



Pest e-alerts



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Wheat Disease Update

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Oklahoma: Last week in Stillwater I observed large, “old” pustules of leaf rust on low leaves of Jagalene planted next to some of Dr. Carver’s breeder lines. This strip of Jagalene was planted relatively early (mid-September) and has not been cut back or “grazed” as have the plots in the field (Fig 1). Hence, the growth is high and rank with the upper leaves obviously having been frozen during the cold spells. Leaf rust pustules were observed on the lower leaves. These pustules were faded orange in color indicating that although these spores are viable, they are relatively old and new spores have not yet started to be produced. The rain we had in the Stillwater area at the end of this past week along with mild temperatures coming will start the production of new leaf rust spores. However, the dry conditions over the state most likely mean that leaf rust should be fairly limited at this time. PLUS, I have not yet heard any reports of wheat rusts in southern Texas, which typically have been reported by early to mid-February. I also observed some aphids in the Jagalene – most likely bird cherry oat.

Louisiana (Dr. Stephen Harrison, Wheat & Oat Breeder, LSU, Baton Rouge, LA): I received a report of a stripe rust infection center in central Louisiana from a pretty knowledgeable consultant. The weather pattern we have had in the past few weeks has been pretty favorable for stripe rust development. Stripe rust spreads when temperatures are relatively cool, in the 70/35° F day/night range and we have free moisture in the form of dews or light mist that keep leaves wet for four hours or longer. In south Louisiana we have had frequent heavy dews and fogs recently with the dews forming sometime before daylight and fog rolling in around daylight, keeping the leaf surface wet until late morning. Next week will probably be favorable for stripe rust spread if you have the beginnings of an epidemic in your fields.





Pacific Northwest (Dr. Xianming Chen, USDA-ARS Scientist, Pullman, WA): Stripe rust of wheat has waked up much earlier this year than last year in the Pacific Northwest and may not have slept in the western Oregon and western Washington. Don Wysocki and Jim Towne found sporulating rust pustules in a wheat field near Pendleton in the northeastern Oregon on the 1st of this month. Last week, Mike Flowers and Chris Mundt reported that stripe rust was easily found (about 5% incidence) in wheat fields in the Willamette Valley of western Oregon. Yesterday, I stopped by the Horse Heaven Hills in the south-central Washington and found sporulating rust pustules in several wheat fields, even in some fields where plants were still small (5 to 7 leaves without dead leaves) and stripe rust was not found in last November. Rust severity was up to 5% of incidence. The rust has survived the relatively mild winter with help with the widespread snow cover in the cold spell of the first week of last December.



Fig 1. Heavy growth of Jagalene wheat in a strip next to grazed (mowed) wheat plots at Stillwater on 12-Feb-2011. Inactive (but viable) leaf rust pustules were found on the lower leaves in this strip of Jagalene.

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