CEREAL RUST BULLETIN

Report No. 6
June 10, 2010

Issued by:

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- Wheat stem rust was found in Oklahoma, Kansas and Kentucky.
- Wheat leaf rust levels are increasing in the central U.S.
- Wheat stripe rust development has slowed in the central U.S. while increasing in Pacific Northwest.
- Aecial infections on common barberry were found in Minnesota and Wisconsin.

Wheat Stem Rust

Oklahoma **-** In early June, low levels of stem rust were found on the stems of breeder lines in a plot planted later than normal at Lahoma in north central Oklahoma.

Kansas **-** In early June, low levels of stem rust were found in plots at two locations in Kansas, at Manhattan in the northeast and at Pratt in south central. Stem rust observation maps can be found on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

This spring from collections made in Louisiana, Texas and Mississippi race QFCSC was identified. This is a common race that has been found in the U.S. the past several years. This race is relatively avirulent - the majority of the U.S. cultivars are resistant.

Kentucky **–** In late May, stem rust was first observed in Kentucky in a nursery plot at Princeton in western Kentucky.

Wheat Leaf Rust

Kansas – In early June, severe leaf rust was observed on fields of susceptible varieties (Overley, Jagger, Jagalene) throughout eastern and central Kansas. Leaf rust was also noted on Armour, Fuller and PostRock, which have been highly resistant in recent years. (For more detailed information see: Kansas reports on the Current Cereal Rust Situation Reports page).

Minnesota **–** In early June, trace levels of leaf rust were found in soft red winter and hard red winter wheat plots in southern Minnesota. Infections were found on the lower leaves and widely scattered in the plots. During the second week in June, low levels of leaf rust were found on winter wheat plots at Lamberton in southwestern Minnesota.

Indiana– By early June, leaf rust incidence and severity had increased in fields and plots throughout Indiana. Severity in most fields and research plots was low but in some plots leaf rust severity

approached 20% on the flag leaf. (For more detailed information see: Indiana reports on the Current Cereal Rust Situation Reports page).

Virginia – In late May, severe levels of leaf rust were observed on susceptible cultivars in plots at Blacksburg in western Virginia.

New York – In late May, a 20-foot diameter severe rust foci was found in a field in north central New York. The rust likely overwintered at this location. (For more detailed information see: New York reports on the Current Cereal Rust Situation Reports page).

Canada – In early June, low levels of leaf rust were reported in the Clinton and Staffa areas of southwestern Ontario. In early June, trace levels of leaf rust were reported on the hard red spring wheat variety AC Domain in southern Manitoba, near the city of Winkler. This was very early to find leaf rust at this location.

Wheat Stripe Rust

Kansas – In late May, stripe rust was a major concern to the farmers in the state. The severity of stripe rust increased dramatically during the last two weeks of May and many fields had 20-40% severity on the flag leaves. Yield loss to stripe rust is likely to be significant in Kansas this year. In early June, the warm temperatures had slowed the development of stripe rust in Kansas and spore production had decreased dramatically. (For more detailed information see: Kansas reports on the Current Cereal Rust Situation Reports page).

Nebraska –In early June, stripe rust severities ranged from trace to 100% in localized areas in a field in Dawes County in the extreme northwest.

Indiana – In early June, low levels of stripe rust were observed in several fields in southwest Indiana and in research plots in north central Indiana. Research plots in southern Indiana have 20-50% severities on the flag leaf of the variety Candace. (For more detailed information see: Indiana reports on the Current Cereal Rust Situation Reports page).

Pacific Northwest

Washington – During the second week in June, stripe rust was widespread in winter wheat fields in southeastern Washington and Latah County in Idaho. Most of the fields had severities below 10% and 20% incidence. Stripe rust was found in spring wheat fields at low incidence and severity (2%). (For more detailed information see: Washington stripe rust report on the Current Cereal Rust Situation Reports page).

Oat Stem Rust – Stem rust observation maps can be found on the CDL website **(http://www.ars.usda.gov/Main/docs.htm?docid=9757).**

Oat Crown Rust – In early June, severe levels of crown rust were observed on the lower leaves in oat spreader rows in the St. Paul, Minnesota buckthorn nursery.

Barley Leaf Rust – There have been no new reports of barley leaf rust since bulletin #5.

Barley Stripe Rust – In early June, low levels of stripe rust were found in a few barley fields in Whitman County, Washington.

Barley Stem Rust – As of late May, no barley stem rust had been reported in the U.S.

