

Issued by:

Cereal Disease Laboratory

U.S. Department of Agriculture
Agricultural Research Service
1551 Lindig St, University of Minnesota
St. Paul, MN 55108-6052
(612) 625-6299 FAX (651) 649-5054

For the latest cereal rust news from the field, subscribe to the cereal-rust-survey listserv list. To subscribe, please visit:
<http://www.ars.usda.gov/Main/docs.htm?docid=9970>

Or, send an email to: Mark.Hughes@ars.usda.gov

Reports from this list as well as all Cereal Rust Bulletins are maintained on the CDL website (<http://www.ars.usda.gov/mwa/cdl>)

- Wheat stem rust was found in northeast Louisiana and south Texas plots.
- Wheat leaf rust levels are increasing in the southern U.S.
- Wheat stripe rust is increasing in plots and fields in the southern and central U.S.
- Oat stem rust was found in central Texas and southern Alabama plots.
- Oat crown rust levels are light in the southern U.S.

Wheat Stem Rust

Texas – On May 7, high levels of wheat stem rust were found in a McNair 701 disease detection plot at Yoakum in south Texas. Stem rust observation maps can be found on the CDL website (<http://www.ars.usda.gov/Main/docs.htm?docid=9757>).

Louisiana – In late April, low levels of stem rust were found in plots at Crowley in southern Louisiana. On May 5, a stem rust infection center that ranged in severity from trace to 20% was found in a plot at Winnsboro in northeastern Louisiana. Last year in the same plots plants with moderate to high infection levels were scattered throughout the nursery. The stem rust infections are lower this year due to a cooler than normal early spring and low amounts of rainfall in March and April. The recent rainfall has made conditions more conducive for rust increase.

Wheat Leaf Rust

Texas – In early May, leaf rust was increasing on the susceptible cultivars Jagalene (*Lr24*), TAM 110, and Fuller (*Lr17*, *Lr39/41*) in central and northern Texas plots. Moderate levels of infection were found in central and northern Texas fields. Wheat leaf rust and wheat stripe rust are competing for the same location on the leaf in many instances. Moisture has been adequate with heavy dews in the mornings.

Oklahoma – In some areas of Oklahoma (i.e. southwestern) leaf rust was increasing in incidence and severity. In areas where leaf rust was severe, Jagalene, Jagger (*Lr17*) and Overlay (*Lr39/41*) leaf rust severity was from 40-60% on the F-1 or lower leaves. (For more detailed information see: Oklahoma reports on the [Current Cereal Rust Situation Reports page](#)).

Kansas – In early May, leaf rust was reported at several locations in the central part of Kansas. In south central Kansas it was found on the flag leaves of susceptible varieties. (For more detailed information see: Kansas reports on the [Current Cereal Rust Situation Reports page](#)).



Nebraska – As of early May, there had been no new reports of leaf rust in Nebraska since CRB #3.

Louisiana – In late April, moderate levels of leaf rust were found on susceptible wheat in southern Louisiana plots. In early May, leaf rust levels were severe in northeast Louisiana plots and low in fields. The low rainfall amounts from February to April limited rust development. However, the latest rainfalls may allow leaf rust to increase.

Arkansas – In early May, traces of leaf rust were found in plots at Fayetteville in northwestern Arkansas.

Alabama – Moderate levels of leaf rust were found on susceptible wheat (full berry) in southern Alabama plots. The latest rainfall has made conditions more conducive for rust increase.

Virginia – In late April, leaf rust was found on the susceptible varieties Red May and Massey at Warsaw in east central Virginia plots. In early May, trace amounts of leaf rust were found on the susceptible varieties Massey (*Lr1, Lr14a*) and McCormick (*Lr24*) at heading stage in the nursery at Blacksburg in southwestern Virginia. On May 10, the susceptible varieties Massey and Sisson (*Lr26*) had high levels of leaf rust infection in plots at Warsaw. (For more detailed information see: Virginia reports on the [Current Cereal Rust Situation Reports page](#)).

