

CEREAL RUST BULLETIN

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Issued by:

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- Wheat stem rust is increasing in a few southern U.S. wheat plots.
- Wheat leaf rust is widespread and increasing throughout the U.S.
- Wheat stripe rust is at low levels throughout the U.S.
- Oat stem rust is increasing in southern U.S. locations.
- Oat crown rust is increasing in the southern U.S.

Winter wheat is at normal developmental stage in most areas of the U.S. In the spring wheat and oat growing area of the northern plains, planting is in progress

Wheat stem rust. On May 8th a hot spot of wheat stem rust was found in a soft red winter wheat plot in central Texas at McGregor. On May 10th stem rust severities ranged from 5-75% with 50% of the plants infected of the susceptible cultivar 'Winmaster' in plots at Castroville and Uvalde in southern Texas. Stem rust observations maps can be found on the CDL website: (<http://www.ars.usda.gov/Main/docs.htm?docid=9757>).

Wheat leaf rust. During the first two weeks of May, wheat leaf rust has been found in plots and fields from southeastern Colorado, south central Nebraska, south central South Dakota to the coastal plains of Virginia (Fig. 1). High levels of leaf rust were observed from central Oklahoma to central Kansas on susceptible varieties. With adequate moisture for rust development, leaf rust will increase throughout this area and provide inoculum for the northern wheat growing areas.

From rust collections made in late March in southern and central Texas plots, the following leaf rust races were identified: MDPS (Lr17 & 24 virulence), MFPS (Lr17, 24 & 26 virulence) and TDBJ (Lr2a and 24 virulence). From collections made in late March in southern Louisiana, the following leaf rust races were identified: MBTS (Lr11 & 17 virulence), MFPS (Lr17, 24 & 26 virulence) and TDBJ (Lr2a & 24 virulence). These leaf rust races also were identified from rust collections made during the 2006 leaf rust survey (<http://www.ars.usda.gov/mwa/cdl/>).

Wheat stripe rust. In the last two weeks traces of wheat stripe rust were reported in east central Nebraska plots, southeastern Colorado plots, central and north central Kansas plots and fields, north central Oklahoma plots, and in plots in the panhandle of Texas (Fig. 2). Most of these infections were found on the F-1 or flag leaves. If temperatures during the nighttime stay below 60 degrees stripe rust will continue to develop in many of these states.



California update: The growing season in California was extremely dry this year. The overall disease impact, even on susceptible varieties, is likely to be much less than in 2006. However, rain showers and cool temperatures in mid-late April in the Sacramento Valley, allowed stripe rust to reach very high severity in that area on susceptible varieties not treated with fungicide. Only trace levels of wheat stripe rust have developed in the drier San Joaquin Valley as of early May.

Oat stem rust. During the first week in May, oat stem rust was heavy across central and south Texas. Stem rust observations maps can be found on the CDL website (<http://www.ars.usda.gov/Main/docs.htm?docid=9757>).

Oat crown rust. In early May, oat crown rust was heavy across central and south Texas in fields and plots. These southern locations may provide inoculum for oat growing areas further north.

Buckthorn. By mid-May, moderate numbers of aecial infections were observed on buckthorn in the nursery at St. Paul. Warmer than normal temperatures have accelerated aecial development. Buckthorn serves as the alternate host for oat crown rust.

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

Barley leaf rust. In early May, trace levels of barley leaf rust were found in Blacksburg, Virginia nursery plots.

Stripe rust on barley. By early May, barley stripe rust had reached high levels on susceptible entries in a stripe rust screening nursery at UC-Davis, but no infections were detected in the commercial crop. The infections were first detected on April 17.



Fig. 1. Leaf rust severities in wheat fields - May 15, 2007

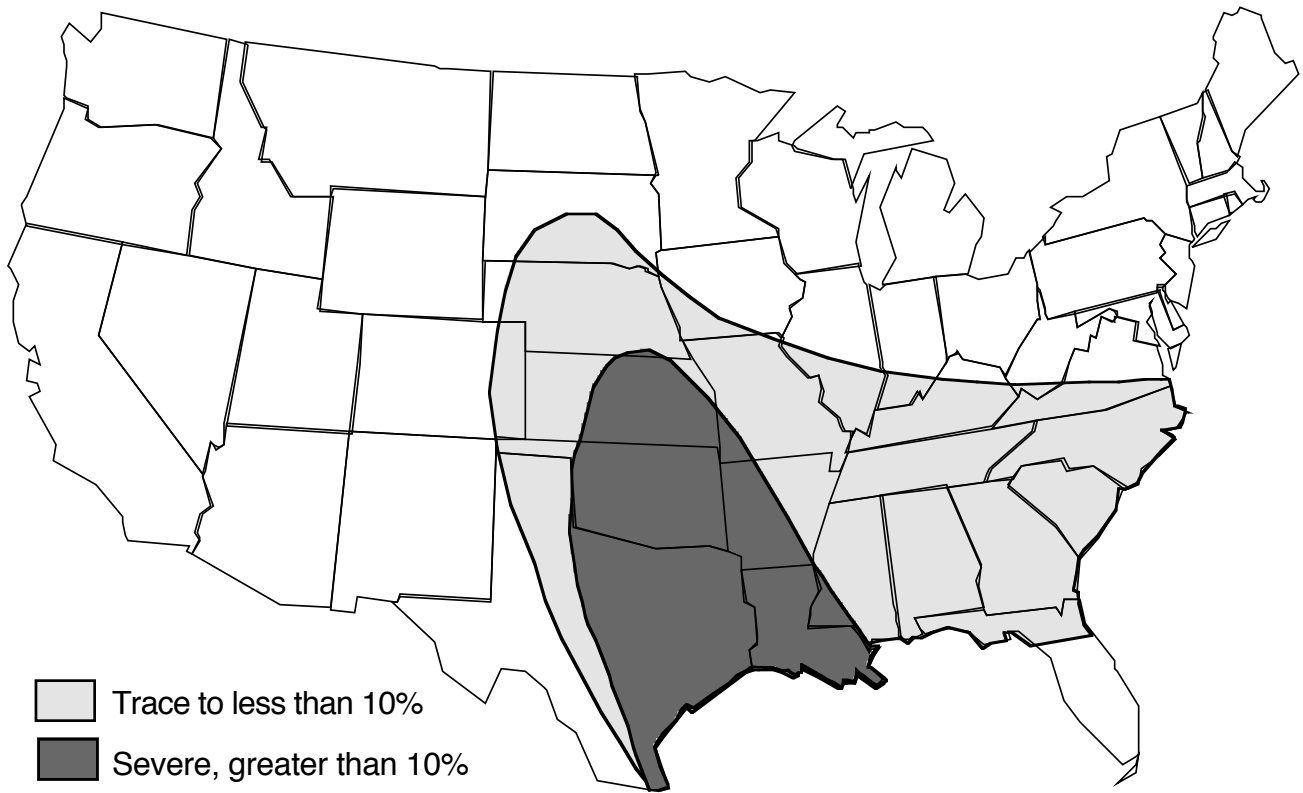


Fig. 2. Stripe rust severities in wheat plots and fields - May 15, 2007

