CEREAL RUST BULLETIN

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- Wheat leaf rust is widespread and increasing in severity throughout the southern U.S.
- Wheat stripe rust is at low levels throughout the southern U.S.
- Oat crown rust is at low levels in the southern U.S.

Most of the winter wheat crop is in fair condition and ahead of normal crop development throughout the United States. Throughout much of the northern spring grain area rain has delayed fieldwork.

Wheat stem rust. On April 18, wheat stem rust was at low levels in plots at Baton Rouge, Louisiana. These plots wheat were drying down 14 days earlier than normal because of minimal rainfall. There have been no other reports of wheat stem rust in the U.S.

Wheat leaf rust. In late April, plots of susceptible wheat cultivars had leaf rust severities up to 80%, in the area from central Texas, central Mississippi to central Georgia. Fields in the same area had severities from 0 to 10% (Fig. 1). Drier than normal conditions in March and April slowed rust development throughout much of the southern U.S.

On May 1, traces of leaf rust were found in plots at Stillwater in northeastern Oklahoma. The wheat is at the milk stage of maturity and therefore it is too late for rust to cause high yield losses this year. In late April, traces of leaf rust were found in south central Kansas. In this area wheat was under extreme drought stress and at heading to early flowering growth stage.

In late April, plots of susceptible wheat cultivars in northeastern Louisiana had leaf rust severities up to 80% on flag leaves. Severe stripe rust was reported in these plots in early April, but in late April sporulating stripe rust infections were hard to find. When temperatures are above 55 F in a 24 hr period, stripe rust development usually slows down. Leaf rust severity will increase significantly with the warmer temperatures.

In late April, plots in east central Arkansas had 0-50% leaf rust severities. In this area rainfall has been at normal levels. Leaf rust should continue to increase and provide inoculum for the northern wheat growing area.

Wheat stripe rust. In late April, hot and dry conditions slowed any stripe rust development in plots and fields throughout the southern U.S. (Fig. 2). For example, in central Texas and northeastern Louisiana plots stripe rust infections were observed but there was little sporulation occurring. Last year there was more stripe rust because the cooler than normal temperatures in the last two weeks of April were more conducive for stripe rust development in the southern U.S.

In late April, severe stripe rust was observed in late maturing susceptible cultivars in the nursery at Plains in southwestern Georgia. In the nursery most of the stripe rust infections had occurred earlier in March and April when temperatures were cooler. By late April leaf rust was the most prevalent rust on wheat at Plains.

On April 26, light amounts of stripe rust were reported on winter wheat in plots at St. Paul, Minnesota. This was most likely from an over wintering infection.

By the third week in April, susceptible entries in winter wheat nurseries at Mount Vernon in northwestern Washington had 60% levels of stripe rust infection. In south central and southeastern Washington, early planted winter wheat fields had 5% stripe rust severity. In this area the initial stripe development was much later than last year, but about normal for this area.

Oat stem rust. During the last week in April, oat stem rust was observed in plots in central Texas, south central Alabama and northeastern Florida. In the Baton Rouge nursery oat stem rust was severe on susceptible plots. A new race may be present in these plots.

Oat crown rust. In late April, central Texas fields had trace–20% severities while trace severities were reported in northern Texas. In early May, oat plots in southern Alabama and the Florida panhandle had 80% rust severities. These southern locations will provide less inoculum than last year for the northern oat growing areas.

Buckthorn. Light pycnial infections were observed on emerging buckthorn leaves in the nursery at St. Paul, Minnesota on May 2. Cooler than normal temperatures have slowed down pycnia development. 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 4.

Stripe rust on barley. There have been no new reports of barley stripe rust since CRB #3.

Rye rusts. During the last week in April, severe rye leaf rust was found in fields in southwestern Georgia and southern Alabama.

Fig. 1. Leaf rust severities in wheat fields - May 2, 2006

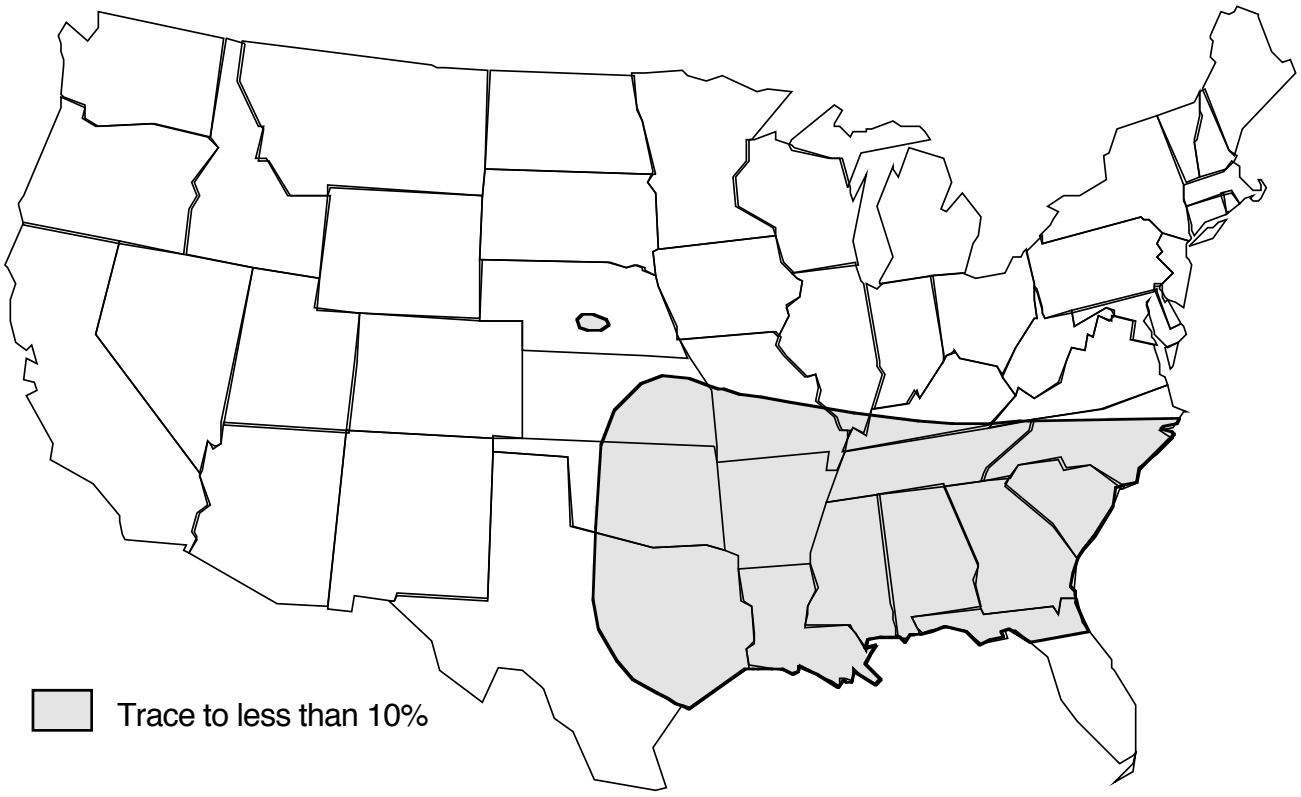

Fig. 2. Stripe rust severities in wheat fields - May 2, 2006