CEREAL RUST BULLETIN

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

Spring wheat planting across the northern plains has been significantly delayed due to cool, wet conditions. Exceptional drought conditions persist in the southern plains while very dry conditions continue in Kansas, Colorado, Nebraska and Georgia. Conditions vary considerably across the country with excessive moisture in Arkansas and Missouri while conditions are favorable in Illinois, Indiana, Ohio and North Carolina and yet more favorable in the Pacific Northwest. Harvest has begun in southern Texas, Louisiana, Alabama, southern Arkansas, Georgia and California.

- Wheat stem rust was found in plots in north central Oklahoma and northeastern Arkansas.
- Wheat stem rust race QFCSC was identified from collections made in plots and fields in Texas and Louisiana.
- Wheat leaf rust remains light and scattered in the southern Plains and Southeast.
- Low levels of wheat stripe rust were found in Illinois plots and an Indiana field.
- Stripe is increasing in commercial winter wheat fields in southern Idaho.

Wheat stem rust. Stem rust was found in a McNair 701 trap plot at Stillwater in north central Oklahoma the week of May 9. Stem rust was also found in one plot at Keiser in northeastern Arkansas in mid-May. These are the only new reports of stem rust since the reports from southern Texas and Louisiana in April (see CRS).

Race QFCSC was identified from collections from emmer and triticale grown as windbreaks in watermelon fields in the Rio Grande Valley in extreme southern Texas. QFCSC was also identified from a collection of McNair 701 plot in south central Texas near Castroville, and collections from unknown plots in south central Louisiana near Crowley. This race has been a commonly found race in the U.S. the past several years.

Stem rust observation maps can be found on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Wheat leaf rust.

Texas – There have been no new reports of leaf rust since the reports from southern Texas in mid-April.

Oklahoma – Leaf rust has increased up to levels of 65-80% around Stillwater (north central Oklahoma) where there has been a bit more rain than some areas. However, leaf rust levels on susceptible cultivars are not consistent from field to field. In fields north and west of Stillwater leaf rust is at low incidence (see CRS). Despite recent rains, extremely dry to drought conditions persist in much of the state, particularly the western half of the state.

Kansas – Leaf rust is still at low levels in central Kansas (see CRS). Persistent dry conditions in the state this spring have not been conducive for rust development.

Arkansas – Trace levels of leaf rust were found in plots at Kibler in northwestern Arkansas in early May. By May 18 severities were up to 70% on flag leaves in the Kibler plots (late soft dough stage). Trace amounts of leaf rust were found on some cultivars (not found on most cultivars) in northeastern Arkansas in mid-May.

Mississippi – Low levels of leaf rust have now been found in the most wheat producing areas in the state.

Alabama – Low levels of leaf rust were observed in plots in southern and central Alabama in early May. No rust was found in the northeastern part of the state.

Georgia – There have been no new reports of leaf rust since traces were found in a field in southwestern Georgia in late April.

South Carolina – There have been no new reports of leaf rust since the reports in plots in southern coastal plain in late April.

Virginia – There have been no new reports of wheat leaf rust in the state since the report of leaf rust in plots in Warsaw on April 14.

Delaware – Light infections of leaf rust were found on lower leaves in a plot in southern Delaware on May 9.

California - There have been no new reports of wheat leaf rust in the state since severe leaf rust was reported in plots in the Sacramento Valley in late April.

Wheat leaf rust observation map can be found on the CDL website (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.

Wheat stripe rust.

Texas – There have been no new reports of stripe rust since it rust was found in south central Texas plots on March 8.

Louisiana – Stripe rust developed around the state, but was not a significant problem for growers.

Mississippi – There have been no new reports of stripe rust since it was detected in commercial fields in northwestern Mississippi in late March.

Arkansas – Stripe rust development has slowed across the state.

Illinois – Low levels of stripe rust were found in plots in east central Illinois on May 13.

Indiana – Stripe rust was found in a southern Indiana field at low incidence and severity the second week of May. Wheat was at Feekes 10.5.3 to 10.5.4.

California – There have been no new reports of wheat stripe rust in the state since reports in plots in the Sacramento Valley in late April (see CRS).

***Idaho* –** Stripe rust was increasing on lower leaves in plots at jointing stage at Aberdeen (southeastern Idaho) on May 11. The stripe rust had overwintered which is uncommon in this area. Stripe rust was increasing in commercial winter wheat fields throughout southern Idaho in mid-May (see CRS). The cool, wet weather is very conducive for stripe rust development and fields not sprayed with fungicides will likely be severely impacted.

Montana – Stripe rust was found in plots and fields in northwestern Montana on May 10. No stripe rust was found in Pondera, Choteau and Teton counties east of the Rockies.

***Washington* –** There have been no new reports of wheat stripe rust in the state since high severities were found in a northwestern Washington nursery in late April and low levels were found in fields in eastern Washington.

Wheat stripe rust observation map can be found on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Oat stem rust. There have been no new reports of oat stem rust since heavy stem rust infection were found in a plot of *Avena strigosa* (black oat) in southern Texas and a few pustules were found in plots in southeastern Texas in late April (see CRB #3). Race SJB was identified from the *Avena strigosa* collections.

Stem rust observation maps can be found on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Oat Crown Rust. A likely trace of oat crown rust was noted in northeastern Alabama in early May, otherwise, there have been no new reports of oat crown rust since the reports of low levels in central Texas in late April (see CRB #3).

Aecia were found on buckthorns (alternate host for oat crown rust) in the Matt Moore Buckthorn Plots at St. Paul, Minnesota on May 10.

Barley stem rust. There have been no new reports of barley stem rust since it was found in windbreaks for watermelon fields in southern Texas in late April.

Barley leaf rust. Barley leaf rust was found on a few leaves in a nursery in southern Delaware on May 9.

Barley stripe rust. There have been no new reports of barley stripe rust since the report of severe stripe rust in several barley plots in the Sacramento Valley, California in late April.

Rye stem or leaf rust. There have been no new reports of rye stem or leaf rust since heavy leaf rust infection was observed on an unknown winter rye cultivar in rotation with watermelon in fields in southern Texas.