CEREAL RUST BULLETIN

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Issued by:

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- Wheat stem rust was found in a few new locations in the U.S.
- Wheat leaf rust is widespread, with high severity and increasing throughout the Great Plains and northern soft red winter wheat area.
- Wheat stripe rust is increasing in limited locations in the central Great Plains and eastern Pacific Northwest.
- Oat crown rust aecia are found on buckthorn in the northern oat growing areas.

The small grain harvest is underway from North Carolina to southern Kansas. Winter wheat maturity is behind normal in the central U.S. winter wheat growing area. In the spring grains area of the northern plains wet and cool conditions have slowed crop development.

Wheat stem rust. In early June, low levels of wheat stem rust were found in susceptible wheat plots at Manhattan, Kansas. Also, in early June severe stem rust was found in a Pike County plot in west central Georgia.

On June 10, a center of wheat stem rust infection was observed in a research plot at Owensboro in northwestern Kentucky.

Wheat stem rust observations map can be found on the CDL website: http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealrustbulletins/2008wsr.pdf.

Wheat leaf rust. In mid-June, leaf rust was increasing in north central and northwestern Kansas where environmental conditions were conducive for rust increase.

In mid-June, low levels of leaf rust were light in the winter wheat nursery at Brookings in east central South Dakota on older susceptible varieties (e.g. Scout 66).

On June 13, low levels of leaf rust were found in winter wheat plots at Lamberton in southwestern Minnesota and in spring wheat plots at St. Paul. Minnesota. On June 16, low levels of leaf rust were found in two spring wheat fields in Richland County, in southeastern North Dakota.

In early June, wheat leaf rust was found in fields from northeastern Missouri to southern Illinois to southern Indiana to west central Ohio at 20 to 60% severities on flag leaves. There will be yield losses to leaf rust in the soft red winter cultivars in this area. In early June, trace levels of leaf rust were found on flag leaves in wheat fields and plots from northwestern Ohio,

northwestern Indiana, to south central Wisconsin. In mid–June, low levels of leaf rust were found in a winter wheat variety plot in east central Wisconsin.

In early June, leaf rust levels ranged from low to severe in western Kentucky plots.

In early June, severe leaf rust was observed at the Blacksburg experiment station in western Virginia.

In early June, leaf rust infection levels ranged from trace to 30% in plots in southwestern Ontario, Canada.

From rust collections made in early April in central Texas plots, the following leaf rust races were identified: MLDSD (*Lr17* and *41* virulence); MFPSC (*Lr17, 24, 26, 42* virulence); TDBGH (*Lr2a, 24, 42* virulence) and TFBJH (*Lr2a, 24, 26* and *42* virulence). From collections made in southern Louisiana in early April the following races were identified: MFPSC (*Lr17, 24, 26, 42*); TBRKG (*Lr2a, 11, 18*); TCRKG (*Lr2a, 11, 18, 26*) and TDBGH (*Lr2a, 24, 42*). These leaf rust races represent some of the most common races identified from rust collections made during the 2007 leaf rust survey (http://www.ars.usda.gov/Main/docs.htm?docid=10493).

Wheat stripe rust. In early June, low levels of stripe rust were found in northeastern Missouri and west central Indiana fields and plots.

On June 10, a center of wheat stripe rust infection was observed in a research plot at Napoleon in northwestern Ohio.

In early June, low levels of stripe rust were found in one plot at Aberdeen in east central South Dakota. In mid-June, low levels of stripe rust were found in field plots near Bozeman, Montana in the southwestern part of the state.

On June 10, no stripe rust was found in the Mosses Lake area in central Washington. Low levels of stripe rust were found in the susceptible spreader rows in the rust-monitoring nursery at the Lind Dryland Experiment Station in east central Washington. In mid-June, high levels of wheat stripe rust were reported on susceptible winter wheat and low levels on spring wheat plants in nurseries at the Pendleton Experiment Station in northeastern Oregon. In mid-June, wheat stripe rust was severe on susceptible spreader rows in the winter wheat nurseries near Pullman, Washington but few winter wheat entries in the nurseries had stripe rust. No stripe rust was found in the spring wheat and barley nurseries or fields near Pullman. In general stripe rust infections are low in the eastern Pacific Northwest.

Oat stem rust. There have been no new reports of oat stem rust since the last bulletin.

Oat stem rust observations map can be found on the CDL website:
http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealrustbulletins/2008osr.pdf

Oat crown rust. In early June, light levels of oat crown rust were found in south central Kansas plots.

By the second week in June, heavy crown rust infection was observed on upper leaves of oat in in the St. Paul, Minnesota buckthorn nursery.

