CEREAL RUST BULLETIN

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- Wheat leaf rust is generally light in many northern wheat growing areas except where moisture conditions are good.
- Wheat stripe rust is present in only trace amounts in most northern wheat growing areas.

Winter wheat harvest has started from southeastern Virginia to southern Kansas. Some of the spring planted small grain crop in northern states is behind normal growth stage.

Wheat stem rust. In late May, severe wheat stem rust developed on late-planted nurseries at Baton Rouge, Louisiana. In late May, traces of stem rust were observed on late-maturing lines of wheat at Kinston, North Carolina.

Wheat leaf rust. In early June, traces of leaf rust were found on the spring wheat Alsen in Bottineau County in north central North Dakota, which is near the Canadian border. In early June, in central and eastern Nebraska and in irrigated wheat in southwestern Nebraska, leaf rust developed to severity levels of up to 15 to 25% on flag leaves. Drier than normal conditions have slowed leaf rust development in most areas of the central and northern plains.

In early June, wheat leaf rust was found in fields from east central Missouri to southern Illinois at 20% severity on flag leaves. Yield losses will be light in this area because the crop is at the soft dough stage.

In early June, trace levels of leaf rust were found on flag leaves of wheat in fields from northwestern Ohio to south central Wisconsin. In plots in west central and northwestern Indiana 40% severities were found on lower leaves. With continued good weather for rust infection, rust may become severe on susceptible cultivars in this area.

In early June, leaf rust that over wintered was limited to the lower canopy of wheat in Pennsylvania.

In North Carolina, wheat leaf rust was widespread in the central Coastal Plain and particularly severe in the Neuse River basin; only traces of wheat leaf rust were observed in the Piedmont and coastal counties.

Leaf rust was earlier and more severe than normal across the state of Virginia. There appeared to be little virulence to the Lr9 gene in the rust population, as Tribute, Coker 9835 and Coker 9663 were virtually clean. In contrast, there seems to be significant virulence to genes Lr24 and Lr26 and, to a lesser extent, virulence to Lr18.

Wheat stripe rust. In early June, traces of stripe rust were found in a winter wheat nursery in east central Nebraska at Mead. This was the first time stripe rust was observed in Nebraska this year. In early June, traces of stripe rust were found in winter wheat plots in northeast South Dakota. This year stripe rust is very light in the central and northern plains because the inoculum from the southern plains was light and hot, drought-like weather conditions persist in much of the area, which is not conducive for rust development.

In early June, traces of stripe rust were found in east central Missouri fields. In early June, 40% wheat stripe rust severities were observed on flag leaves in plots in northwestern Indiana; trace severities were found in fields.

As of June 9, no stripe rust has been reported in Pennsylvania. This year insignificant levels of wheat stripe rust were present throughout the Coastal Plain of North Carolina.

In early June, light stripe rust was found on Garland wheat under irrigation in Logan, Utah. Stripe rust was not found in the dryland area in northwestern Utah. This is typical, since rust is rarely seen in Utah. Last year was an anomaly with quite severe stripe rust in Logan which started much earlier in the growing season. Prior to last year, the previous year that had significant stripe rust (or any rust) was 1993 (which was similar in temperature and moisture to 2005).

In late May, wheat stripe rust was severe throughout the Central Valley of California, especially in fields where fungicides were not applied. Statewide yield loss to wheat stripe rust may approach 15% this season.

In late May, was starting to increase on susceptible winter wheat entries in nurseries in the Palouse region of Eastern Washington. Severities ranged from 1 to 10% with less than 1% of the plants infected. The stripe rust appeared one month later that last year in the Palouse region.

Oat stem rust. In late May, a 100% oat stem rust severity reading was reported in a plot at Davis, California. In early June, traces of stem rust were observed on late-maturing lines of oat at Kinston, North Carolina.

Oat crown rust. By the second week in June, moderate to heavy crown rust infection was observed on upper leaves of oat in spreader rows in the St. Paul, Minnesota buckthorn nursery and had spread rapidly into research plots. In oat plots at Rosemont, Minnesota traces of crown rust were found in early June. In late May, oat crown rust was moderate at Kinston, North Carolina.

Buckthorn. In early June, aecial infections were common on buckthorn (alternate host for crown rust) in hedge rows in central New York.

