

Issued by:

**Cereal Disease Laboratory**

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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](mailto: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 southern Texas and Louisiana plots.
- Wheat leaf rust is widespread throughout the southern U.S.
- Wheat stripe rust levels were low in southern U.S., California and the Pacific NW
- Low amounts of oat stem rust were found in southern Texas and eastern Louisiana plots.
- Oat crown rust is increasing in the southern U.S. oat growing areas.

Winter wheat is at normal developmental stage, but many areas in the U.S. winter wheat area, e.g., south Texas, 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. Texas** - On April 9, low levels of wheat stem rust were found on flag leaves and stems in McNair 701 disease detection plots in irrigated nurseries at Beeville and Castroville in south Texas. The pustules developed from spores that were likely rain deposited approximately 10-14 days ago. The plants were at the half berry growth stage.

**Louisiana** - In early April, a center of stem rust was found in a disease detection plot of the cultivar Panola at Jeanerette in southern Louisiana. Severities ranged from trace to 40% in a 2 m x 2 m foci. On April 8, severe levels of stem rust were found in several wheat plots at the Winnsboro experiment station in northeastern Louisiana. The rust had not spread evenly across the nursery, but since the varieties are about a week past heading there still is time for more increase. Weather conditions have been ideal for rust development with lots of moisture (rain, dew and fog) and ideal temperatures across much of Louisiana the last couple of weeks.

**Wheat Leaf Rust. Texas** – In early April, susceptible varieties Overley (*Lr41*), Jagalene (*Lr24*) and Jagger (*Lr17*) growing in nurseries at Castroville, Beeville, College Station and McGregor, Texas had 60% leaf rust severities on lower leaves. In more resistant varieties like Fuller and Fannin lower severities of infections were observed. Fields in southern Texas are under drought stress and rust was found only in irrigated plots in this region. During the first week in April, low to moderate levels of leaf rust were noted in central Texas fields. Rain this past weekend may be conducive for more rust development. No leaf rust has been noted in the Rolling Plains, Texas Panhandle or North Texas High Plains fields.

**Oklahoma** – In early April, only low levels of leaf rust were observed in Oklahoma.



**Kansas** – In early April, leaf rust remains at low levels throughout south central and central Kansas. The lower leaves of the wheat in northeastern Kansas plots have now naturally deteriorated with age taking some of the overwintering leaf rust with it. Despite this decrease in incidence leaf rust could still be found at trace levels in research plots of susceptible cultivars.

**Louisiana** – In late March, leaf rust was starting to increase and growers were spraying for rust control. Weather conditions were ideal for rust development with lots of moisture (rain, dew and fog) and ideal temperatures across Louisiana for the last couple of weeks. In early April, leaf rust levels were heavy in plots of susceptible varieties throughout Louisiana.

**Arkansas** – In early April, low levels of wheat leaf rust were reported across southern Arkansas. Levels of leaf rust appear to be much lower than in the past several years in Arkansas.

**Wheat Stripe Rust. Texas** – On March 27, low levels of stripe rust were detected in the lower canopy of susceptible Pioneer 25R78 wheat fields in Hunt, Rockwall and Fannin counties in north central Texas. Weather conditions were conducive for the rust to move upwards to the F-2 and F-1 leaves. Detection of stripe rust in north Texas was similar in date to that of last year (2008). In early April, light to heavy levels of stripe rust were observed in a field of Pioneer 26R61 near College Station in central Texas. Stripe rust was only found in one half of the field, but with continued good moisture and low temperatures at night the rust will continue to develop throughout the field.

As of early April, no wheat stripe rust has been reported in Oklahoma or Kansas.

**Louisiana** – In early April, high levels of stripe rust were found in northeastern Louisiana plots at Winnsboro. Wheat stripe rust has not yet been reported in other areas of the state.

**Arkansas** – Wheat stripe rust is at lower levels than in the past several years in Arkansas. Extension personnel reported light stripe rust in southwest Arkansas.

