

# CEREAL RUST

## BULLETIN

Report No. 2  
April 8, 2008

Issued by:

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- Trace levels of wheat stem rust were found in a plot in South Texas.
- Wheat leaf rust is widespread throughout the southern U.S.
- Wheat stripe rust is at low levels in the southern U.S. wheat growing area.
- Oat stem rust is increasing in plots in Louisiana.
- Oat crown rust is increasing in the southern oat growing areas.

Winter wheat is at normal developmental stage, but many areas in the winter wheat area of the U.S. have been damaged by the dry conditions and wind. In the spring wheat and oat area of the northern plains, cool and wet conditions have slowed field preparation and planting.

**Wheat stem rust.** On April 3, trace amounts of wheat stem rust were found on flag leaves in a McNair 701 plot in South Texas at Castroville. The pustules developed from spores that were likely rain deposited approximately a week ago. The plants were at the half berry growth stage.

**Wheat leaf rust.** In early April, susceptible varieties TAM 110, Jagalene (*Lr24*) and Jagger (*Lr17*) in nurseries at Castroville and College Station, Texas had 60% leaf rust severities on lower leaves. On the highly resistant varieties Fannin and Endurance, no infections were found. In the first week in April, traces to moderate levels of leaf rust were noted in fields in north central Texas. No rust has been noted in the Rolling Plains, Texas Panhandle or North Texas High Plains fields.

In early April, low levels of rust were found in a wheat field of Jagger in south central Kansas. In fields near Manhattan, Kansas, leaf rust was increasing. Leaf rust was actively producing spores at both locations. The top three wheat varieties in the state [Jagalene (*Lr24*), Overley (*Lr41*) and Jagger (*Lr17*)] are susceptible to leaf rust. Severe levels of rust have been observed in south Texas plots of these 3 varieties, which will provide inoculum for wheat further north. The susceptibility of these varieties, the apparent overwintering of leaf rust and delay in crop maturity all increase the risk of severe disease in Kansas this year.

During the first week in April, wheat plots in south central Louisiana had high levels of leaf rust on the lower leaves. Moisture is needed for further rust development in this area. In the plots at Baton Rouge leaf rust was moderately heavy on susceptible lines.



In early April, leaf rust was heavy on the lower leaves of early-planted wheat fields (early October) and traces on late-planted fields (early November) and plots in central and southern Arkansas. In west central Arkansas, 10% severity levels were reported on lines in a nursery.

With continued good conditions for rust development, leaf rust incidence and severity will increase in the next few weeks. Many of these southern areas will provide rust inoculum for areas further north.

**Wheat stripe rust.** In early April, low amounts of stripe rust were found on flag leaves of wheat in south central Texas plots at Castroville. The pustules developed from spores that were likely rain deposited approximately 7 -14 days ago.

In early April, trace to high levels of stripe rust were found in north Texas, north of the Dallas area.

As of early April, no stripe rust has been found in Oklahoma or states to the north.

In mid-March, traces of stripe rust were found in wheat plots at Crowley in south central Louisiana but by late March no stripe rust was found.

By early April, stripe rust was confirmed in plots and fields in central and southeastern Arkansas. Stripe rust was scattered with little evidence of hot spots and most of the commonly planted cultivars have some resistance. One hot spot of stripe rust was found in a plot in west central Arkansas.

In late March, hot spots of stripe rust were reported in Griffin, Georgia fields and low levels were reported in the Tifton, Georgia area.

So far this year there have been few stripe rust inoculum sites reported in the southern U.S. As day and nighttime temperatures continue to increase, the conditions for stripe rust development will be less favorable. This will lead to a reduced amount of rust for the northern wheat growing regions of the U.S.

In early April, stripe rust was increasing in the Central Valley of California.

By early April, wheat stripe rust had not been found in the major eastern wheat-growing areas of the Pacific Northwest.

**Oat stem rust.** In early April, no oat stem rust was found in the plots at Castroville, College Station and McGregor Texas. Stem rust infections were less than normal in these plots.

In early April, oat stem rust levels were high and active in southeastern Louisiana plots.



