



Pest e-alerts



Entomology and Plant Pathology, Oklahoma State University
127 Noble Research Center, Stillwater, OK 74078
405.744.5527

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Wheat Disease Up

Bob Hunger, Extension Wheat Pathologist



CORRECTION – Please note there was an error by omission in CR 7668 - Foliar Fungicides and Wheat Production in Oklahoma – March 2016 @ <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-4987/CR-7668web2016.pdf>. The errors were in Table 2, which depicts results from using fungicides in a low-disease-year (2014) and a high-disease-year (2015). In the 2015 portion of Table 2, two highly effective fungicide treatments were omitted. These were 1) Aproach

@ 6 oz FB Aproach Prima @ 6.8 oz applied at growth stages 6 and 10, and 2) Aproach Prima @ 6.8 oz applied at growth stage 10. Both are products from DuPont. I apologize for the omission and a revised CR-7668 should be available next week.

Over this past week I have received multiple reports that the prevalence of wheat rusts (especially stripe rust) has increased across OK. Reports from Texas (see below) also indicated that both leaf and stripe rust are present and increasing across Texas. Gary Strickland (SW Research & Extension Center; Dryland Cropping Systems Specialist – Jackson Co.) sent me a photo showing a stripe rust infected leaf. Zack Meyer (Extension Educator; Kingfisher Co.) also sent photos of stripe rust infected leaves he has found in his area (a bit north and west of Oklahoma City). Note in these photos how early infections of stripe rust do not always fall into clearly visible “stripes” as do later infections. Also note the increased chlorosis (yellowing) and “splotchiness” of the infection. The yellowish-orange pustules present on these leaves provide the spores that spread stripe rust, and given the temperature and moisture we have received over much of the state, I foresee stripe rust to continue to increase in incidence and severity. Leaf rust and powdery mildew also can be found on lower leaves and also will continue to increase if we continue to have weather favorable for disease development. Such early season infections can be damaging to wheat and provide the inoculum for later season foliar disease. So, monitor your fields closely and consider applying a fungicide if foliar diseases are prevalent throughout your field. A fungicide application at this time of year will not last through the entire season, but using a generic, lower cost fungicide now will help prevent early season foliar

diseases and protect not just yield potential but also help to maintain higher test weight. If that yield potential continues to look good, a later season application of a higher cost fungicide can then be considered to continue to protect yield potential and quality.



Photo credit - Gary Strickland



Photo credit - Zack Meyer

The other report I received to which I want to call your attention was a report of severe greenbug on wheat near Minco. In rating my soil-borne/spindle streak nursery last week, I noted many aphids including both bird cherry-oat aphid (BCOA) [below L] and greenbug [below R]. I do not know how widespread aphids are across the state, but greenbug in particular can be very damaging to wheat, and both greenbug and BCOAs will spread barley yellow dwarf virus.



Texas: Dr. Ron French (Extension Specialist; Texas A&M AgriLife; Amarillo, TX) Mar 8, 2016: “Various degrees of rust infections were observed on rust sentinel plot entries of cereal crop species planted in Weslaco, TX on the first week of March. The highest infections were:

- Wheat leaf rust, up to 85S with 100% incidence, was observed on Morocco spring wheat.
- Wheat stem rust, single pustule was found on Panola winter wheat.
- Wheat stripe rust, with low severities but incidence up to 90% on some lines, were observed on several winter wheat cultivars.
- Oat crown rust, up to 25S with 100% incidence, was observed on Marvelous spring oat.
- Barley leaf rust, up to 10S with 100% incidence, was observed on Hiproly barley.

Texas (cont’d): Dr. Clark Neely (Small Grains and Oilseed Extension Specialist; Texas A&M AgriLife; College Station, TX) Mar 10, 2016: “In addition to rust reports in Uvalde and Castroville, TX (South Texas), leaf and stripe rust are present in wheat throughout much of Texas from the Red River (Oklahoma line) south to the Gulf Coast. I have identified both rusts here in College Station (leaf rust on Jagalene; stripe rust on young WB Cedar nearly a month ago), though leaf rust appears more prevalent. I have seen photos and heard reports from numerous growers and county agents from the northern Rolling Plains (Vernon, TX area) over to the northern Blacklands (Dallas area) and south. Growers are already applying fungicides to keep it at bay. Barley leaf rust was also identified in research plots in College Station, TX recently. Barley plots in Castroville and McGregor locations appear clean so far. The Texas High

Plains appears to be the only region unaffected by rust thus far. Much of the state (except High Plains) received heavy rainfall recently with more rain in the forecast so further development is expected for the foreseeable future.”

Louisiana: Dr. Boyd Padgett (Plant Pathologist; LSU Ag Center); Mar 1, 2016: “I found leaf and stripe rust in wheat growing on the Dean Lee Research Station near Alexandria, LA. Incidence is less than 1%, but severity is high in some spots. I also spoke with Dr. Trey Price and he observed stripe rust on wheat growing on the Macon Ridge Research Station near Winnsboro, LA.



Arkansas: Dr. Terry Spurlock (Asst Prof & Extension Plant Pathologist – Southeast Res & Extension Center; Monticello, AR) Mar 2, 2016: “We’ve seen similar to what Boyd described in Louisiana. Both stripe rust and leaf rust have been confirmed in Desha and Jefferson Counties with a report of stripe rust in a farmer’s field in Woodruff County last week. In Desha and Jefferson, I observed low incidence levels with a few localized spots moderate.”

Dr. Richard Grantham - Director, Plant Disease and Insect Diagnostic Laboratory

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