CEREAL RUST BULLETIN

Report No. 9
July 16, 2008

Issued by:

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- Wheat stem rust has been found in susceptible winter wheat in Wisconsin, Illinois, Minnesota, South Dakota, North Dakota, Colorado and Washington.
- Wheat leaf rust is widespread throughout the northern Great Plains.
- Wheat stripe rust is at low levels in Pacific Northwest fields.
- Oat crown rust is at light levels in the northern oat growing area.

The spring planted small grain crop in the northern states is 1-2 weeks behind normal growth stage.

Wheat stem rust. In early July, low levels of stem rust were found in winter wheat plots at Lancaster in southwestern Wisconsin and Urbana, Illinois. On July 10th, low levels of wheat stem rust were found in a soft red winter wheat field and plots in Door County in northeastern Wisconsin.

High levels of wheat stem rust were found on flag leaves of susceptible spring wheats (e.g. Baart) in plots at Rosemount in southeastern Minnesota on July 16. Wheat stem rust was also found on susceptible winter wheats which had not reached maturity.

During the second week in July, low levels of stem rust were detected on the winter wheat cultivar 'Radiant' in a Ransom County plot in southeastern North Dakota and on a winter wheat line at the Waseca plots in south central Minnesota. On July 13th, low levels of stem rust were found in plots of a rust spreader mix (highly susceptible lines) at Groton in northeastern South Dakota.

In the early July, significant levels of wheat stem rust were found in a winter wheat irrigated field in east central Colorado. In the second week of July there were low levels of wheat stem rust in northeastern Colorado plots.

In early July, low levels of stem rust were found on winter wheat in plots near Pullman, Washington. This is the first report of stem rust in the Palouse region of eastern Washington this year.

This year there have been more stem rust reports on susceptible cultivars in the northern winter wheat growing area on this date than usual. Since the crop is maturing slower than normal more stem rust than normal is expected in the future.

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

Wheat leaf rust. During the second week in July, leaf rust was increasing in spring wheat fields and plots throughout southern Minnesota, eastern South Dakota and southeastern North Dakota. In susceptible winter wheat fields in southeastern North Dakota, average severities were close to 10%. Many of the wheat fields in the spring wheat region will be treated with fungicide, which will prevent losses due to leaf rust and FHB (scab).

High levels of wheat leaf rust were found on susceptible spring wheats at Rosemount, Minnesota on July 16.

In early July, low levels of leaf rust were found in irrigated spring wheat plots near Billings in south central Montana.

In early July, high levels of leaf rust were found in winter wheat plots in Grant County in southwestern Wisconsin. On July 10th, high levels of wheat leaf rust were found in soft red winter wheat fields and plots in Door County in northeastern Wisconsin.

In early July, wheat leaf rust was present at trace to moderate levels on flag leaves across western and central New York state. The crop was maturing rapidly.

In early July, low levels of leaf rust were found on hard red spring wheat in the Red River Valley in Southern Manitoba, Canada.

Wheat stripe rust. In early July, stripe rust was found on susceptible winter wheat varieties in fields at Bozeman, Montana. There were low severities (<10% of leaf area) on flag leaves and incidences were high in infection sites but low through the field.

In early July, wheat stripe rust was developing at a slow pace in the Pacific Northwest due to the dry and hot weather conditions. No rust was found in winter wheat fields in the Palouse area. Low levels of stripe rust were found in spring wheat fields in east central Washington. In late June, high levels of stripe rust were found in susceptible winter wheat entries in nurseries at Corvalis, Oregon, Moscow, Idaho and Pullman, Washington. In Pendleton and Hermiston, Oregon nurseries susceptible spring wheat entries had stripe 20% rust severities. On July 1st, highly susceptible winter wheat entries in experimental fields at Walla Walla in southeastern Washington had 80% stripe rust severities.

Oat stem rust. On July 14th, light levels of stem rust were found in oat plots at Brookings, South Dakota and in oat plots in the buckthorn nursery at St. Paul, Minnesota.

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 July, light levels of oat crown rust were found in plots in northern Iowa and southern Minnesota. In early July, heavy amounts of crown rust were observed on the upper leaves of oat in spreader rows and the rust has moved slowly into the rest of the entries in the St. Paul, Minnesota buckthorn nursery. High levels of oat crown rust were found on susceptible oat at Rosemount, Minnesota on July 16.

In early July, light levels of crown rust were found on oat in the Red River Valley in Southern Manitoba, Canada.

Barley stem rust. On July 8th, a single plant of 'Bailey' spring barley was infected with stem rust in the nursery at Ithaca, New York. On July 14th, heavy levels of stem rust were found on winter barley in the Brookings, South Dakota nursery. Moderate levels of stem rust were found on susceptible spring barleys at Rosemount, Minnesota on July 16. These are the first reports of barley stem rust being found this year in the U.S.

Barley leaf rust. On July 10th, light levels of leaf rust were detected in a six-row barley field in Griggs County in east central North Dakota.