Buckthorn. In mid June, a second increase of aecia was observed on the buckthorn nursery in St. Paul, Minnesota. The warm and wet conditions have been ideal for aecial development at this location. Buckthorn serves as the alternate host for oat crown rust.

In mid-June, aecial development was observed on buckthorn at Fargo, North Dakota.

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

Barley leaf rust. In late May, severe barley leaf rust was found in southeastern Pennsylvania.

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

Rye rusts. In early June, 10% leaf rust severities were observed in rye plots in southwestern Indiana.

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

Stem rust on barberry. There have been no new reports of stem rust on barberry since the last bulletin.

Fig. 1. Leaf rust severities in wheat fields - June 18, 2008

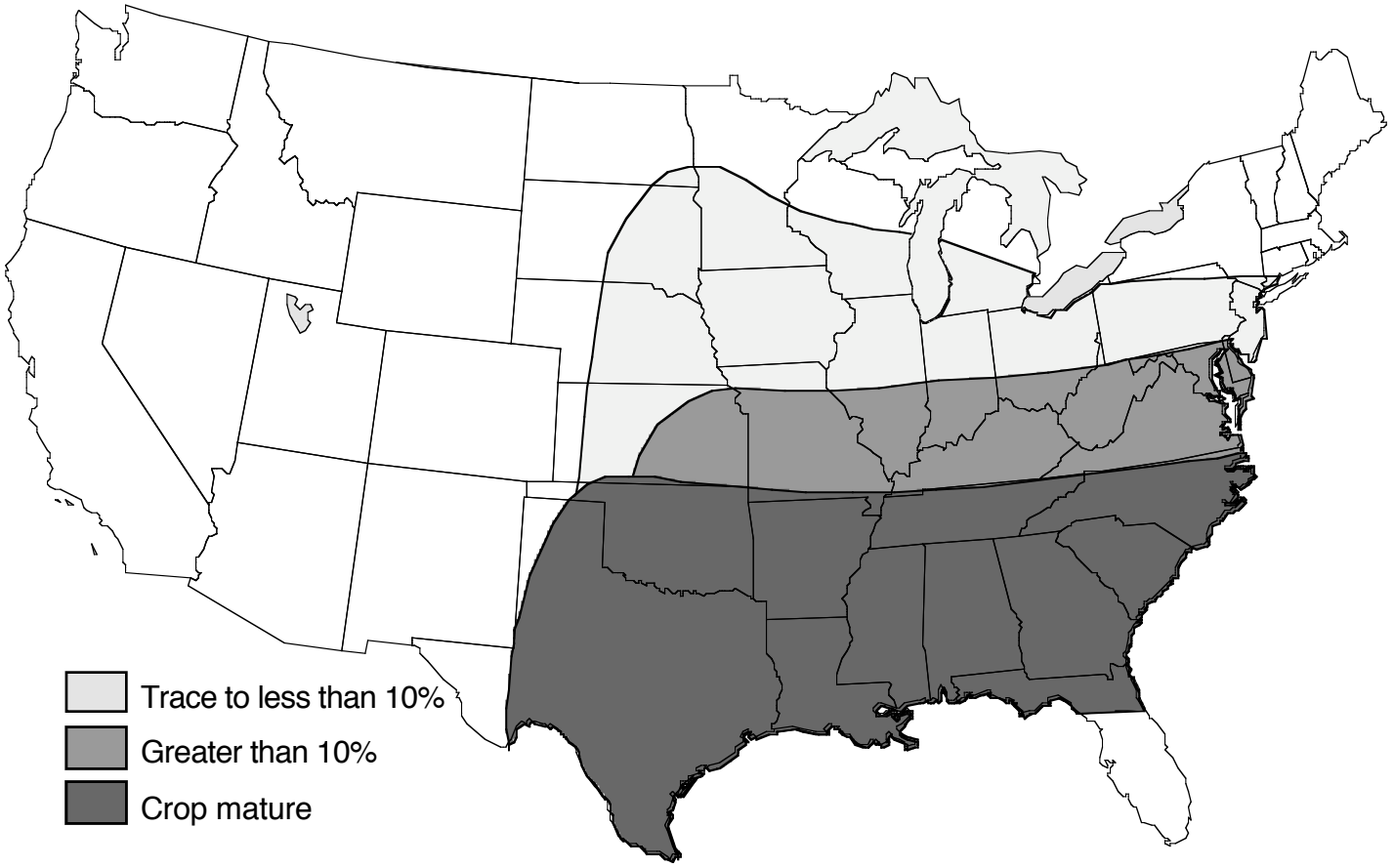

Fig. 1. Stripe rust severities in wheat plots and fields - June 18, 2008