**Oat crown rust.** In early April, trace to 60% levels of crown rust were found in south central Texas plots. High levels of crown rust were found in roadside oat plantings in central Texas. In early April, crown rust was severe in southeastern Louisiana oat plots.

**Barley stem rust.** No barley stem rust has been found in 2008.

**Barley leaf rust.** There have been no reports of barley leaf rust this year.

**Stripe rust on barley.** No barley stripe rust has been found as of early April in the U.S.

**Rye rusts.** No rye leaf rust has been reported as of early April in the U.S.



Fig. 1. Leaf rust severities in wheat fields - April 8, 2008

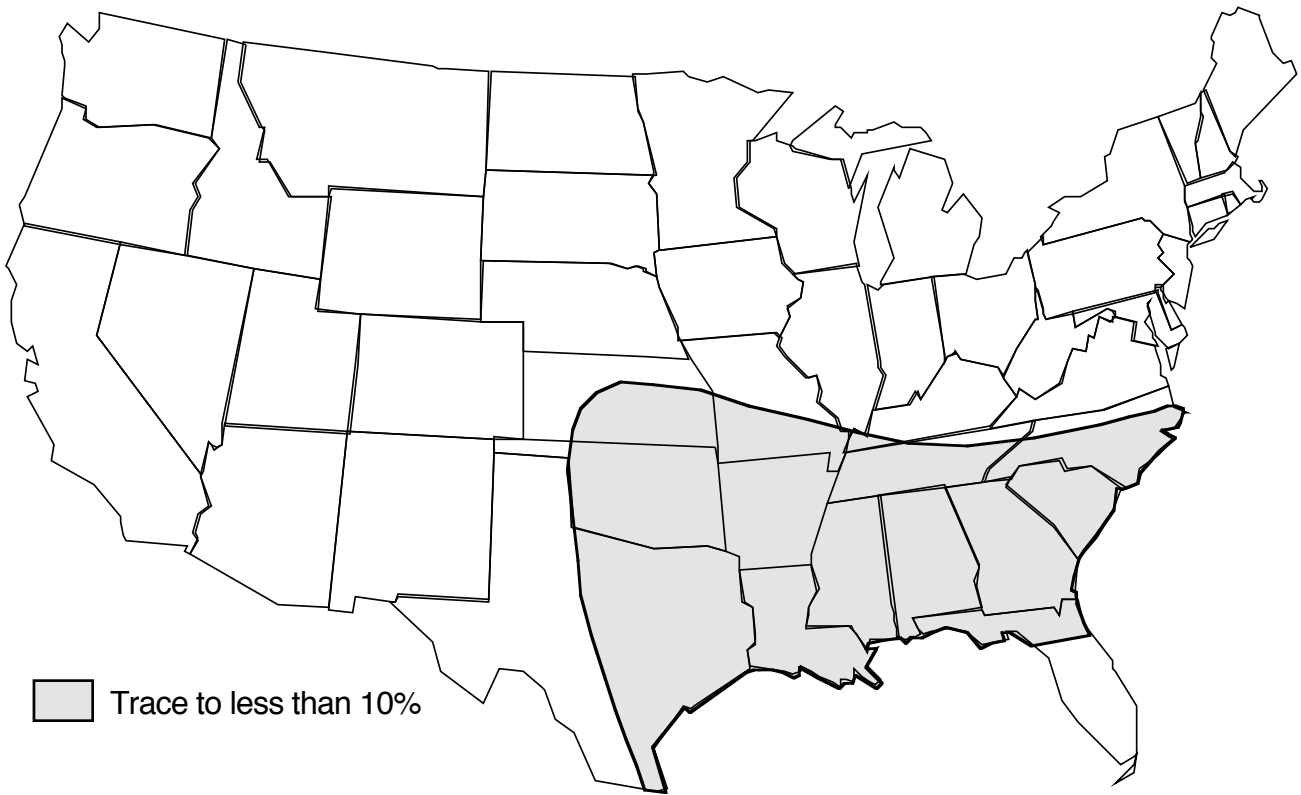


Fig. 2. Stripe rust severities in wheat plots and fields - April 8, 2008

