

CEREAL RUST BULLETIN

Report No. 9
July 31, 2007

Issued by:

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- Wheat stem rust is at trace levels in susceptible spring wheat in eastern North Dakota.
- Wheat leaf rust is present in high severity levels on susceptible spring wheat cultivars in the northern plains.
- Oat crown rust is at moderate to high severity levels in south central North Dakota fields.

Spring planted small grain crops are ahead of normal maturity throughout much of the northern wheat growing area.

Wheat stem rust. In late July, trace levels of stem rust were found in the susceptible spring wheat cultivars Baart and Max at Carrington and Langdon experiment stations in North Dakota. Trace levels of stem rust were observed on Radiant winter wheat plot at Lisbon, ND, on July 16th. Moderate levels of stem rust were observed on a triticale line on July 23 at the Fargo, ND Experiment Station. During the month of July, trace levels of wheat stem rust have been found in susceptible winter wheat and spring wheat plots from southeastern Minnesota to east central South Dakota and onto northeastern North Dakota. Stem rust was not observed in any current wheat cultivars in research plots or in fields in this area.

The wheat stem rust observation map is now available on the CDL website (http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealarustbulletins/2007wsr.pdf).

Race QFCS has been identified from wheat stem collections made in early July in Minnesota and North Dakota. This is a common race that has been found in the U.S. in the past several years.

In late July, stem rust was not observed in Manitoba and eastern Saskatchewan, Canada commercial wheat fields but was found on the susceptible line Little Club at Indianhead, Saskatchewan.

Wheat leaf rust. During the fourth week in July, wheat leaf rust was widespread and at high severity levels on susceptible and moderately resistant spring wheat cultivars in research plots in North Dakota and northwestern Minnesota. Many cultivars lost their flag leaves because of leaf rust and high temperatures. The cultivars Knudson and Briggs with Lr16 and Lr34 have low to moderate levels of leaf rust infection, a significant increase from previous years. Cultivars postulated to have Lr21 (RB07, Glenn, Steele, Faller, Howard) are highly resistant.



In western North Dakota and eastern Montana high temperatures and leaf rust defoliated leaves in susceptible wheat lines in research plots. No leaf rust was observed on durum wheat cultivars. In farm fields throughout North Dakota trace to moderate levels of leaf rust were observed in a small number of fields due to highly resistant cultivars and common use of fungicide sprays. Many fields that had been sprayed had no rust infections.

On July 23 and 24, wheat fields were surveyed in Manitoba and eastern Saskatchewan. Leaf rust was widespread and severe in Manitoba fields that were not sprayed with fungicide. Severities of 80% were observed on the flag leaves in some fields, although the average level of infection was approximately 20%. Highest severities in Saskatchewan were near the Manitoba border and declined to trace levels near Regina.

Wheat stripe rust. In late July, no stripe rust was detected in spring wheat in northwest Minnesota or northern North Dakota.

In late July, isolated pustules of stripe rust were observed in some fields in Saskatchewan, Canada, but the severity was very low.

Oat stem rust. In late July, oat stem rust was found on wild oat (*Avena fatua*) in south central North Dakota wheat fields.

The oat stem rust observation map is now available on the CDL website (http://www.ars.usda.gov/SP2UserFiles/ad_hoc/36400500Cerealarustbulletins/2007osr.pdf).

Oat crown rust. In late July, crown rust levels were moderate to severe in fields and plots through south central North Dakota. Much of the primary inoculum originated from buckthorn, the alternate crown rust host, common throughout the Upper Midwest.

Barley stem rust. In mid-July, trace levels of barley stem rust were found in the nursery at Sidney, in east central Montana.

Barley leaf rust. In mid-July, barley leaf rust levels of infection were light in northern North Dakota.

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

Rye leaf rust. There have been no new reports of rye leaf rust since CRB #8.

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

