevalent, although at low levels, from this area through Bexar county, which has San Antonio as the county seat.”

On 15-Mar-2010, I received the following report from Dr. Jackie Rudd, Professor and Wheat Breeder at Texas A&M University in Amarillo.

“I drove from Amarillo to Castroville on Thurs-Friday. Most of the wheat around Amarillo is not jointing yet and is relatively clean. I found a few leaf rust pustules, but no stripe rust.

At our trial near Abilene, 250 miles SE of Amarillo, low incidence of leaf and stripe rust were found, the early varieties were just starting to joint.

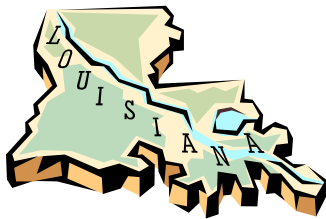
Brady is 100 miles south of Abilene. The wheat looked about like Abilene. I found both leaf rust and stripe rust, but leaf rust was more prevalent - 10-20% of susceptible plants had trace to 5% on the lower leaves.

Uvalde is 150 miles south of Brady. There the wheat was 15-20 inches tall, very lush, and early varieties were early to mid boot. Leaf rust was heavy on lower leaves of susceptible plants and starting to build on upper leaves. Powdery mildew was heavy in the lower canopy of susceptibles. I only found trace amounts of stripe rust.

Sixty miles east of Uvalde is the Castroville rust screening nursery. Plant growth and development were similar to Uvalde. Also like Uvalde, powdery mildew was heavy in lower

canopy. I found low levels of leaf rust on lower leaves of the usual suspects - Jagger (Lr17), Jagalene (Lr24), and TAM 112 (Lr39/Lr41). I found stripe rust only on the south end of the field, where I saw two hot spots of about 2-ft diameter where the stripe rust was from top to bottom of the plants and there was a low incidence of fresh stripes on upper leaves scattered across the south end of the field.

In summary, both leaf and stripe rust are present in south Texas. It is now a matter of temperature and rainfall. Leaf rust is a given in south Texas, but stripe rust is unpredictable. Forecast for this week is mid 70's day, 50's night, and scattered showers."



Louisiana: The following report from Dr. Stephen Harrison (wheat and oat breeder, Louisiana State University) received on 08-Mar-2010 indicates that stripe rust has been found in Louisiana.

"I just walked the wheat yield plot field in Baton Rouge for a few minutes this morning. I found stripe rust on several plots at a moderate level. Stripe rust does not produce stripes on young plants. Symptoms are similar to leaf rust but the pustules are lighter in color and tend to be in a thumb-sized cluster. It has been cool and damp, weather conducive to stripe rust development.

Most varieties grown in the state are probably resistant although we have not had stripe rust in several years to get good notes."

Dr. Richard Grantham
Director, Plant Disease and Insect Diagnostic Laboratory

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