**Georgia** – In late March, stripe rust was found in susceptible wheat fields from southwest to south central Georgia.

**California** – In late March, stripe rust was found in nurseries in the Sacramento and San Joaquin Valleys.

**Pacific Northwest** – In early April, 30% wheat stripe rust severities were reported on susceptible entries in nurseries and 2 to 5% in some fields. The rust severities were less than normal for this time of the year.

**Oat Stem Rust.** In early April, trace to 5% severities of oat stem rust were found in irrigated plots of the variety Harrison at the Beeville and Castroville nurseries in southern Texas. The pustules developed from spores that were rain deposited approximately 10-14 days ago. In some cases the stem rust had only developed on one side of the leaf. In late March, oat stem rust was found in several plots in the Baton Rouge, Louisiana nurseries. Weather conditions have been ideal for rust development with lots of moisture (rain, dew and fog) and ideal temperatures so oat stem rust has continued to increase in the plots.



**Oat Crown Rust.** In early April, heavy levels of crown rust were found in susceptible varieties in plots in irrigated nurseries at Beeville and Castroville and College Station, Texas. In late March, crown rust was increasing in the oat plots at Baton Rouge, Louisiana. These southern locations will provide crown rust inoculum for oat growing areas further north.

**Barley Leaf Rust.** In early April, light to severe levels of leaf rust were found in barley plots at College Station in central Texas.

**Rye Leaf Rust.** No rye leaf rust has yet been reported in the U.S.

*Please Note:*

**Current cereal rust situation**

Cereal Rust Bulletins are distributed every two weeks on average; for the latest cereal rust situation reports, subscribe to the cereal rust survey listserv list. Instructions can be found at:

<http://www.lsoft.com/scripts/wl.exe?SL1=CEREAL-RUST-SURVEY&H=LISTS.UMN.EDU>

Or, if you prefer, simply send a message to Mark Hughes ([Mark.Hughes@ars.usda.gov](mailto:Mark.Hughes@ars.usda.gov)) and he will add you to the list. Messages from the list are maintained on the CDL website (<http://www.ars.usda.gov/Main/docs.htm?docid=9757>).

If you have information on the cereal rust situation (or other small grain diseases) in your area that you would like to share, please email your observations to:

Mark Hughes ([Mark.Hughes@ars.usda.gov](mailto:Mark.Hughes@ars.usda.gov)) and David Long ([David.Long@ars.usda.gov](mailto:David.Long@ars.usda.gov))

Or to: [CEREAL-RUST-SURVEY@LISTS.UMN.EDU](mailto:CEREAL-RUST-SURVEY@LISTS.UMN.EDU)

Or, if you prefer: call Dave (612-625-1284)

We would like to include your name and email address so others can contact you. If, however, you prefer not to have your name or email address appear with the information, we will omit them. We will continue to incorporate these reports into the Cereal Rust Bulletin.

**Information of most importance**

We welcome any information you can provide, but are particularly interested in:

- Rust (leaf rust, stem rust, stripe rust)
- Host (wheat, oat, etc.)
- Cultivar or line name if known
- Severity and prevalence
- Growth stage -when rust likely arrived, when infection first noted and current stage
- Where rust is found on the plants, e.g., lower leaves, flag leaf, etc.

**Rust collections**

Reports on the distribution of races of cereal rust fungi are an important part of our surveys as reported in the Cereal Rust Bulletin. We regularly collect and test isolates of stem rust (wheat, oat, and barley), wheat leaf rust, and oat crown rust. We appreciate receiving collections of these rusts from cooperators around the U.S. If you would like to provide samples, please contact David Long ([David.Long@ars.usda.gov](mailto:David.Long@ars.usda.gov)) or Mark Hughes ([Mark.Hughes@ars.usda.gov](mailto:Mark.Hughes@ars.usda.gov)) and they will send you a packet of collection envelopes and forms.



