CEREAL RUST BULLETIN

Report No. 1
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Issued by:

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For the latest cereal rust news from the field, subscribe to the cereal-rust-survey listserv list. To subscribe, please visit: http://www.ars.usda.gov/Main/docs.htm?docid=9970

Or, send an email to: markh@umn.edu

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

Special announcement:

2007 North American Cereal Rust Workshop

The upcoming North American Cereal Rust Workshop will be held April 2-4 on the St. Paul campus of the University of Minnesota. For more information on this exciting workshop, please visit: http://www.ars.usda.gov/Main/docs.htm?docid=14535

There's still time to register and attend, however, all oral presentation slots have been taken. Hope to see you in St. Paul!

- Wheat leaf rust is present at low levels in fields and plots in the southern U.S.
- Wheat stripe rust is present at low levels in fields and plots in the southern U.S.
- Traces of oat stem rust were found in Texas and Louisiana plots.
- Oat crown rust is present at low levels in the southern U.S.

Wheat Stem Rust. As of mid-March no wheat stem rust has been reported in the U.S.

Wheat Leaf Rust. ***Texas –*** In early February, low levels of leaf rust were reported in central Texas wheat plots. Moisture was limited from late January to mid-March in much of the state of Texas. In late February high levels of rust were found in plots at Luling, Texas. In mid-March, low amounts of leaf rust were found on lower wheat leaves in the irrigated nursery at Castroville, Texas. In plots at College Station leaf rust was at low levels except for high severities in Jagelene (Lr24 resistance). The recent rains have improved conditions for rust development in Texas.

Oklahoma – In early February, traces of leaf rust were found on susceptible varieties in the plots at Stillwater, Oklahoma. In late February, leaf rust was light in southwest Oklahoma fields. By mid-March leaf rust still was light in plots and fields in Oklahoma.

Kansas – In mid-March, traces of leaf rust were found in Manhattan, Kansas plots. The leaf rust appeared to have overwintered since it was limited to the lower leaves.

Louisiana – In late February, leaf rust was found on susceptible cultivars in statewide variety trails in southwest Louisiana.

Arkansas – As of March 18 no leaf rust has been reported in Arkansas.

Wheat stripe rust. ***Texas*** – In early February, wheat stripe rust was easy to find at low severities in plots at College Station and McGregor in central Texas. As of mid-March no more stripe rust had been reported in Texas. Stripe rust development in Texas is equal to last year on the same date.

Oklahoma – By mid-March, no wheat stripe rust had been reported in Oklahoma.

Louisiana – In late February, light levels of stripe rust were found in wheat fields and plots in southern Louisiana. Spraying for stripe rust was suggested by one crop consultant. In Louisiana, stripe rust epidemics usually develop in the first half of March and peak by early April when temperatures surpass the optimum of stripe rust development.

Arkansas – In early March, wheat stripe rust was reported in southeast and southwest Arkansas fields. Hot spots were seen from the road in a few fields by March 13. Stripe rust was reported in many varieties and there may be one new race attacking the formerly resistant varieties. Fungicides have been recommended for all fields with stripe rust and several fields have been sprayed.

California – As of March 20, no wheat stripe rust has been observed in central California.

Pacific Northwest – As of March 20, no wheat stripe rust has been observed in the major wheat-growing areas of the eastern Pacific Northwest.

Please send wheat and barley stripe rust collections (5 or more rusted green leaves) 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@mail.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.

Oat Stem Rust. - On January 11 oat stem rust was found on one volunteer plant in the College Station, Texas nursery, which was the earliest stem rust was found at this location. None of the surrounding plants were infected. In mid-March, traces of stem rust were found on the variety Otana in the Castroville, Texas nursery. In early January, traces of stem rust were found in oat varietal plots at the Baton Rouge, Louisiana nursery. Rust has continued to develop in these plots.

Oat Crown Rust. In mid-February, light levels of crown rust were found in varietal plots at College Station, Texas. In mid-March, 5% severities were found on the lower leaves of the cultivar Brooks at the Castroville, Texas nursery and 20% severity on the wild oat (*Avena fatua*) at Luling, Texas. In early January rust was found and by late February, crown rust of oats continued to spread rapidly in a susceptible, early-planted field in Baton Rouge, Louisiana. Crown rust infections are equal to last year on the same date in the southern U.S.

Barley Leaf Rust. In mid-March, traces of leaf rust were reported on an Idaho barley line at the Castroville, Texas nursery.

Rye Leaf Rust. No rye leaf rust has been reported as of mid-March in the U.S.

Please Note:
Current cereal rust situation
Cereal Rust Bulletins are distributed every two weeks on average; for the latest cereal rust situation reports, subscribe to the cereal rust survey listserv list. Instructions can be found at:
http://www.lsoft.com/scripts/wl.exe?SL1=CEREAL-RUST-SURVEY&H=LISTS.UMN.EDU

Or, if you prefer, simply send a message to Mark Hughes (markh@umn.edu) and he will add you to the mail list. Messages from the mail list are maintained on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

If you have information on the cereal rust situation (or other small grain diseases) in your area that you would like to share, please email your info to:

Mark Hughes (markh@umn.edu) and David Long (davidl@umn.edu)

Or to: CEREAL-RUST-SURVEY@LISTS.UMN.EDU

Or, if you prefer: call Dave (612-625-1284)

We would like to include your name and email address so others can contact you. If, however, you prefer not to have your name or email address appear with the information, we will omit them. We will continue to incorporate these reports into the Cereal Rust Bulletin.

Information of most importance

We welcome any information you can provide, but are particularly interested in:

- Rust (leaf rust, stem rust, stripe rust)
- Host (wheat, oat, etc.)
- Cultivar or line name if known
- Severity and prevalence
- Growth Stage -when rust likely arrived, when infection first noted and current stage
- Where rust is found on the plants, e.g., lower leaves, flag leaf, etc.

Rust collections

Reports on the distribution of races of cereal rust fungi are an important part of our surveys as reported in the Cereal Rust Bulletin. We regularly collect and test isolates of stem rust (wheat, oat, and barley), wheat leaf rust, and oat crown rust. We appreciate receiving collections of these rusts from cooperators around the U.S. If you would like to contribute, please contact Dave Long (davidl@umn.edu) or Mark Hughes (markh@umn.edu) and they will send you a packet of collection envelopes and forms.