CEREAL RUST BULLETIN

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Issued by:

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- Wheat leaf rust is prevalent throughout the southern U.S.
- Wheat stripe rust is more severe than last year in Texas and California.
- 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 southern U.S.

Wheat stem rust. No wheat stem rust has been reported in the U.S. as of April 7.

Wheat leaf rust. In early-April, leaf rust infections were light in commercial wheat fields and at high levels on susceptible cultivars in nursery plots in southern and central Texas. In the last week of March in southern and central Texas, leaf rust severities up to 60% were on the lower leaves of cultivars in breeding nurseries, and trace-10% severity levels were on the lower leaves in fields. Wheat leaf rust was light in plots in the southern soft red winter wheat area from Georgia to Louisiana. The dry and cool weather in late March and early April contributed to the slow leaf rust development in the southern U.S. Leaf rust will increase rapidly with adequate moisture and warmer weather.

Wheat stripe rust. In early April, wheat stripe rust infection levels were high in wheat fields in southern and central Texas. Leaf rust severities ranged from trace levels of infection to 80% severity in both plots and fields. Stripe rust infections were high in several thousand acres of Coronado wheat in central Texas. In mid-March in one of these fields, plants had died because of stripe rust. Many of the fields in central Texas were sprayed for rust control. Stripe rust increase slowed during the later part of March and early April because of drier field conditions. In early April, light levels of stripe rust infection were found in fields west of Dallas. With adequate moisture, stripe rust will continue to increase in Texas. The wheat cultvars Jagger, Cutter and Jagelene have the best stripe rust resistance in the Texas nurseries.

In early April, stripe rust infections were increasing throughout plots in southern Louisiana. With adequate moisture more stripe rust will develop in the next two weeks. Many wheat fields in Louisiana were sprayed for stripe rust. In early April, a center of stripe rust infections that had overwintered was found in wheat plots at early flag leaf emergence growth stage in northwestern Arkansas. A single pustule of stripe rust was found on an upper leaf of a wheat nearby field.

In early April, wheat stripe rust infections had increased throughout much of the Central Valley of California and surrounding areas. Most of the current wheat varieties in California, including many durum varieties, are susceptible to stripe rust. A mild winter with moisture and early infection of very susceptible varieties has produced an abundant inoculum load. Susceptible varieties, such as Dirkwin, Cavalier, Yecora Rojo, Eldon, Yolo, and Klasic had 100% stripe rust severities. A larger proportion of wheat fields in California have been sprayed with fungicides than in previous years. The fungicide Tilt was used early in the growing season but Quadris has been applied after the emergence of the flag leaves.

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 oats in southern and central Texas plots. A few pustules were found on the upper leaves of oats planted for roadside erosion control in central Texas. During the third week in 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 mid-March oat crown rust infections were at 30-60% in plots and fields in southern Texas. The oats planted in roadside ditches provided an excellent habitat for crown rust development and spread throughout central Texas. In early April low amounts of crown rust infections were found in oat nurseries and fields in central Texas. The dry weather in late March and early April slowed increase of rust infections. With adequate moisture and warmer weather crown rust will increase.

In early April, crown rust infections were at low levels in Baton Rouge, Louisiana.

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.

Barley stem rust. As of April 7, no barley stem rust has been reported in the U.S.

Barley leaf rust. As of April 7, no barley leaf rust has been reported in the U.S.

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

Rye rusts. There have been no new reports of rye rust since CRB #1.