CEREAL RUST BULLETIN

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Issued by:

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- Wheat leaf rust in the upper Midwest is severe on winter wheat and increasing on susceptible spring wheat.
- Wheat stripe rust is severe in the Pacific Northwest and has stopped throughout the northern plains wheat growing area.
- Oat crown rust is increasing in the northern oat growing area.

The small grain harvest has commenced from northwestern Ohio to southern South Dakota. Winter wheat is generally in good condition and normal maturity throughout most of the U.S. Spring planted small grain crops are at normal maturity throughout much of the area.

Wheat stem rust. No wheat stem rust has been reported since mid-May in south Texas.

Wheat leaf rust. In late June in susceptible winter cultivars such as Jagalene plots, in east central Minnesota, central South Dakota and western Nebraska had 60% rust severities, but the resistant cultivars had only trace levels of infections on the flag leaves. By late June, spring wheat had leaf rust severities of 5-10% on lower leaves in many southern Minnesota fields (Fig. 1). In late June, susceptible spring wheat cultivars in southern Minnesota plots had 60% rust severities with most infections on the lower leaves.

This year leaf rust is widespread in the upper Midwest in spring and winter wheat. Rust inoculum arrived from the south in mid-May through mid-June with rain showers. The spring wheat cultivars currently grown have less effective resistance to leaf rust than those 10-15 years ago. Many of the wheat fields in the spring wheat region have been treated with fungicide, which will prevent losses due to leaf and stripe rust.

Wheat stripe rust. In late June, very hot weather slowed or stopped stripe rust development throughout the northern Great Plains. In mid-June, winter wheat plots and fields in the panhandle of Nebraska had 60% rust severities on susceptible cultivars, but hot temperatures at the end of June stopped further rust development.

In late June, stripe rust was light with severity levels up to 20% in east central South Dakota susceptible spring wheat plots (Fig. 2). The cultivars Walworth and Briggs were the most susceptible with stripe rust infections up to 20%. Most of the commonly grown spring wheats had good resistance to stripe rust. The warmer than normal temperatures in mid- to late June stopped stripe rust development and will greatly reduce further infections.

By late June, stripe rust was severe in virtually every location wheat is grown in the Pacific Northwest, extending as far east as Bozeman (Fig. 2). Most fields of moderately susceptible or susceptible winter and spring wheat cultivars were sprayed.

Oat stem rust. In early July, traces of oat stem rust were found in plots at Lincoln, Nebraska.

Oat crown rust. In the last week in June, lower leaves of oat in east central Minnesota plots and fields had trace to 20% severities of crown rust. Crown rust on oat in the buckthorn nursery at St. Paul, Minnesota had severity levels up to 60%. In early July, crown rust was not observed in central and eastern Wisconsin because of very dry conditions throughout the area in the past month.

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

Barley leaf rust. In late June, 10% severities were observed on the lower leaves of barley in east central Minnesota plots.

Stripe rust on barley. In late June, stripe rust was increasing rapidly in eastern Washington and northern Idaho and in susceptible barley fields 60% severities were reported.

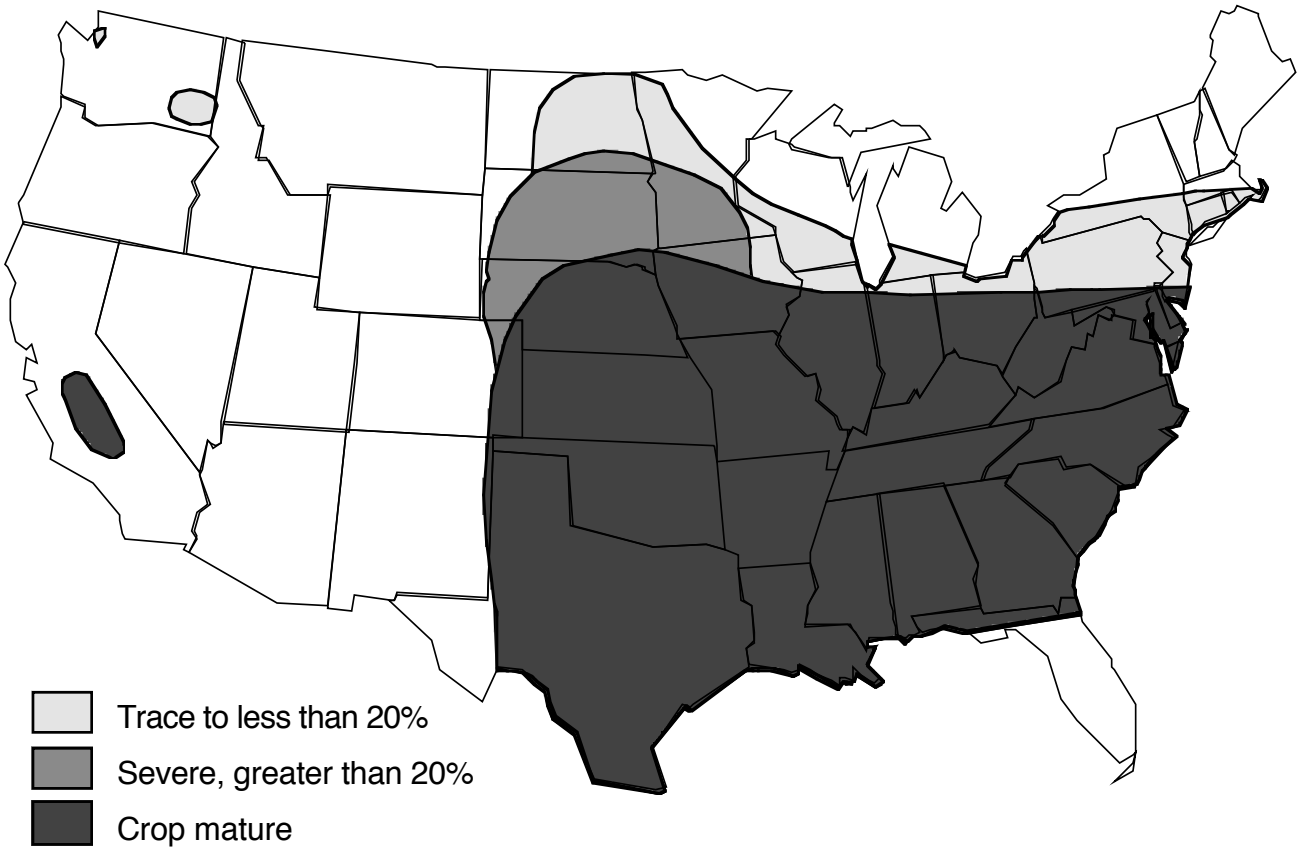
Barley crown rust. In late June, susceptible barley cultivars in the buckthorn nursery at St. Paul, Minnesota had trace to 10% crown rust severities.

Rye leaf rust. By late June, 60% severities of leaf rust were found on upper leaves of winter rye and 40% severities on lower leaves of spring rye in southern and east central Minnesota plots.

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 aecial infection on barberry since CRB # 7.

Fig. 1. Leaf rust severities in wheat fields - July 6, 2005



Stripe rust severities in wheat fields - July 6, 2005