

CEREAL RUST BULLETIN

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Cereal Disease Laboratory
U.S. Department of Agriculture
Agricultural Research Service
1551 Lindig St, University of Minnesota
St. Paul, MN 55108-6052
(612) 625-6299 FAX (651) 649-5054
markh@umn.edu

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- Traces of wheat stem rust were found in southern U.S. plots.
- Wheat leaf rust is increasing throughout the southern U.S.
- Wheat stripe rust is lighter than last year throughout the U.S.
- Oat crown rust is increasing in the southern U.S.

Most of the winter wheat crop is in good condition and near normal crop maturity throughout the United States. Much of the spring wheat crop has been planted and the emerged crop is in good condition. By early May, harvest had commenced in southern Texas.

Wheat stem rust. In late April, traces of wheat stem rust were found in plots at Giddings in central Texas and at Quincy in the Florida panhandle.

Wheat leaf rust. In early May, 80% wheat leaf rust severities were observed in plots from central Texas to the Florida panhandle. In late April in central Texas, moderate to severe rust infection was found on susceptible cultivars while in northern Texas wheat at the late flower to early dough growth stages had light to moderate leaf rust infection. In central Texas fields, 40% severities were observed in fields that had been sprayed with fungicide (Fig. 1). By early May, leaf rust was increasing throughout Oklahoma. As in previous years, Jagger wheat was heavily rusted and some yield reduction is expected. In early May, leaf rust was present in most of Kansas at a low severity except in a few areas in south central Kansas.

In late April, light to moderate leaf rust was found in Arkansas fields and plots. In early May in northwestern Arkansas varietal plots, no leaf rust was found, but 50% severities were found in nursery plots.

The moist weather in late April was conducive for leaf rust development in much of the southern U.S. With rainfall and warmer temperatures, leaf rust should increase and provide inoculum for the northern wheat growing area.

Wheat stripe rust. In late April, stripe rust was light to moderate in north central Texas and southern Oklahoma plots and fields (Fig. 2). In north central Texas, 60% severities were observed on susceptible varieties. Fields in this area had been sprayed for rust and mildew control. In early May, stripe rust was found across northern Oklahoma, but at levels that should not cause significant yield losses. Rust was present in significant amounts, but dry and



windy conditions impeded the further development of stripe rust on susceptible varieties. Hot spots of rust development were found in central and southwestern Oklahoma, but not at levels that will likely cause significant yield losses.

In late April, stripe rust was found in eastern and northern Arkansas, but in light amounts. By early May in northern Arkansas, 100% severities were reported, but disease progress appeared to have stopped because of warm night temperatures.

This year stripe rust infections in the southern US are less severe and extensive than last year and therefore will provide less inoculum for the northern wheat growing area.

In early May, stripe rust was light in wheat fields in southwestern Illinois.

In the last week of April, stripe rust was starting to show in experimental plots in northeast Oregon and southeast Washington. Near Connell, Washington, severity levels up to 20% were observed in fields planted with 'Hatton', a hard red winter wheat. This year, the appearance of stripe rust was much later than last year in this region, due to the dry weather last fall that reduced fall infection and a cold winter that reduced winter survival. Most of the infected leaves were the top leaves, indicating infections occurred mostly after the winter. The rust infected fields will produce rust spores to infect spring wheat crops in central and eastern Washington and northern Idaho.

Oat stem rust. During the last week in April, severe oat stem rust was observed in plots while traces were found in fields in central Texas. From collections made in south Texas in late March, races NA-27, -29 and -67 were identified. These races were also identified in Texas and much of the U.S. in 2003.

Oat crown rust. In late April, 60-80% severities were observed in central Texas fields while severities ranged from traces to 40% in plots in north central Texas. In early May, 40-60% severities were observed in oat plots in Alabama and the Florida panhandle. These southern locations will provide inoculum for the northern oat growing areas.

Buckthorn. Light to moderate pycnial and aecial infections were observed on emerging buckthorn leaves in the nursery at St. Paul, Minnesota on May 11. Buckthorn serves as the alternate host for oat crown rust.

