

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

Vol. 17, No. 7	http://entoplp.okstate.edu/pddl/pdidl	4/6/2018
----------------	---------------------------------------	----------

Wheat Disease Update - 6 April 2018

Bob Hunger, Extension Wheat Pathologist Department of Entomology & Plant Pathology Oklahoma State University - 127 Noble Research Center 405-744-9958

Powdery mildew (Figure 1) is showing up on lower leaves in fields and trials around Stillwater, and I've also had reports of powdery mildew on lower leaves from Extension Educators around the state. I also have seen 'hot spots' indicative of barley yellow dwarf (Figure 2) around Stillwater, but did not find any aphids associated with these spots. From Texas, Dr. Clark Neely (Small Grains and Oilseed Extension Specialist; Texas A&M AgriLife Extension) relayed to me on 04-April that, "Overall, I think we have avoided the stripe rust and what little was around is shutting down now. Leaf rust is around, but seems lighter than normal for the moment." Across Oklahoma, wheat leaf and stripe rust still are largely absent, although a few "stripes" of stripe rust were found by Zac Meyer here at Stillwater this morning at an Extension Educators in-service training. This lack of the rusts in Oklahoma is supported by the recently implemented scouting program involving Oklahoma Extension Educators. This program asks county educators to look for and report weekly the occurrence of stripe rust, leaf rust, and/or powdery mildew they observe in commercial fields, variety trials or variety demonstrations located in their counties. This information is reported by county educators from counties across southern Oklahoma to Heath Sanders (Area Extension Agronomy Specialist; southwest district), from counties across mid-Oklahoma to Zack Meyer (Extension Educator; Kingfisher County) and from counties across northern Oklahoma to Josh Bushong (Area Extension Agronomy Specialist; northwest district). The incidence and severity of these three wheat foliar diseases can then be more accurately summarized and disseminated to facilitate decisions related to applying a fungicide to help manage these diseases on susceptible varieties. For the week ending on April 5th, observations reported from across southern and mid-Oklahoma (Jackson, Dewey, Washita, Blaine, and Kingfisher Counties) indicated no leaf or stripe rust and only one report of powdery mildew on lower and mid-leaves in Washita County. It is still a bit early for reports to come in from across northern Oklahoma. Thanks are extended to all the educators that participated in this pilot program, and I would encourage more participation to facilitate this reporting program

Figure 1. Powdery mildew observed Apr 5th on lower leaves of wheat in trials around Stillwater, OK.



Figure 2. Likely barley yellow dwarf (BYD) "hot spot" observed on wheat in early April (Photo 1). As time proceeds, these hot spots will develop stronger symptoms of BYD including leaf discoloration ranging from yellowing (Photo 2) to purpling in some varieties (Photo 3).



Photo 1



Photo 2

Photo 3

Plant Disease and Insect Diagnostic Laboratory

The pesticide information presented in this publication was current with federal and state regulations at the time of printing. The user is responsible for determining that the intended use is consistent with the label of the product being used. Use pesticides safely. Read and follow label directions. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: <u>eeo@okstate.edu</u> has been designated to handle inquiries regarding non-discrimination policies: Director of Equal Opportunity. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources.