Pest e-alerts

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Wheat Disease Update

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Since my last report, I don't believe a lot has changed with the disease situation. Similar to what I indicated in mid-December, I have continued to find small pustules of powdery mildew and a few scattered leaf rust pustules in rank wheat around Stillwater. The temperature and weather has been such that these two foliar diseases (powdery mildew and leaf rust) have been able to persist but have not increased in the wheat around Stillwater. This seems to be the case for southwestern and south central OK as well. Gary Strickland (OCES Educator & SWREC Dry-land Cropping Systems Specialist; Jackson/Greer County in SW OK) indicated wheat in SW OK is lagging behind the rest of the state and mostly is just now establishing a solid root system. He had sent us a sample last week in which he expected a root rot to be involved, but we were not able to confirm any root rot pathogens. Gary also indicated that he has confirmed Hessian fly at damaging levels in at least a few fields in Jackson County. He will be going out in the next few days to scout additional fields. Aaron Henson (OCES Educator; Tillman County in southern OK) indicated wheat in his area varies from quite small to well-established with the majority of the wheat not yet jointing. He is aware of the earlier reports of scattered stripe rust showing in south-central OK, but has not heard anything to indicate increase in incidence or severity. For additional information regarding early season foliar wheat diseases and possible control with an early fungicide application please see:

- E-Pest Alert (Dec 18, 2015) at http://entoplp.okstate.edu/pddl/advisory.htm
- OCES Fact sheet PSS-2138 discussing split application of fungicides at http://wheat.okstate.edu/wheat-management/insectsdisease/PSS2138splitvssinglefungicideapplications.pdf
- Dr. Jeff Edwards blog at http://osuwheat.com, or go directly to the blog at: http://osuwheat.com/2016/02/09/is-this-the-year-for-split-fungicide-application

Also around Stillwater, I am beginning to see symptoms indicative of wheat soil-borne mosaic/wheat spindle streak mosaic in areas such as my WSBM/WSSM screening nursery. At this point, it is somewhat difficult to differentiate between symptoms of WSBM/WSSM and discoloration resulting from cold. The photo below shows the contrast between a variety susceptible to WSBM/WSSM and a resistant variety, but was taken about 2-3 weeks later than today. Thus, over the next month as temperature rises and wheat greens up, symptoms will become more striking. However, nearly 100% of varieties planted across Oklahoma are resistant to both these viruses, so this disease complex has not caused a problem to wheat in Oklahoma (or other states) for many years. For more information on the WSBM/WSSM complex, go to: https://www.youtube.com/user/OSUWheat/videos and watch the video on "Wheat Soilborne Mosaic Virus and Wheat Spindle Streak Mosaic Virus."

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