

CEREAL RUST BULLETIN

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- Wheat stem rust foci were found in south central Kansas nurseries.
 - . Leaf rust was found in winter wheat plots in east central Minnesota and east central North Dakota and in spring wheat fields in southeastern South Dakota.
- Stripe rust was found in plots in south central Kansas and traces were scattered throughout eastern and southern Kansas.

The small grain harvest is underway from northern Georgia to south central Oklahoma. Winter wheat maturity is slightly ahead of normal throughout the U.S. Small grain planting is virtually complete in the northern growing area, and development of spring-planted grains is behind average maturity.

Wheat stem rust. During the first week in June, stem rust foci were found on the cultivar Mit in a south central Kansas nursery. Traces of wheat stem rust were found scattered on other cultivars like, Onaga and 2174, in two south central Kansas nurseries.

Severe stem rust was observed on late maturing susceptible wheats during harvest in central Texas wheat plots in late May. Wheat stem rust development is much lighter than normal this year throughout the southern U.S.

Wheat leaf rust. During the first week in June, trace to 80% severities were reported in nurseries in south central Kansas. In fields in the same area, 20% severities were observed on susceptible cultivars like Jagger, but on most of the other cultivars severities were much lower. In north central Kansas, 20% severities were observed on the lower leaves and, if the moisture conditions continue to be good for infection, more rust will develop. During the first half of May, leaf rust development was slow throughout the central Great Plains, but since that time leaf rust has been increasing at a fast rate.



In early June, only traces of leaf rust were found in eastern Colorado. The leaf rust is less than in prior years, partly because less acreage of the common susceptible cultivar TAM 107 is being grown.

During the first week in June, traces of leaf rust were found in a southeastern Nebraska winter wheat nursery. In the first week in June, 5-30% severities were reported in a winter wheat nursery and traces in spring wheat fields in southeastern South Dakota.

On May 27, traces of leaf rust were observed on the lower leaves of the winter wheat cultivar Norstar in a southeastern North Dakota plot. On June 3, trace to 1% severities were found in a plot of the winter wheat Roughrider in east central Minnesota. Traces of rust were also observed on other winter wheat cultivars. The rust development in the northern Great Plains states probably originated from rust spores that were deposited with rain 12-16 days ago. This rust development is earlier than normal.

During the first week in June, 20-30% leaf rust severities were observed on susceptible wheat cultivars in the late milk stage of development in southwestern Indiana and western Kentucky plots. Leaf rust severities of 40% were observed in wheat fields at full berry stage in northeast Missouri on June 7. Severities in plots in the area ranged from trace to 40%.

Leaf rust (low to moderate incidences and low severities) could be found in southwest Michigan fields by June 8. The infections are predominantly on the lower leaves.

During the last week in May, 80% leaf rust severities were observed on susceptible winter wheat cultivars in eastern Virginia plots and traces of rust were found on wheat in west central New York fields.

By the last week in May, leaf rust was increasing at a slow rate in the Pacific Northwest because the spring was cooler than normal.

Wheat stripe rust. During the last week in May, severe wheat stripe rust foci were found in some plots like 2137, in a south central Kansas nursery, and traces were scattered throughout the central and southern parts of the state. Where this rust originated from is anybody's guess, since this is the first report this year of stripe rust being found in the central part of the U.S. The hot temperatures of the past week will probably disrupt the development of stripe rust in this area.

During the last week in May, 80% wheat stripe rust severities were reported on susceptible winter wheat lines in northwestern Washington plots at the boot stage.

Oat stem rust. In mid-May, severe stem rust severities were reported on some lines in central Texas. In general, oat stem rust development is much less than last year throughout the southern U.S.

Oat crown rust. Hedges presumed to be buckthorn in Morris, MN were reported to have become heavily rusted suddenly during the last week of May. Scattered pustules of crown rust were found on oats in the buckthorn nursery at St. Paul on June 4. This is four weeks later than



last year, but close to normal for most years. No crown rust could be found on oats near buckthorn at Brookings, South Dakota on June 4. Oats there were in the jointing stage.

Barley stem rust. No barley stem rust has been reported in the U.S. as of June 7.

Barley leaf rust. During late May, barley leaf rust was increasing on the winter barleys and traces were found on the spring barleys in northwestern Washington

Stripe rust on barley. In late May, in the Pacific Northwest, barley stripe rust was less than last year because of the cool spring.

Barley crown rust. A few pustules of barley crown rust were seen on winter rye in southeastern South Dakota plots.

Rye leaf rust. During the last week in May, traces of rye leaf rust were found in a field in south central Wisconsin. In early June, 10% severities were observed on the lower leaves of winter rye in southeastern South Dakota plots.

Rye stem rust. There have been no new reports of rye stem rust since CRB #3 (<http://www.cdl.umn.edu/CRB/99CRB/99crb3.html>).

Stem rust on barberry. There have been no new reports of rust on barberry since CRB #3.

Latest rust news. As always, for the latest rust news, subscribe to the cereal rust survey mail list (see front page header) or visit the Cereal Disease Laboratory's web page regularly.



Fig. 1. Leaf rust severities in wheat fields on June 7, 1999

