Issued by:

Cereal Disease Laboratory

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Reports from this list as well as all Cereal Rust Bulletins are maintained on the CDL website (http://www.ars.usda.gov/mwa/cdl)

- Wheat leaf rust was confirmed in six counties in Mississippi.
- High levels of wheat stripe rust were observed in southwestern and central Georgia.
- Oat crown rust was confirmed in several oat fields from southwestern to east central Georgia

For original, detailed reports from our cooperators and CDL staff, please visit the <u>Cereal Rust Situation</u> (CRS) reports page on the <u>CDL website</u> or click the <u>CRS</u> link found throughout the bulletin.

Cool spring weather in the Great Plains and eastern states continued to delay small grain development, planting and field work. Thirty three percent of the U.S. winter wheat crop was in good to excellent condition on April 28, down slightly from the previous week. Nationally, 12% of the spring wheat crop was planted by the end of last week, 25 percentage points behind the 5-year average. By the end of last week 30% of the U.S. barley crop was seeded, 7% behind the 5-year average. The U.S. oat crop was 47% seeded by the end of last week, 21% behind the 5-year average. Oat seeding in the two largest oat-producing states is just underway, at 46% behind average due to the unseasonably cool and wet weather.

Wheat stem rust. Not yet reported this year in the U.S.

Wheat leaf rust.

Texas – High levels of leaf rust were observed in plots at Castroville in southern Texas in mid-April. Previously wheat leaf rust was reported from trace to 80S in plots in south Texas (see <u>CRB #1</u>).

Oklahoma – No leaf rust was found in plots and fields (at boot stage) in central Oklahoma when visited on April 26. Previously, low levels of wheat leaf rust were found on the winter wheat cultivar Overley near Devol in south central Oklahoma the second week of April.

Louisiana – There have been no new reports from the state since the last bulletin. Previously, high levels of leaf rust were found in plots in south central and southwestern Louisiana on April 2.

Mississippi – Leaf rust was confirmed in six counties scattered across the state by mid-April.

Wheat leaf rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Wheat cultivar *Lr* gene postulation database. *Please visit*: Leaf rust resistance gene postulation in current U.S. wheat cultivars.

2012 wheat leaf rust race survey results are now available.



Wheat stripe rust.

Texas – Stripe rust development was winding down in plots at Castroville in southern Texas in mid-April due to increasing temperatures. Previously stripe rust (trace to 100S) was reported in plots in south Texas (see CRB #1).

Oklahoma – Reports of stripe rust in Oklahoma were common in late April. One field near Apache in south central Oklahoma had low levels of stripe rust across the field. Stripe rust was present on lower-mid leaves and most severe on the cultivar Duster in plots at Minco in central Oklahoma. Stripe rust was also found around Stillwater, but it was not severe. No rusts were found at Kingfisher (30 miles northwest of Stillwater).

Louisiana – There have been no new reports from the state since the last bulletin. Previously, high levels of stripe rust were found in plots in south central and southwestern Louisiana and stripe rust was rapidly spreading in plots at Baton Rouge in early April. Stripe rust was active and developing in fields in central Louisiana the first week of April.

Mississippi – Isolated stripe rust hot spots were found throughout Mississippi in mid-April and stripe rust was confirmed in 16 counties. Some fields in the mid-Delta were severely infected, but generally the stripe rust is not as severe as it was in 2012.

Georgia – Stripe rust has been observed across much of Georgia. High levels of stripe rust have been observed in commercial fields in southwestern and central Georgia since early to mid-March. Persistent cool temperatures have been conducive to stripe rust development. Fungicides have been applied throughout the state.

Arkansas – Based on observations the third week of April, stripe rust in eastern Arkansas was only serious in areas where it had overwintered and the cultivars lacked adult plant resistance or where no fungicide or late applications of fungicide were applied. Two fields of unknown cultivars near North Little Rock had numerous large hot spots, but most commercial fields had little stripe rust (see <u>CRS</u>). Stripe rust did not appear to overwinter in plots at Keiser and Newport in northeastern Arkansas. By April 26, stripe rust had not increased significantly in plots in northwestern, southeastern and east central Arkansas. A few stripe rust lesions were found on upper leaves in plots at Marianna in eastern Arkansas. At Rowher, in southeastern Arkansas, stripe rust was producing telia and urediniospore production was winding down.

South Carolina – There have been no new reports from the state since the last bulletin. Previously, low levels of stripe rust were found on winter wheat at early boot in south central South Carolina on April 9.

California – There have been no new reports from the state since the last bulletin when several stripe rust hot spots were found in a commercial field of an unknown cultivar in Yolo County in late March. Stripe rust has appeared later this season than in past years (see <u>CRS</u>).

Oregon – There was a report that stripe rust was developing rapidly in plots in the South Willamette Valley on April 24.

Washington – There have been no new reports from the state since the last bulletin. Previously, wheat stripe rust was easily found and actively sporulating on lower leaves in fields in Adams and Lincoln counties in southeastern Washington and at lower incidences in Franklin County in early April. Stripe rust was severe in susceptible winter wheat spreader rows in nurseries at in northwestern Washington in late March (see CRS).

Please send wheat and barley stripe rust collections as soon as possible after collection to:

Dr. Xianming Chen USDA-ARS 361 Johnson Hall P.O. Box 646430 Washington State University Pullman, WA 99164-6430 email: xianming@wsu.edu

Note: Stripe rust collections are vulnerable to heat and do not survive long at warm temperatures; therefore, if shipment of collections for race identification is delayed their viability will be greatly reduced. An overnight courier service is preferred for sending stripe rust collections.

Wheat stripe rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Oat stem rust. There have been no new reports of oat stem rust since the last bulletin when oat stem rust was reported in plots in southeastern Louisiana and in southern Texas.

Oat crown rust. Crown rust was confirmed in several oat fields from southwestern to east central Georgia in late April. Previously, oat crown rust was found in plots in southeastern Texas, the Florida panhandle and in southeastern Louisiana as well as a field in southeastern Mississippi (see <u>CRB #1</u>).

Oat crown rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Barley stem rust. Not yet reported in the U.S. this year.

Barley leaf rust. There have been no new reports of barley leaf rust since it was found in plots at Warsaw, Virginia on January 10.

Barley leaf rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Stripe rust on barley. Stripe rust was found on wild barley in Yolo County in late March.

Rye stem rust. Not yet reported this year in the U.S.

Rye leaf rust. Not yet reported this year in the U.S.