Maryland – On April 28, low levels of leaf rust were found on the lower wheat leaves in a nursery at Salisbury in southeastern Maryland.

Pacific Northwest – On April 29, one pustule of leaf rust was found in an early-planted winter wheat field in southeastern Washington.

Wheat Stripe Rust

Texas – In late April, wheat stripe rust was present throughout Texas except for the Panhandle. The winter and spring were cooler and wetter than normal, allowing stripe rust to develop. Stripe rust infections will lead to leaf desiccation when the weather warms up throughout Texas.

Oklahoma – In early May, stripe rust levels were severe on the varieties Jagalene and Jagger (*Yr17*) throughout much of the wheat growing areas of Oklahoma. In the varietal nurseries stripe rust levels were lower on many of the commonly grown varieties. (For more detailed information see: Oklahoma reports on the [Current Cereal Rust Situation Reports page](#)).

Kansas – In late April, low levels of stripe rust were found throughout central Kansas. On May 3, trace levels of stripe were found at Colby in northwest Kansas. (For more detailed information see: Kansas reports on the [Current Cereal Rust Situation Reports page](#)).

Nebraska – In late April, low levels of stripe rust were found in a Johnson County field and in early May high levels of stripe rust were found in a Jefferson County field in southeastern Nebraska.

Louisiana – In late April, stripe rust development had slowed considerably in Louisiana because the dry conditions limited further stripe rust infection.

Arkansas – By early May in the Arkansas River Valley, stripe rust had moved out from the hot spots and was uniformly distributed throughout the susceptible varieties. Overall, varieties suspected of



having *Yr17* seemed to be moderately susceptible. Many of the commonly grown varieties are still resistant and appear to have adult-plant resistance. Nighttime temperatures are still favorable for stripe rust, but moisture is limited in the Delta and Grand Prairie regions of eastern Arkansas where most of the wheat is grown. (For more detailed information see: Arkansas reports on the [Current Cereal Rust Situation Reports page](#)).

Alabama – In early May, no stripe rust was observed in southern Alabama plots.

Illinois – The first report of stripe rust in Illinois this year was on May 4 when low levels of stripe rust were found in a winter wheat field in Randolph County in southwestern Illinois.

Virginia – On April 29, stripe rust was found at Mt. Holly in east central Virginia.

Maryland – In early May, severe levels of stripe rust infection were found in two infection foci in Dorchester County in southeastern Maryland.

Pacific Northwest – In late April, low levels of stripe rust were found in eastern Washington fields. The lower than normal temperatures in April slowed wheat growth and stripe rust development. (For more detailed information see: Washington stripe rust report on the [Current Cereal Rust Situation Reports page](#)).

Oat Stem Rust – On May 4, a stem rust overwintering site (.5 m in diameter) was found on oat at soft dough growth stage at Fairhope plots in southern Alabama. Weather conditions are now conducive for increase of stem rust in this nursery. In early May, severe stem rust was found in plots while traces were found in fields in central Texas. Stem rust observation maps can be found on the CDL website (<http://www.ars.usda.gov/Main/docs.htm?docid=9757>).

Oat Crown Rust – In early May, oat crown rust levels are low throughout Texas and southern Oklahoma. In late April, crown rust infections were less than in previous years in Louisiana plots.

Buckthorn - On May 11, moderate levels of aecial infections were observed on buckthorn in the nursery at St. Paul. Cooler than normal conditions the past 2 weeks have slowed aecial development. Buckthorn serves as the alternate host for oat crown rust.

Barley Leaf Rust – There have been no new reports of barley leaf rust since the CRB #3.

Barley Stripe Rust – This year barley stripe rust has been reported in California, western Washington and western Oregon.

Barley Stem – As of early May, no barley stem rust has been reported in the U.S.

Rye Leaf Rust – There have been no new reports of rye leaf rust in the U.S. since the last bulletin when it was reported in Texas.