Fig. 1. Leaf rust severities in wheat fields - April 15, 2009

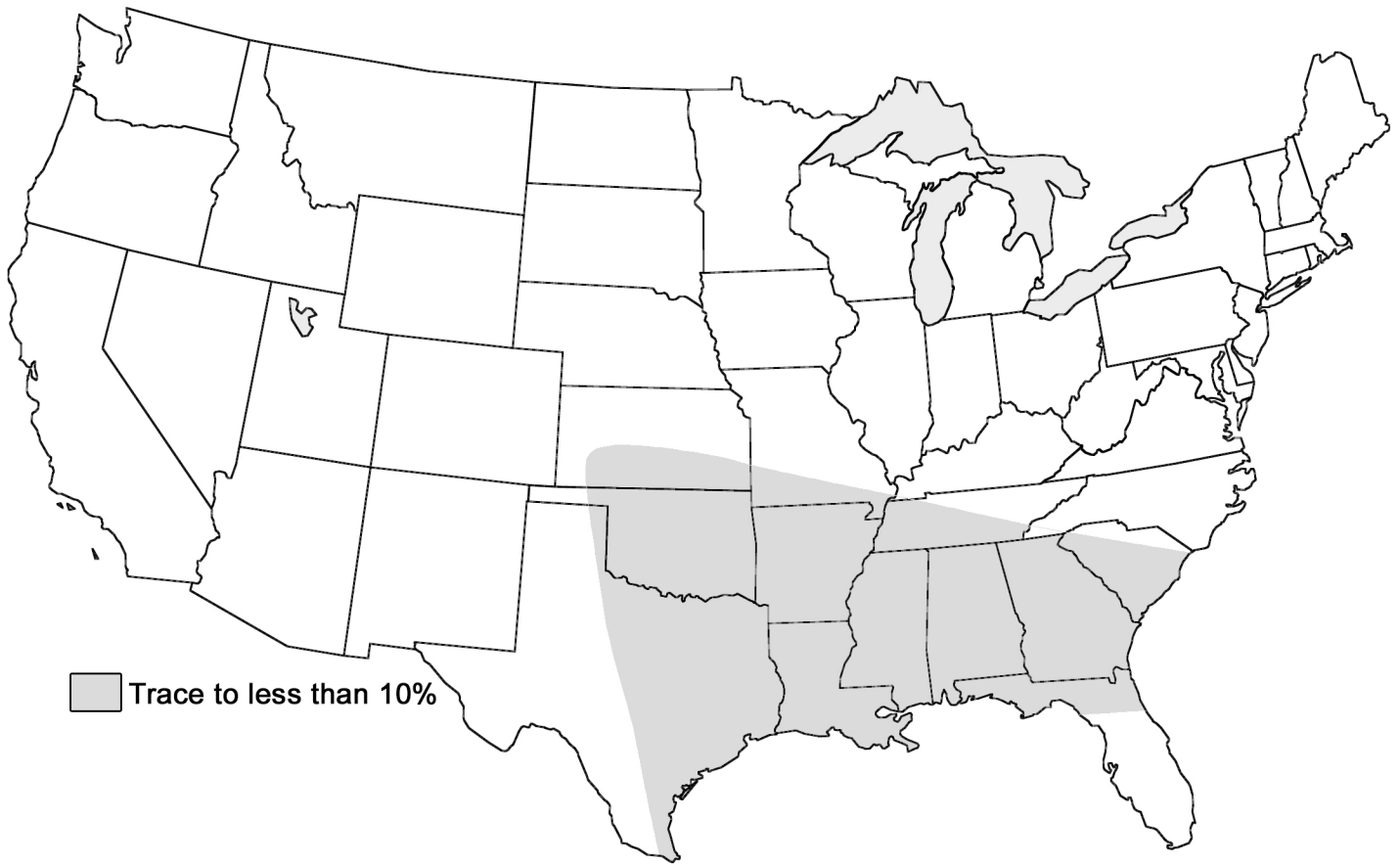


Fig. 2. Stripe rust severities in wheat plots and fields - April 15, 2009

