# CEREAL RUST BULLETIN

Report No. 6
June 4, 2008

Issued by:

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- Wheat stem rust was found in a few locations in southern U.S.
- Wheat leaf rust is widespread and increasing throughout the U.S.
- Wheat stripe rust is at low levels and will increase in central Kansas if cool conditions persist.
- Oat stem rust was found in a northeast Kansas plot.

The small grain harvest is underway from southern South Carolina to southern Oklahoma. Winter wheat maturity is behind normal in the central winter wheat growing area. In the spring grains area of the northern plains wet and cool conditions have slowed crop development.

**Wheat stem rust.** On May 24, low levels of wheat stem rust were found in the susceptible McNair 701 plot at Lahoma in north central Oklahoma. In late May, stem rust was severe in some head-rows of a late planted nursery, at Chillicothe in north Texas.

In late May, wheat stem rust was found in east central and northeastern Arkansas. The disease developed too late to cause much damage, but these are the first reports of stem rust in Arkansas in the past 10 years.

In late May during harvest, wheat stem rust was found in a breeding nursery at Plains, Georgia.

On May 8, light levels of stem rust were found in a wheat nursery at Blackville in south central South Carolina.

Wheat stem rust observations map can be found on the CDL website: http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealrustbulletins/2008wsr.pdf.

**Wheat leaf rust**. In late May, high severity (60%) levels of wheat leaf rust were found in fields of Jagalene (*Lr24*), Jagger (*Lr17*) and Overley (*Lr41*) throughout north central Oklahoma and southeastern and south central Kansas (Fig. 1). In some fields of susceptible cultivars there will be a significant loss to leaf rust. Many fields have been sprayed with fungicide to control the rust. In varietal plots in south central Kansas, leaf rust was low in the resistant cultivars Fuller, Santa Fe and Duster. In north central Kansas fields of Jagger, etc., leaf rust severities on flag leaves were much lower, but with continued favorable conditions for rust development, leaf rust

will increase throughout this area and provide inoculum for the northern wheat growing areas. Only trace levels of leaf rust have been reported in western Kansas.

In late May, light levels of leaf rust were reported in a field of Jagalene at Reliance, South Dakota (near the center of the state).

On May 20, severe levels of leaf rust were reported in varietal plots in northeastern Arkansas at Kibler.

In late May, leaf rust was light in central and western Kentucky wheat fields. In much of this area many of the fields had been sprayed with fungicide to control the rust.

In late May, trace to low levels of leaf rust were reported at the northern (Blackstone, VA) and southern (Orange, VA) Piedmont experiment stations. The heaviest rust was found at the eastern shore station (Painter, VA) where cultivars with *Lr26* (USG 3209, Sisson) and *Lr24* (McCormick were heavily infected. At the Warsaw station leaf rust was light to moderate while severe leaf rust was observed at the Blacksburg (western VA) location. In late May, leaf rust was still increasing in some Maryland fields.

**Wheat stripe rust.** In late May, low to moderate levels of stripe rust were found in variety demonstration plots in south central and central Kansas. The disease was limited to susceptible varieties such as 2137, 2174 and Above which are grown on limited acreage. In a few fields in central Kansas near Lincolnville, hot spots of 60-80% severity were observed. This year stripe rust arrived too late to cause widespread infections and yield loss in Kansas. Many of the varieties are also resistant to stripe rust.

In late May, low levels of stripe rust were found in southwestern Missouri fields.

In late May, stripe rust was at low levels in central and western Kentucky wheat fields. In much of this area many of the fields had been sprayed with fungicide to control the rust.

Trace amounts of stripe rust were found in wheat breeding nurseries at Blacksburg and Warsaw, Virginia in early June.

**Oat stem rust.** On May 22, light amounts of oat stem rust were found at the Ashland Agronomy farm in northeastern Kansas at Manhattan.

Oat stem rust observations map can be found on the CDL website:
http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealrustbulletins/2008osr.pdf

**Oat crown rust**. Conditions appear favorable for crown rust to develop in the spring oat growing area.

**Buckthorn**. On May 26, moderate levels of aecial infections were observed on buckthorn in the nursery at St. Paul. Cooler than normal temperatures have slowed aecial development.

Buckthorn serves as the alternate host for oat crown rust. In mid-May, aecial development was observed on buckthorn near Brookings, South Dakota and in central New York.