Barley stem rust. There have been no reports of barley stem rust this year.

Barley leaf rust. There have been no new reports of barley leaf rust since April 6.

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

Rye rusts. During the last week in April, severe rye leaf rust was found in fields in the Florida panhandle.



Fig. 1. Leaf rust severities in wheat fields - May 11, 2004

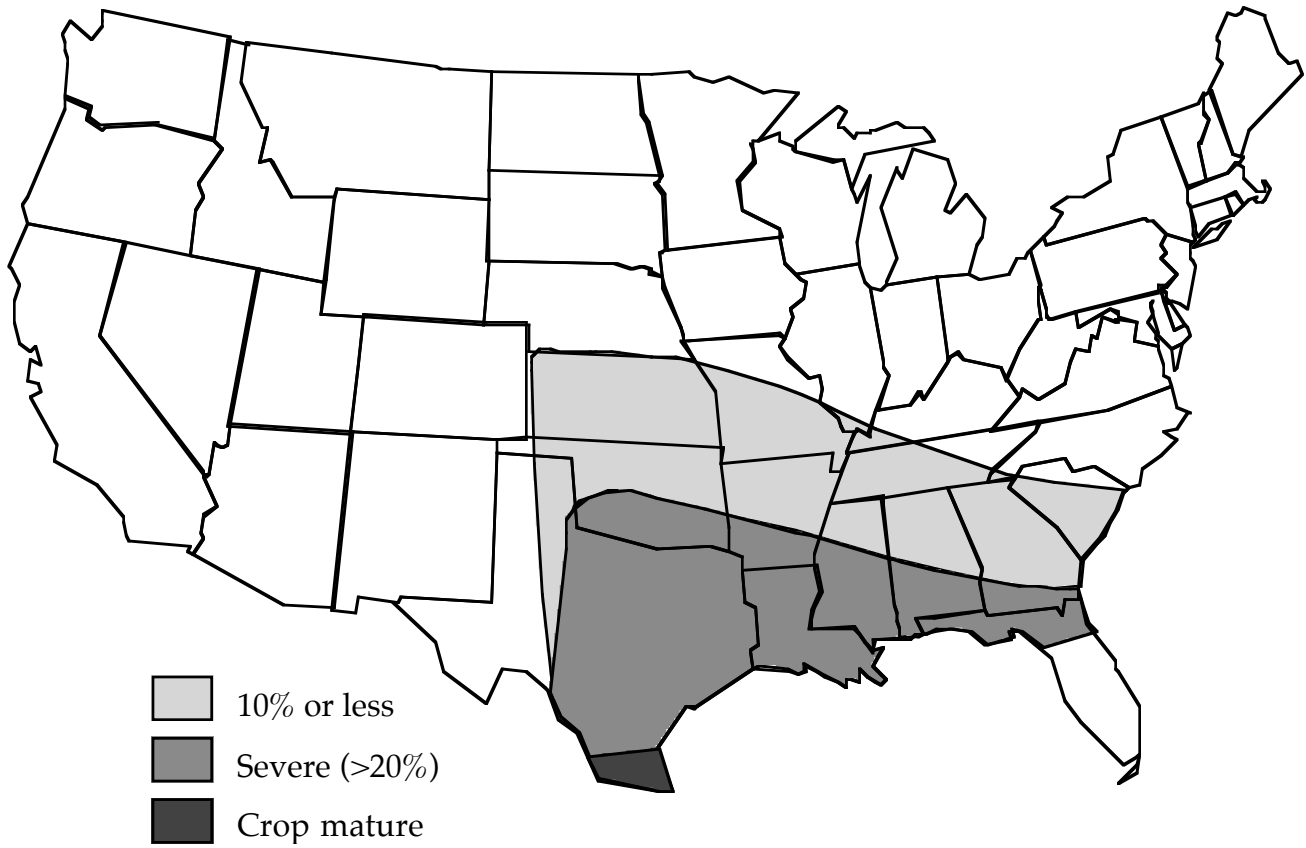


Fig. 2. Stripe rust severities in wheat fields - May 11, 2004

