# 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).

- Traces of wheat stem rust were found in plots in southern Texas.
- Wheat leaf rust is light throughout the southern U.S.
- Light amounts of wheat stripe rust were found in Louisiana, Arkansas and Washington.
- Crown rust is severe on susceptible oats in southern Texas and southern Louisiana.

Lack of moisture during the winter delayed small grain growth throughout much of the southern U.S. small grain growing areas. During the last three weeks rainfall has made conditions better for small grain development in the southern U.S. In Kansas and Oklahoma, most of the wheat crop is in fair to good condition and ahead of normal crop maturity.

**Wheat stem rust.** In mid-March, traces of wheat stem rust were found in soft red winter wheats growing in plots in southern Texas at the Uvalde experiment station.

**Wheat leaf rust.** In early February, light amounts of leaf rust were found on the susceptible cultivar Tam107 in central Texas plots, but drought-like conditions throughout much of Texas kept rust development to a minimum. In early March, leaf rust was increasing rapidly in south and north central Texas wherever moisture was present for rust infection to occur. By the third week in March, 10-40% severity rust readings were observed on the lower leaves of susceptible cultivars in southern Texas at the experiment stations in Uvalde and Beeville.

In early February, light leaf rust was found in spreader rows in southern Louisiana. Rust development was slower starting than normal because of the lack of moisture throughout the southern soft red winter wheat area. In early March, wheat leaf rust was increasing throughout the state of Louisiana and by late March severe leaf rust was observed in the plots in southern Louisiana. By late March, leaf rust

was severe on susceptible cultivars in nurseries in west central Mississippi, while most of the commercial fields in the area were rust free because they were sprayed.

In mid-March, in northeastern Arkansas wheat plots, leaf rust was widespread on lower leaves of Hart spreader rows and in other susceptible lines where rust had overwintered.

During late March, light leaf rust was observed on wheat growing in plots in the panhandle of Florida. In late March, light amounts of leaf rust were found on susceptible lines in plots in southwestern Georgia where weather has been dry since last fall.

**Wheat stripe rust**. During late March, old pustules of stripe rust were found on the lower leaves of soft red winter wheat cultivars at the experiment station at Uvalde,Texas.

In early March, light amounts of stripe rust were found in a wheat field in southern Louisiana. In late March, light stripe rust was found in plots in northeastern Louisiana.

In mid-March, stripe rust was widespread on the lower leaves and upper leaves of several cultivars in northwestern Arkansas where the rust had overwintered.

By mid-March, wheat stripe rust was increasing in plots and fields in western Washington.

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, P.O. Box 646430, Washington State University, Pullman, WA 99164-6430. Attention: Mary Moore. **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.

**Oat stem rust**. In late March, stem rust was found in oat plots in a southern Louisiana nursery.

**Oat crown Rust.** In early March, in south Texas plots, crown rust was severe in susceptible plots and increasing at a rapid rate wherever moisture was present.

In early March, traces of oat crown rust were found in southern Louisiana. In late March, in southern Louisiana, crown rust was increasing in oat plots with some lines as high as 60% severity. Oat lines were at the heading stage, so there is plenty of time for rust to develop in Louisiana. In late March, light amounts of crown rust were found in oat plots along the Gulf Coast and some overwintering sites were observed in locations like Headland, Alabama.

**Barley and Rye Rusts.** As of March 29 there have been no reports of barley or rye rusts in the U.S.

**Other rusts.** During late March, leaf rust (*Uromyces hordeinus*) on little barley (*Hordeum pusillum*) was found along the Gulf Coast of the U.S.
**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@cdl.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/updates.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@cdl.umn.edu) and Mark Hughes (markh@cdl.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.

**New on the CDL Website (www.cdl.umn.edu):**

If you haven't visited the CDL website (www.cdl.umn.edu) in a while, you may want to stop by. Some of the new additions include:

Online Searchable Databases
- Rust Resistance Genes in Wheat Lines and Cultivars
- Index of Rust Fungi and Their Hosts in Minnesota
- Bibliographies
    - Cereal Rusts (13,582 citations)
    - Fusarium Head Blight (3024 citations)
    - Karnal Bunt of Wheat (642 citations)

1998 and 1999 Wheat Leaf Rust Survey Results
Recent Nursery Testing Results
Losses Due to Rust - updated