

CEREAL RUST BULLETIN

Report No. 1

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Issued by:

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For the latest cereal rust news from the field, subscribe to the cereal-rust-survey mail list. To subscribe, send an email message with the word *subscribe* in the message body (not subject line) to:

cereal-rust-survey-request@coafes.umn.edu

Reports from this mail list as well as all Cereal Rust Bulletins are maintained on the CDL web page (<http://www.cdl.umn.edu/>).

- Wheat leaf rust is heavier than last year throughout the southern U.S.
- No wheat stem rust has been found in the U.S. this year, but 20% oat stem rust severities were reported on volunteer plants in southern Texas.
- Crown rust is more severe than last year in southern Texas.

Adequate moisture during the winter has resulted in good cereal growth throughout most of the southern U.S. small grain growing area. In southern and central Texas the wheat is in good condition and near normal crop maturity. In Kansas and Oklahoma most of the wheat crop is in good condition and there has been minimal winter injury.

Wheat stem rust. No wheat stem rust has been found in the U.S. as of March 18.

Wheat leaf rust. During mid-March, wheat leaf rust severities ranged from traces on flag leaves to 60% on the lower leaves of cultivars in nursery plots throughout southern Texas. For example, plots of Custer had traces of leaf rust, but Karl 92 had 60% severities. Commercial wheat fields in southern Texas had rust severities ranging from traces to 20% on the lowest leaves. In southern Texas, rust increased on the lower leaves when moisture was abundant, but rust increase farther up the plant has been limited because of recent dry weather. During November in Oklahoma, leaf rust was severe on some of the commonly grown cultivars. However, a hard freeze in mid to late December, followed by dry conditions through January and early February, eliminated this leaf rust in many of



these fields. By early March leaf rust was less severe, since most of the rusted leaves died without the rust spreading to the younger leaves because of the dry weather in February. However, with the recent warm and moist conditions, rust will increase and in some areas be a problem while providing inoculum for the wheat-growing areas farther north.

In mid-March, wheat leaf rust was increasing in plots of southern soft red winter wheat cultivars in southern Louisiana. In February, heavy rainfall in Louisiana did not allow the rust spores to move up the plants and therefore rust development has been limited.

Wheat stripe rust. No wheat stripe rust has been reported in the U.S. as of March 18.

NOTE: Stripe rust is vulnerable to heat and does not survive long at warm temperatures; therefore, if shipment of collections for race identification is delayed, their viability will be poor. Please send wheat and barley stripe rust collections (10 or more rusted green leaves) as soon as possible after collecting to: Dr. Roland Line, USDA-ARS, 361 Johnson Hall, Washington State University, Pullman, WA 99164-6430.

Oat stem rust. On March 15, twenty percent oat stem rust severities were found on volunteer plants growing around the edges of a non-cultivated field 10 miles north of Uvalde, Texas. Last year in the same field, the oats were destroyed by stem rust. No other oat stem rust was found in oat fields within the immediate area of these infections.

Oat crown rust. During mid-March, crown rust was severe in southern Texas plots and fields. Foci of sixty-percent severity were common on the most susceptible cultivars in nursery plots. In southern Texas oat fields, rust severities ranged from 1 to 20%; on average, rust development was equal to last year.

In mid-March, crown rust was light in varietal plots in southern Louisiana.

Barley stem rust. As of March 18, no stem rust has been reported on barley in the U.S. this year. Limited amounts of barley are grown commercially in the southern states. Stem rust on barley rarely occurs in this area.

Barley leaf rust. In mid-March, traces of leaf rust were observed on lower leaves in a few barley plots in southern Texas.

Stripe rust on barley. No stripe rust on barley has been reported in the U.S. as of March 18.

Rye rusts. During mid-March, rye leaf rust foci with 10% severities were found on leaves of winter rye in southern Texas. No rye stem rust has been reported this year.

Special Note: If you currently receive the Cereal Rust Bulletin by U.S. mail but would prefer to receive it by email or receive email notification when it is posted on our web page, please send a message to Mark Hughes (markh@puccini.crl.umn.edu).



The latest news on the current cereal rust situation in the U.S. can be found on our web page (<http://www.cdl.umn.edu/CRB/crbupd.html>). If you have information on the cereal rust situation (or other small grain diseases) that you would like to share, please email your info to: cereal-rust-survey@coafes.umn.edu

or David Long (davidl@puccini.crl.umn.edu) and Mark Hughes (markh@puccini.crl.umn.edu) or if you prefer, call Dave (612-625-1284). We would like to include your name and email address so others could contact you. If, however, you prefer not to have your name or email address appear with the information, we will omit them. Posting these messages will supplement the Cereal Rust Bulletins by making cooperators' reports available on the home page as they come in. Of course, we will continue to incorporate these reports into the regular issues of the Cereal Rust Bulletin. Generally, the Cereal Rust Bulletins are compiled every two weeks during the crop season. We welcome all comments or suggestions on how we can improve the bulletins or our home page.

Reports on 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 Dave Long or Mark Hughes, and they will send you a packet of collection envelopes and forms.





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