

CEREAL RUST BULLETIN

Report No. 9
July 19, 2005

Issued by:

Cereal Disease Laboratory
U.S. Department of Agriculture
Agricultural Research Service
1551 Lindig St, University of Minnesota
St. Paul, MN 55108-6052
(612) 625-6299 FAX (651) 649-5054
markh@umn.edu

For the latest cereal rust news from the field, subscribe to the cereal-rust-survey mail list. To subscribe, send an email message with the word *subscribe* in the message body (not subject line) to: cereal-rust-survey-request@coafes.umn.edu

Reports from this mail list as well as all Cereal Rust Bulletins are maintained on the CDL web page (<http://www.cdl.umn.edu/>).

- Wheat stem rust has been reported on susceptible spring wheat in the northern plains.
- Wheat leaf rust is increasing on spring wheat cultivars in the northern plains.
- Wheat stripe rust development has stopped in the northern spring wheat area.
- Oat stem rust and oat crown rust is common in upper Midwest fields.

The small grain harvest has commenced from southwestern New York to northern South Dakota. Winter wheat is in good condition and at normal maturity throughout much of the U.S. In the northern small grain area, most of the spring-sown grains are in good condition except in areas where drought-like conditions have persisted.

Wheat stem rust. In mid-July, traces of wheat stem rust were observed on the susceptible spring wheat cultivar Baart in south central Minnesota and in an east central South Dakota plot of Morocco. All of the current spring wheat cultivars are resistant to the current race population. In susceptible winter wheat plots in an east central Minnesota nursery, trace to 10% severities were found at the soft dough growth stage. Earlier in the year, there were few reports of wheat stem rust in the southern and central plains grain growing area and now in July stem rust has been found on susceptible cultivars at locations throughout the northern plains.

Wheat leaf rust. In early July, leaf rust severities ranged from 1-90% on flag leaves of winter wheat in southeastern North Dakota fields. In mid-July, trace-60% leaf rust severities were observed on flag leaves of spring wheat cultivars in fields from north central South Dakota to west central Minnesota. Many wheat fields have been sprayed with fungicide to prevent losses due to rust and scab. By mid-July, leaf rust was increasing significantly across the state of North Dakota. Hot weather combined with severe leaf rust infections will quickly kill flag leaves of spring wheat.

In early July, light levels of wheat leaf rust were found in western New York, southwestern Idaho and east central Washington.



Wheat stripe rust. In mid-July, hot temperatures stopped development of stripe rust on spring wheat in the northern Great Plains.

In mid-July, significant levels of stripe rust were found on wheat in fields and plots in south central Idaho.

Oat stem rust. During mid-July, trace to 10% severities of oat stem rust were found in fields and plots at milk to soft dough growth stage throughout southern Minnesota and eastern South Dakota. Most current oat cultivars are not highly resistant to stem rust.

Oat crown rust. During the second week in July, trace to 80% oat crown rust severities were found in fields and plots throughout west central Wisconsin to central South Dakota. Much of the primary inoculum originated from buckthorn, the alternate crown rust host, common throughout the Upper Midwest.

Barley stem rust. The first reports of barley stem rust this year were trace severities in plots of susceptible two-rowed cultivars in a plot in east central Minnesota.

Barley leaf rust. In mid-July, 40% severities of leaf rust were found on upper leaves of susceptible spring barley plots in east central South Dakota and east central Minnesota. In early July, barley leaf rust was reported in fields and plots in eastern North Dakota.

Stripe rust on barley. There have been no new reports of stripe rust on barley since CRB #8.

Rye leaf rust. In mid-July, 40% leaf rust severities were found on the upper leaves of spring rye in plots in southern and west central Minnesota.

Rye stem rust. In mid-July, the first report of rye stem rust this year was in winter rye plots in east central South Dakota at Brookings.

Stem rust on barberry. In early July, aecial infections were found on barberry in west central New York.