Stem rust on barberry. In late April, low levels of pycnial infections were found on susceptible barberry bushes (alternate host for stem rust) growing in south central Wisconsin. In early May, low levels of aecial infections were found on susceptible barberry bushes in southeastern Minnesota.



Fig. 1. Leaf rust severities in wheat fields - May 7, 2010

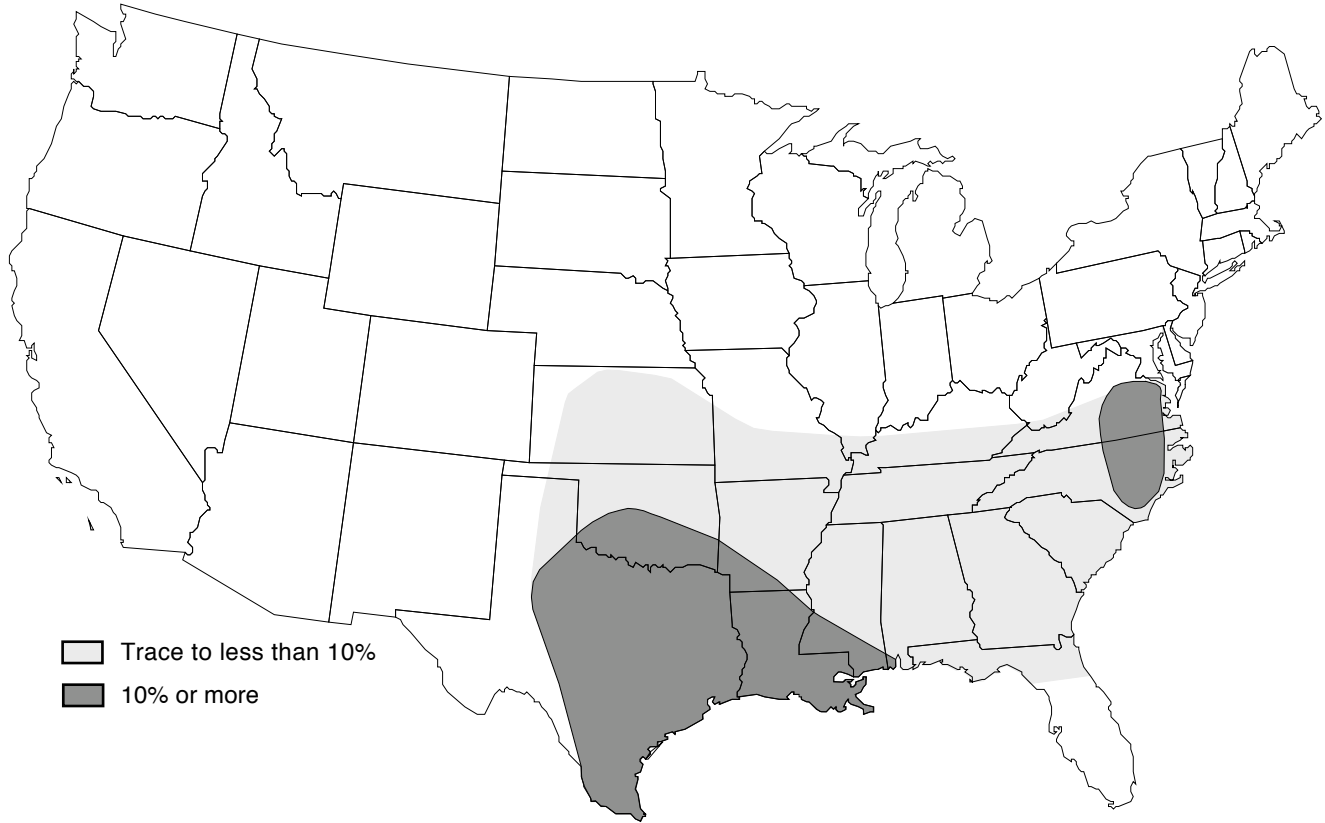


Fig. 2. Stripe rust severities in wheat fields and plots - May 7, 2010

