CEREAL RUST BULLETIN

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- Wheat leaf rust is severe in the central Great Plains.
- Wheat stripe rust is lighter than last year in Kansas.
- Rust is severe on barberry (alternate wheat stem rust host) in south central Wisconsin.

The small grain harvest is underway from southern South Carolina to northern Oklahoma. Winter wheat is ahead of normal maturity in much of the central plains. Most of the grain in the northern growing area is ahead of average maturity.

Wheat stem rust. In early June, trace to 5% wheat stem rust severities were reported on an experimental wheat line in a nursery at Manhattan in northeastern Kansas.

Wheat leaf rust. During the last week in May, leaf rust was severe in plots and fields of susceptible cultivars from north central Kansas to west central Missouri (Fig. 1). In fields of Jagger at the late berry stage in south central Kansas, 60% severities were found on flag leaves. In fields of Jagger in northeast Kansas, 20% severities were observed on flag leaves. In central Kansas varietal plots, rust severities ranged from trace to 80%. In southern Kansas, losses due to leaf rust will be severe in cultivars like Jagger, but in other leaf rust susceptible cultivars losses will be lower. In Oklahoma, leaf rust was increasing but drier than normal conditions significantly slowed rust development. This year leaf rust in the southern Great Plains was more severe than last year. Dry conditions in some areas however reduced rust development and caused the crop to mature 7-10 days earlier than normal. With recent rainfall in the central plains, leaf rust should increase and provide inoculum for the northern wheat growing area.

Trace amounts of leaf rust were found on winter wheat lines in plots at Brookings in east central South Dakota in early June.

In early June, traces of wheat leaf rust were found in winter wheat plots in east central Minnesota. This winter wheat rust observation is normal for the date. Traces of leaf rust infections were also found in spring wheat in the Red River Valley on June 7.

In late May, 20-25% leaf rust severities were found on susceptible cultivars at the late milk stage in wheat plots in southwest Indiana. This was the most rust seen in a number of years in this

area. In early June, 20% severities were found in plots in west central Indiana while traces were found in fields.

In late May, light amounts of leaf rust were observed in wheat plots and fields in northwest Washington.

Wheat stripe rust. In late May, light wheat stripe rust was found on flag leaves in north central Kansas. Stripe rust was much lighter than last year on the same date in Kansas. The warm and dry conditions in May reduced the development of stripe rust.

Stripe rust was just beginning to appear on the cultivar Nekota in plots in east central South Dakota in early June.

Last year in early June, traces of stripe rust were found in winter wheat plots at the Rosemount Experiment Station in east central Minnesota, but this year no stripe rust has yet been found.

In late May, 5-10% stripe rust severities were observed in soft red winter wheat fields in west central Missouri. The rust severity was less than last year in this area and the crop was 7-10 days earlier than normal. Traces of stripe rust were observed in plots and fields in northeastern Missouri in early June.

Traces of stripe rust were observed in plots in west central Indiana in early June.

By late May, wheat stripe rust was observed on susceptible spring and winter wheat cultivars growing in fields and plots in central and eastern Washington and northern Idaho. Based on weather conditions the last two weeks and the forecast for the next 10 days, stripe rust may develop quickly on susceptible varieties of both winter and spring wheat in the Pacific Northwest.

Oat stem rust. No new oat stem rust has been reported since CRB #4 (May 12). Oat stem rust development is less than normal throughout the southern U.S. this year.

Oat crown rust. In late May, light crown rust was observed in spring oat plots in central Kansas plots at Hutchinson.

In early June, 20% crown rust severities were found in spring oat plots in northeastern Missouri.

Buckthorn. In late May, crown rust aecial infections were severe at the St. Paul, Minnesota buckthorn nursery. Uredinial infections were observed on oat spreader rows in the nursery on May 30.

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 CRB #5 (May 26).

Stripe rust on barley. There have been no new reports of stripe rust on barley since CRB #5 (May 26).

Barley crown rust. There have been no reports of crown rust on barley yet this year.

