

# CEREAL RUST BULLETIN

Report No. 1  
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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: [markh@umn.edu](mailto:markh@umn.edu)

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 leaf rust is increasing in fields and plots in the southern U.S.
- Wheat stripe rust is light in the southern Mississippi Valley area of the U.S. and the Sacramento Valley of California.
- Traces of oat stem rust were found in Louisiana plots.
- Oat crown rust is increasing in the southern U.S.

**Wheat Stem Rust.** As of March 25, no wheat stem rust has been reported in the U.S.

**Wheat Leaf Rust. Texas** – In late February, low levels of leaf rust were reported in central Texas wheat plots. Moisture has been limited from late January to mid-March in western Texas. In mid-March, 30% leaf rust severities were found on the susceptible varieties, Cutter (*Lr24* resistance), Jagger (*Lr17* resistance), Overley (*Lr41* resistance) and TAM 110 in the nursery at Castroville, Texas. During the fourth week in March in College Station plots, leaf rust severities ranged from 30% on TAM 110 to traces on Fuller (*Lr17+Lr41*). The recent rains have improved conditions for rust development in Texas.

**Oklahoma** – In mid-March, no leaf rust was found in the Stillwater, Oklahoma plots.

**Kansas** – In late February, leaf rust infections that had over-wintered were found in plots at Manhattan, Kansas. In mid-March, traces of leaf rust were found in central Kansas fields. The leaf rust pustules were actively producing spores. The next few weeks will be critical for determining the risk of leaf rust in Kansas this year.

**Louisiana** – In mid-February, leaf rust was increasing on susceptible varieties, McCormick (*Lr24* resistance) in Baton Rouge, Louisiana plots. In early March leaf rust was active and at significant levels in the Baton Rouge plots and growers were starting to apply fungicides in fields that were infected with leaf rust in Louisiana.

**Arkansas** – In mid- March, low levels of leaf rust were found in susceptible varieties in southeastern Arkansas fields. Rust was severe in susceptible varieties in disease management plots which were planted very early and are more mature than most of the wheat in the state.

**Mississippi** – In mid-March, low levels of leaf rust were found in southern Mississippi fields.

**North Carolina** – In mid-March, leaf rust was widespread but not severe in plots at Kinston and Plymouth, North Carolina.

**Wheat stripe rust.** As of mid-March, no stripe rust has been reported in Texas, Oklahoma or Kansas.



**Louisiana** – In mid-March, stripe rust was increasing in Baton Rouge and Winnsboro plots. Growers were starting to apply fungicides in fields that were infected with rust. In Louisiana, stripe rust epidemics usually develop in the first half of March and peak by early April when temperatures surpass the optimum for stripe rust development.

**Arkansas** – In mid-March, stripe rust was confirmed in southeastern Arkansas plots.

**Mississippi** – In mid-March, very low levels of stripe rust were found in a southern Mississippi field.

**California** – On February 27, two infection foci of 25 sq ft and 50 sq ft were detected in plots of the variety (D6301) in Davis, California. The foci were severely diseased, so the initial infections probably occurred at least two weeks previous to detection. In mid-March, stripe rust was confirmed in a few commercial fields in the Yolo and Colus counties in the Sacramento Valley on susceptible cultivars (Blanca Grande, Summit) and on the previously resistant cultivar Cal Rojo. Disease severity was relatively light overall, but within the infection foci severity was up to 50%.

**Pacific Northwest** – As of March 20, no wheat stripe rust has been observed in the major wheat-growing areas of the Pacific Northwest.

Please send wheat and barley stripe rust collections (5 or more rusted green leaves) as soon as possible after collection to:

Dr. Xianming Chen  
USDA-ARS  
361 Johnson Hall  
P.O. Box 646430  
Washington State University  
Pullman, WA 99164-6430  
email: [xianming@mail.wsu.edu](mailto:xianming@mail.wsu.edu)

**Note:** Stripe rust collections are vulnerable to heat and do not survive long at warm temperatures; therefore, if shipment of collections for race identification is delayed their viability will be greatly reduced. An overnight courier service is preferred for sending stripe rust collections.

**Oat Stem Rust.** In late February, traces of stem rust were found in oat varietal plots at the Baton Rouge, Louisiana nursery. By mid-March, stem rust was increasing in these plots.

**Oat Crown Rust.** In early February, severe levels of crown rust were found in the College Station, Texas area on oat that had planted along the roadside by the highway department personnel for erosion control. In early March, light levels of crown rust were found in College Station, Texas plots. In mid-March 20% severities were observed on the spreader rows of Brooks oat in the Castroville, Texas nursery plots.

In mid-February, crown rust was very active with severity levels as high as 40% on some cultivars in Baton Rouge, Louisiana plots. By mid-March, crown rust was at severe levels in the southern Louisiana plots. Crown rust infections are equal to last year on the same date in the southern U.S.

**Barley Leaf Rust.** No barley leaf rust has been reported as of mid-March in the U.S.

**Rye Leaf Rust.** No rye leaf rust has been reported as of mid-March 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 ([markh@umn.edu](mailto:markh@umn.edu)) and he will add you to the mail list. Messages from the mail 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 info to:

Mark Hughes ([markh@umn.edu](mailto:markh@umn.edu)) and David Long ([davidl@umn.edu](mailto:davidl@umn.edu))

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 contribute, please contact David Long ([davidl@umn.edu](mailto:davidl@umn.edu)) or Mark Hughes ([markh@umn.edu](mailto:markh@umn.edu)) and they will send you a packet of collection envelopes and forms.

