

CEREAL RUST BULLETIN

Report No.2
April 6, 2004

Issued by:

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- Wheat leaf rust is more widespread and at higher levels than last year throughout the southern U.S.
- Wheat stripe rust is less prevalent and at lower levels than last year in Texas.
- Oat crown rust is severe throughout southern Texas.
- Oat stem rust is light in Texas.

The winter-sown small grain crop is in good condition and near normal crop development in much of the southern U.S.

Wheat stem rust. No wheat stem rust has been reported in the U.S. as of April 6.

Wheat leaf rust. In late March in southern and central Texas, leaf rust infections were at low levels in most commercial wheat fields and at high severity levels on susceptible cultivars in nursery plots. Leaf rust severities up to 80% were on lower leaves of cultivars in nurseries, and trace-20% severity levels were on lower leaves in fields. Wheat leaf rust is present in fields and plots in the southern soft red winter wheat area from Georgia to Arkansas. Some of the fields infected with rust were sprayed for rust control in the southern grain growing area of the U.S. Rainfall in mid to late March contributed to the increase in leaf rust development in the southern U.S. Leaf rust will continue to increase rapidly with adequate moisture and warm weather, and will provide rust inoculum for the wheat growing areas further north.

Wheat stripe rust. In late March, wheat stripe rust infections were at low levels in wheat fields in southern and central Texas. Stripe rust severities ranged from trace levels of infection to 20% severity in plots and fields. Stripe rust was reported in late February in Texas and then the drier than normal conditions in early March slowed rust development. Although rainfall in late March provided high moisture conditions, warmer day and night temperatures restricted stripe rust development. This year stripe rust has been found in fewer locations and the weather conditions have not been as conducive for rust development as last year in Texas. Another possibility is that stripe rust overwintering was reduced compared to previous years.

In early April, stripe rust was active in Louisiana and some fields were sprayed for rust control. With adequate moisture and lower than normal temperatures stripe rust may continue to develop in April. In late March, stripe rust was found in fields throughout southern Arkansas and fungicide application was recommended.



In late March no stripe rust was found on the eastern side of the Rocky Mountains in Washington.

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

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 mid-March, low levels of stem rust infections were found on oat in central Texas plots. During late March traces of stem rust were found on wild oat (*Avena fatua*) in central Texas.

In early April, traces of oat stem rust were found in plots at Baton Rouge, Louisiana.

Oat crown rust. In late March, oat crown rust infections were at trace to 80% severity in plots and fields in southern and central Texas. Crown rust was so severe in a field in southern Texas that the crown rust killed the plants before heading. Crown rust is increasing throughout Texas and will provide inoculum for the oat growing areas further north.

In late March, crown rust was increasing in Baton Rouge, Louisiana plots.

Buckthorn. Buds on buckthorn, the alternate host for oat crown rust, have not yet started to break dormancy in the buckthorn nursery at St. Paul, Minnesota.

Barley stem rust. As of April 6, no barley stem rust has been reported in the U.S.

Barley leaf rust. In early April, traces of barley leaf rust were found in southern Texas plots at Castroville.

Stripe rust on barley. There have been no new reports of barley stripe rust since CRB #1.

Rye rusts. In early April, 60% leaf rust severities were observed on rye in central Texas plots.



Fig. 1. Leaf rust severities in wheat fields - April 6, 2004

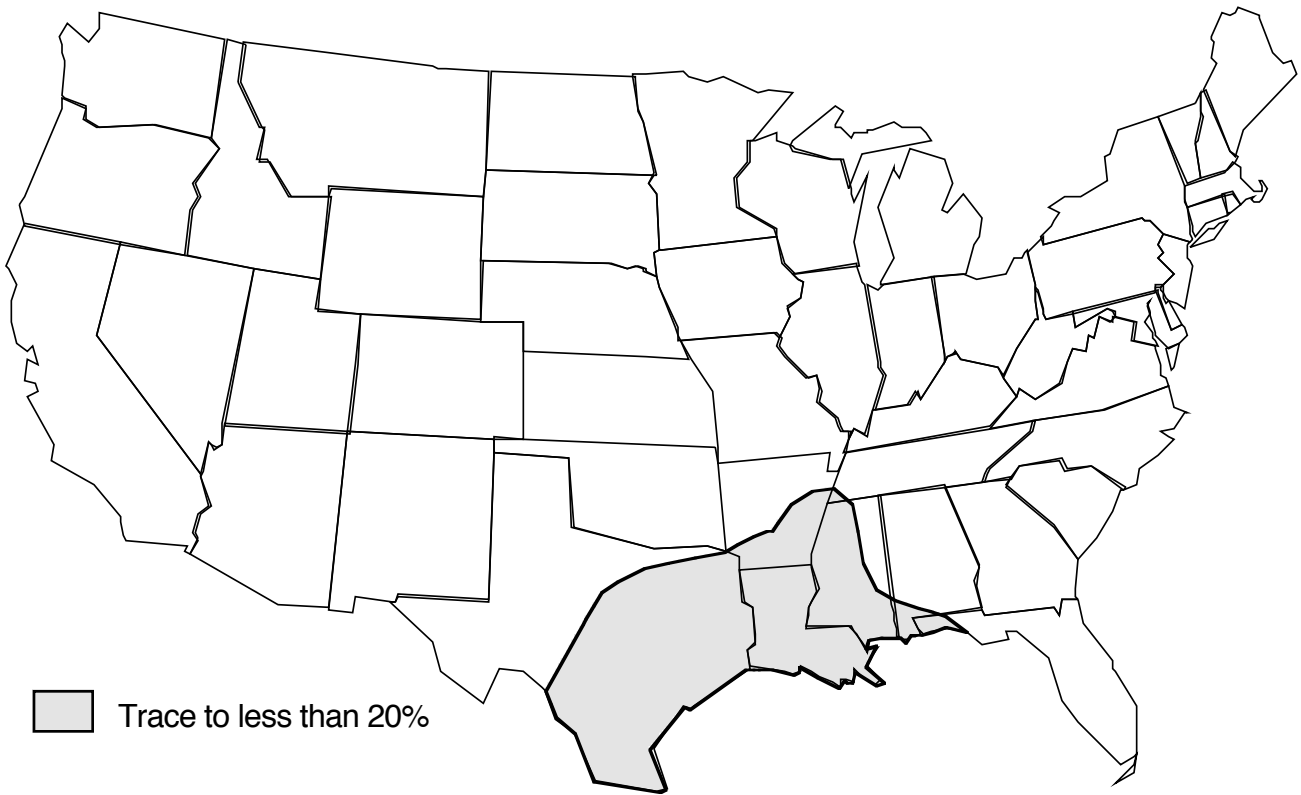


Fig. 2. Stripe rust severities in wheat fields - April 6, 2004