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

**Barley leaf rust**. On May 21, severe barley leaf rust was found in plots in north central Virginia.

**Stripe rust on barley.** There have been no new reports of barley stripe rust since CRB #5.

**Rye rusts.** In late May, 10% leaf rust severities were observed in rye plots at Hutchinson, Kansas.

**Stem rust on barberry**. In late May, severe aecial infection was found on susceptible barberry bushes (alternate host for stem rust) growing in southeastern Minnesota. The infection was heavier than last year.

Fig. 1. Leaf rust severities in wheat fields - June 4, 2008

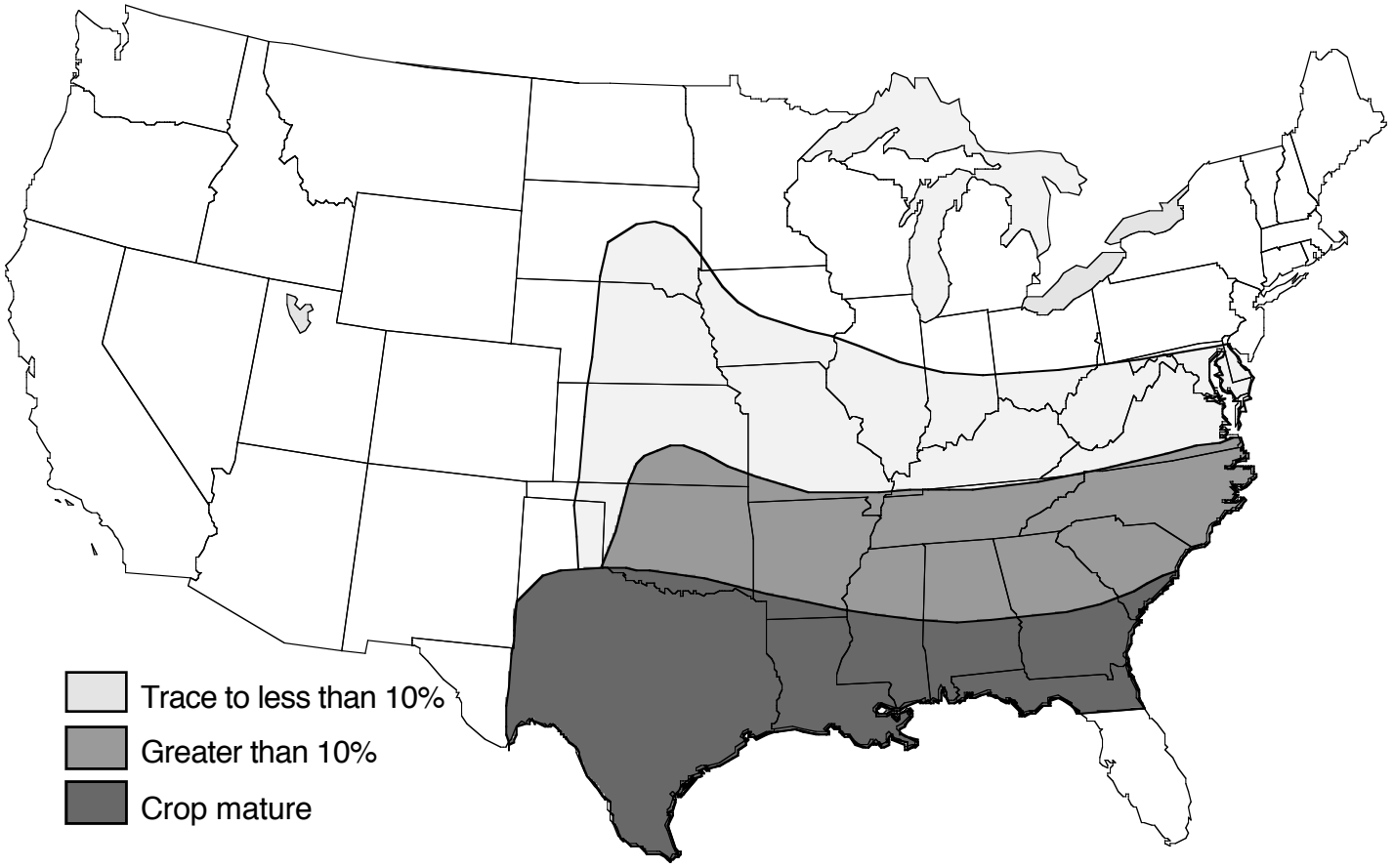


Fig. 1. Stripe rust severities in wheat plots and fields - June 4, 2008