Stripe rust on barley. In early July, light levels of stripe rust were found on susceptible barley entries in eastern Washington nurseries.

Barley crown rust. Light levels of barley crown rust were found in plots at St. Paul, Minnesota on July 15.

Rye leaf rust. In mid July, light levels of leaf rust were found on winter rye at Door County, Wisconsin and Brookings, South Dakota. High levels of leaf rust were found on Hypana rye at Rosemount, Minnesota on July 16.

Rye stem rust. On July 14th, light levels of stem rust were found on winter rye plots at Brookings, South Dakota. This was the first report of stem rust being found on rye this year.

Stem rust on barberry. There have been no new reports of stem rust on barberry since bulletin #6. Aecial collections from southeastern Minnesota and south central Wisconsin were identified as rye stem rust.

Fig. 1. Leaf rust severities in wheat fields - July 15, 2008

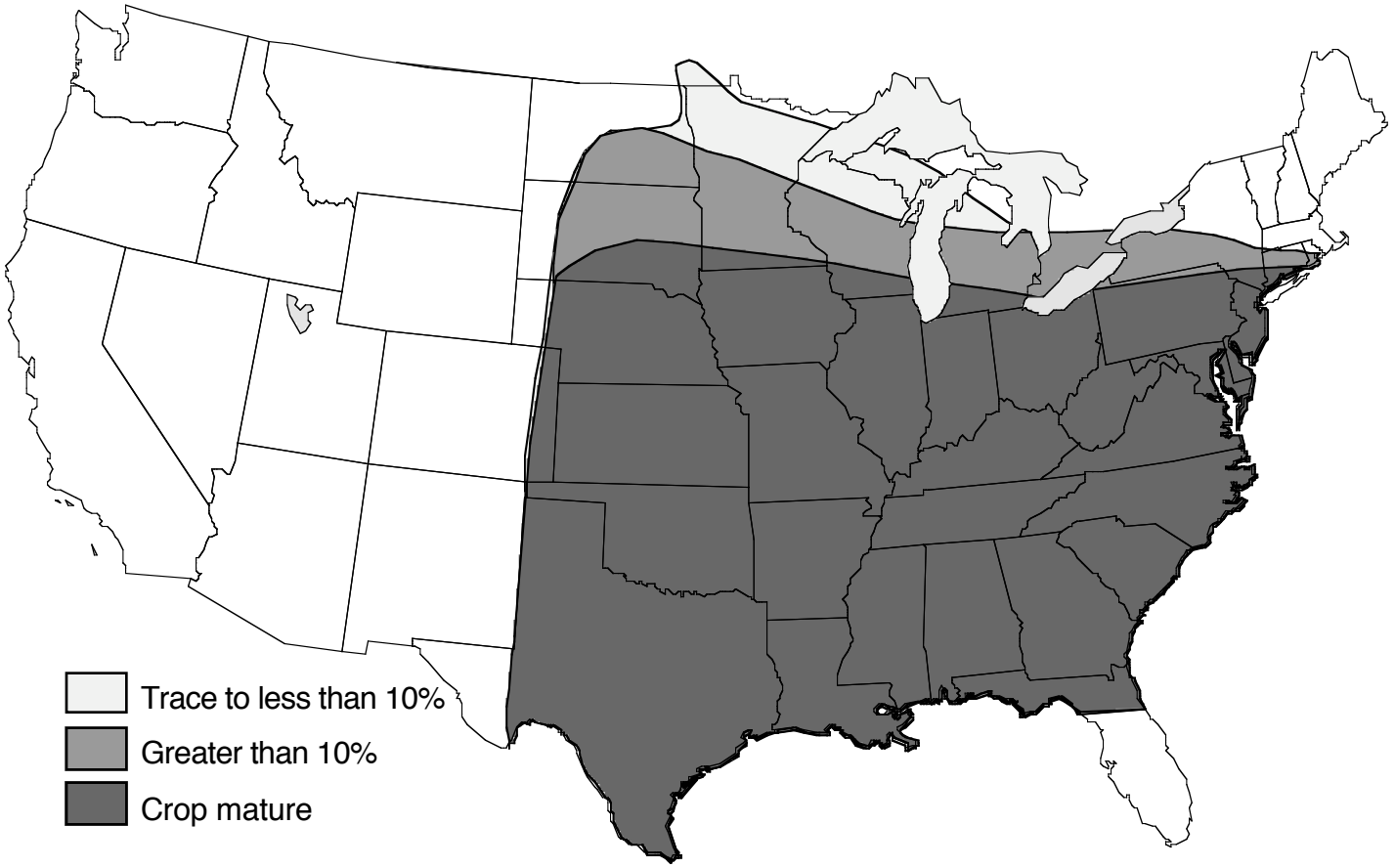

Fig. 1. Stripe rust severities in wheat plots and fields - July 15, 2008