Rye Leaf Rust – In early June, light levels of rye leaf rust were found in a north central Kansas field and in a field in south central Wisconsin.

Aecial infections on barberry. In early June, light levels of aecial infections were found on susceptible common barberry (*Berberis vulgaris*) bushes in southeastern Minnesota. Also, in early June, moderate levels of aecial infections were found on the common barberry in Manitowoc County (east central Wisconsin) and light infections on bushes in Marquette County in central Wisconsin.

The rust samples collected from barberry bushes in May in Latah County, Idaho and Whitman County, Washington were identified as stem rust. In early June, no stem rust was found in the wheat fields nearby the bushes in Latah County.

Fig. 1. Leaf rust severities in wheat fields and plots - June 10 , 2010

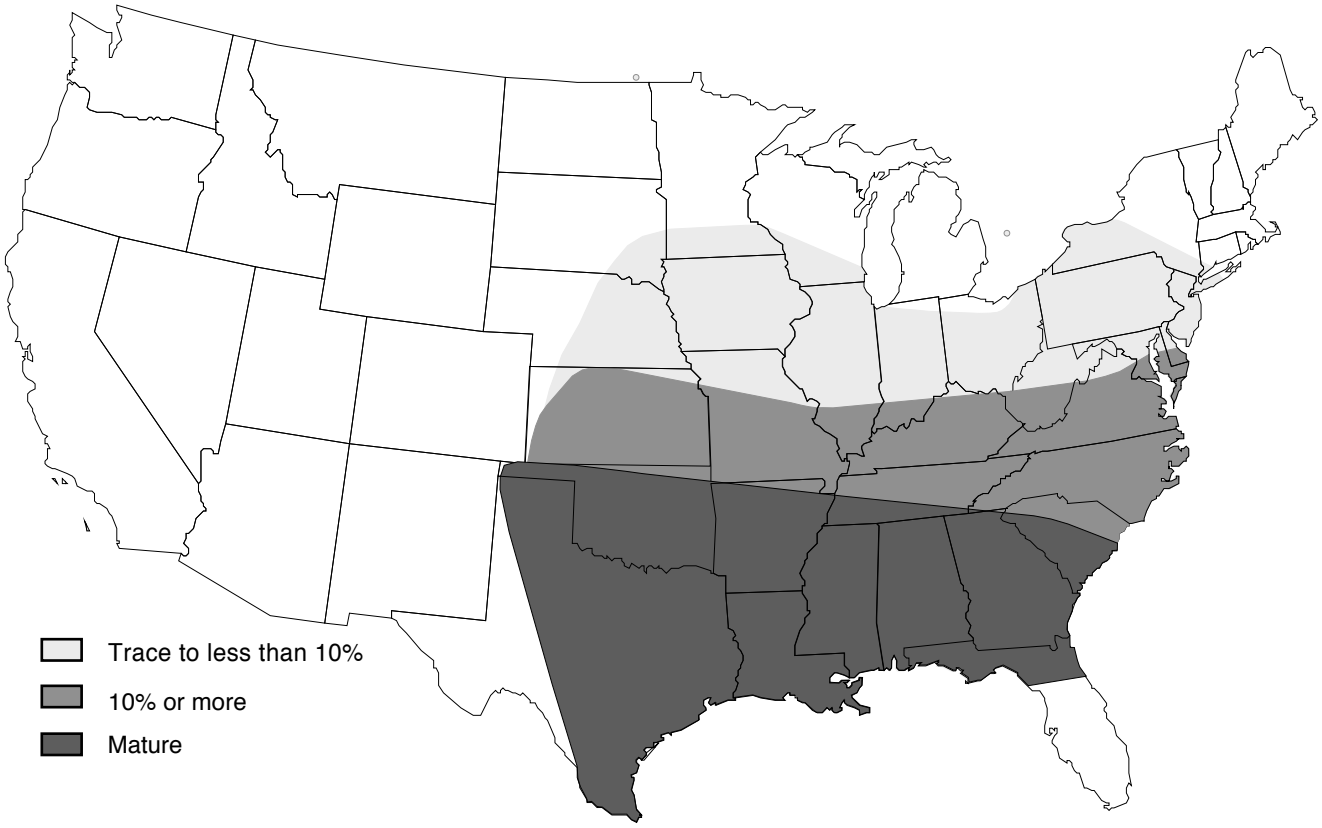

Fig. 2. Stripe rust severities in wheat fields and plots - June 10, 2010