CEREAL RUST BULLETIN

Report No. 4

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Issued by:

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- Wheat stem rust was found in a few fields in west central Texas.
- Wheat leaf rust is light throughout the southern U.S.
- Wheat stripe rust was found in southwestern Oklahoma fields.
- Oat crown rust aecial development was found on buckthorns in Minnesota.

Most of the winter-sown small grain crop is in good condition throughout the United States. By mid-May, harvest had commenced from southern Georgia to southern Texas. Much of the crop in the central plains is behind normal maturity. Throughout most of the spring grain growing-area, the water-soaked soils and cold temperatures had delayed field work, but now with dry, warm conditions planting has accelerated.

Wheat stem rust. During early May in west central Texas, wheat stem rust was reported in fields of Wintex; traces were reported in plots of McNair 701.

Wheat leaf rust. In early May, traces of wheat leaf rust were found in southern Kansas, eastern Arkansas and southern South Carolina. By mid-May, leaf rust was light and scattered throughout the southern U.S. winter wheat growing area (Fig. 1). In winter wheat plots in north central Texas, 40% severities were reported on flag leaves of susceptible cultivars, but with the crop rapidly maturing further infection will be limited. During the second week of May, light leaf rust was found in fields in eastern Arkansas, and the San Joaquin and Sacramento Valleys of California. As stated in the previous bulletin, late planting of the crop in the fall, the colder than normal winter temperatures in January and February, and dry conditions in April all contributed to the light rust development in the southern U.S. wheat area. This is not a typical year for leaf rust in the southern U.S., which means there will be a reduced amount of leaf rust inoculum for the northern wheat growing area.

Wheat stripe rust. During the first week in May, wheat stripe rust was found on susceptible cultivars in a south central Kansas nursery. The plants were in the late boot maturity stage. The rust increased with cool, wet weather in early May, but later warmer temperatures eventually slowed rust development. In early May, in west central Texas, stripe rust was moderate on susceptible cultivars, but because of the drought conditions and hot weather further rust development was limited. During the second week in May, severe stripe rust was found in fields of 2137, 2174 and Custer in southwestern Oklahoma (Fig. 2). By mid-May, reports of stripe rust in Arkansas were limited to only a few areas in the east central and west central parts of the state. The current warmer temperatures are expected to slow further

development of stripe rust in the south central U.S. The southern winter wheat growing area will provide less stripe rust inoculum for the northern wheat growing area compared to last year.

By early May, wheat stripe rust was found on susceptible cultivars growing in fields in the Sacramento Valley of California. The cool moist conditions were ideal for rust development.

In mid-May, wheat stripe rust was increasing in western Washington and traces were found on winter wheat in eastern Washington. The rains and cool temperatures have provided ideal conditions for stripe rust increase in most of the Pacific Northwest.

Oat stem rust. In early May, oat stem rust was found in north central Louisiana plots and central Texas plots at the soft dough maturity stage. The dry weather in much of the southern U.S. has slowed oat stem rust development.

Oat crown rust. In early May, crown rust was light in fields and moderate on susceptible cultivars in plots in central Texas. This year crown rust development in Texas was lighter than normal.

Buckthorn. During the second week in May, aecial infections were observed on buckthorn bushes at the St. Paul, Minnesota buckthorn nursery. With continued good moisture and warm temperatures more aecial infection is expected. The aecial development in the buckthorn nursery is 2 weeks behind last year, but near normal for this date.

Barley stem rust. As of May 15, no barley stem rust has been reported in the U.S.

Barley leaf rust. There have been no new reports of barley leaf rust since the last bulletin.

Stripe rust on barley. Stripe rust is increasing on barley in western Washington and western Oregon. The weather is favorable for stripe rust increase in most of the Pacific Northwest.

Rye rusts. No rye rust reports since bulletin #3.

Fig. 1. Leaf rust severities in wheat fields - May 15, 2001

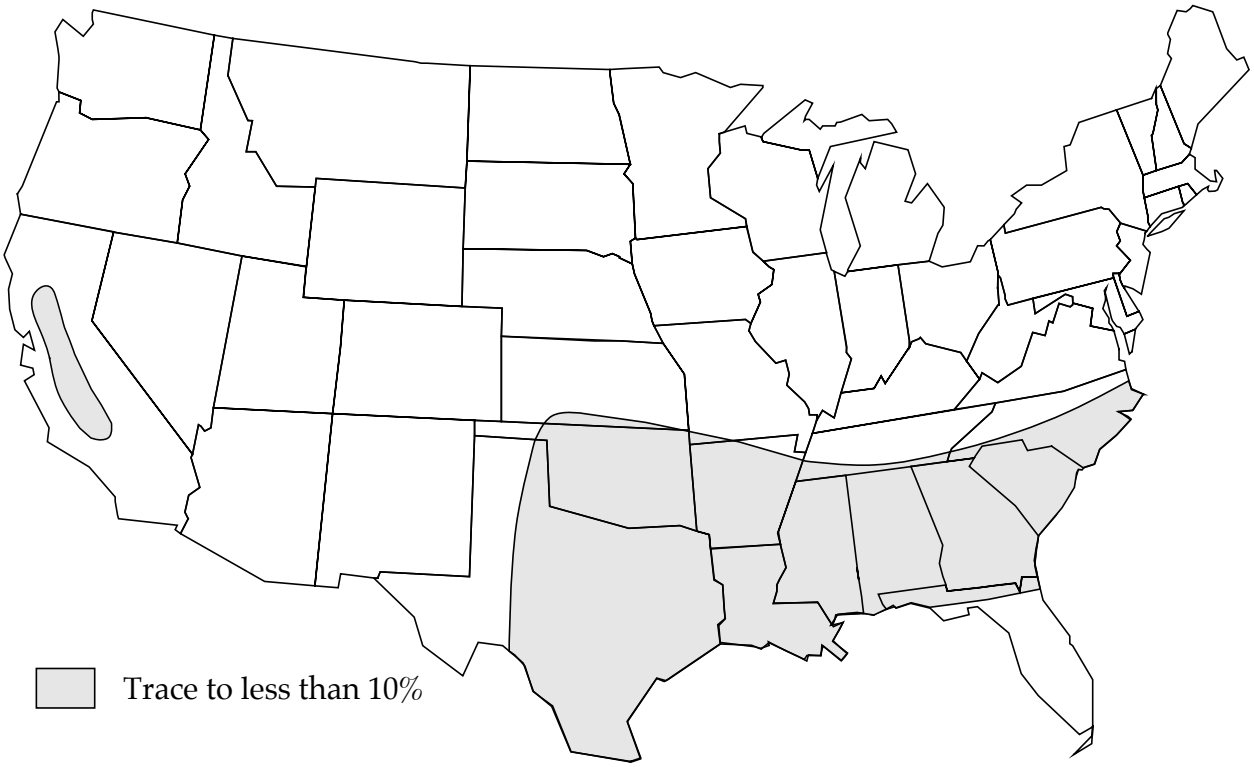

Fig. 2. Stripe rust severities in wheat fields - May 15, 2001