Rye leaf rust. In late May, light leaf rust was observed on rye in a field in east central Kansas.

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

Stem rust on barberry. In late May, aecial collections were made from heavily infected susceptible barberry bushes (alternate host for stem rust) growing in south central Wisconsin.

Fig. 1. Leaf rust severities in wheat fields - June 8, 2004

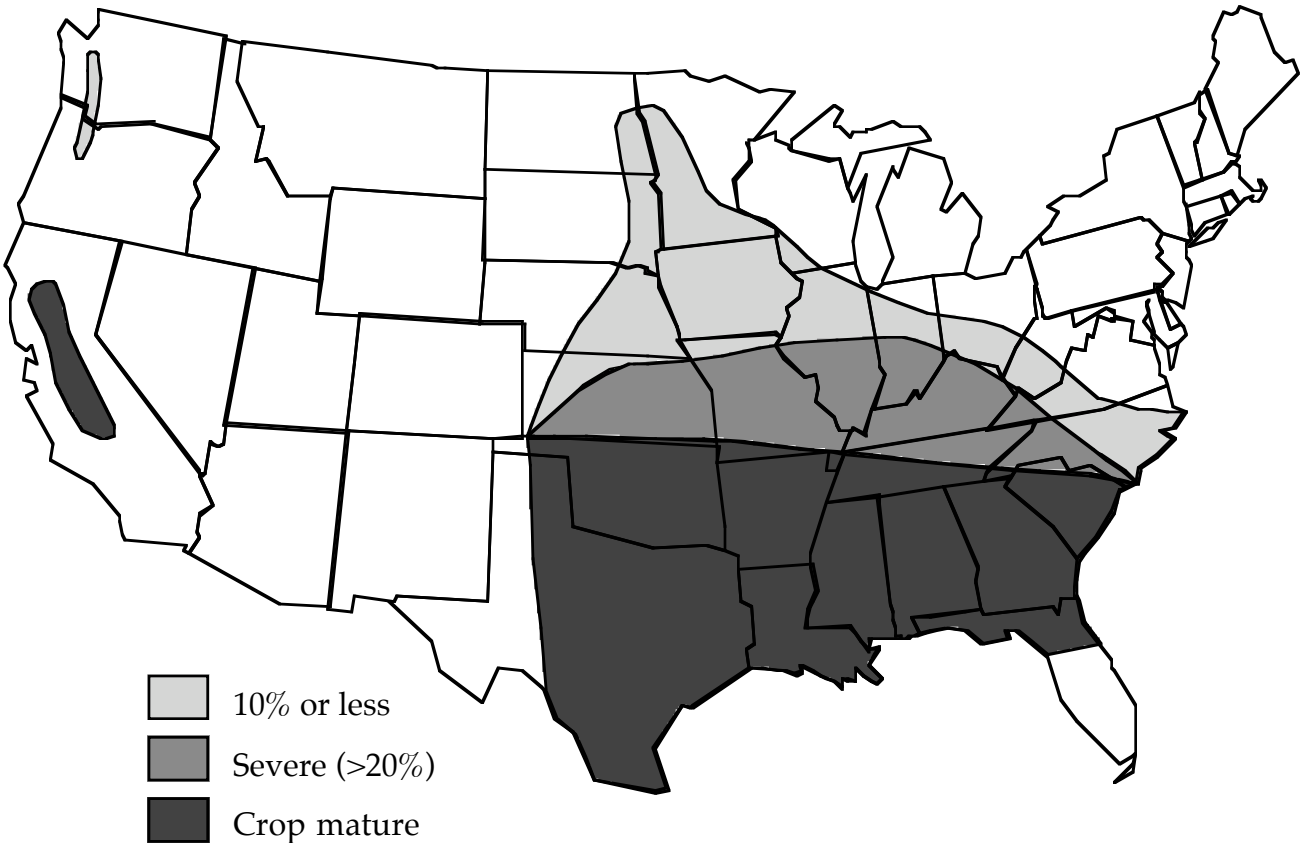

Fig. 2. Stripe rust severities in wheat fields - June 8, 2004