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

Barley leaf rust. In late May, moderate to severe barley leaf rust developed on susceptible cultivars in nurseries in the Central Valley of California. By early June, barley leaf rust that over wintered was limited to the lower canopy in most cultivars but the cultivar Barsoy had a 30% severity on the flag leaf in Pennsylvania plots

Barley crown rust. In early June, light amounts of crown rust was found on barley growing near buckthorn in St. Paul, Minnesota.

Stripe rust on barley. There been no new reports of barley stripe rust since CRB #6.

Rye leaf rust. In early June, 40% rye leaf rust severities were reported in rye plots in southwestern Indiana.

Rye stem rust. There have been no reports of rye stem rust this year.

Stem rust on barberry. In early June, aecial infections were light on susceptible common barberry bushes (alternate host for stem rust) in southeastern Minnesota and south central Wisconsin.

Fig. 1. Leaf rust severities in wheat fields - June 13, 2006

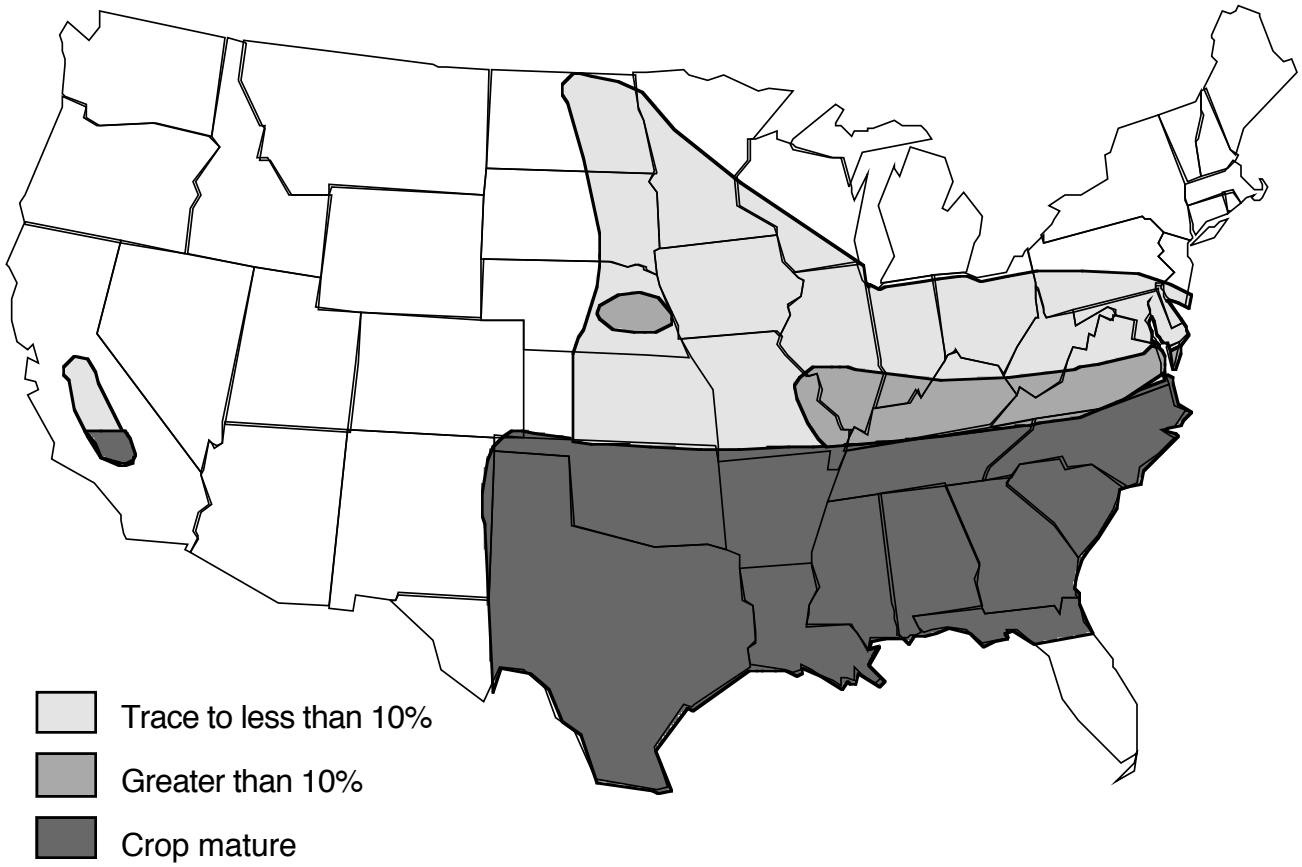

Fig. 2. Stripe rust severities in wheat fields - June 13, 2006