Plant Disease and Insect Advisory

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Wheat Disease Update

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Tan spot & septoria severe in some locations: Close to Stillwater I have seen both of these diseases in a plot where a fair amount of residue was left in the field from last year's crop. However, Dr. Brett Carver (OSU Wheat Breeder) and Ray Sidwell (Station Director at Lahoma) have both observed that tan spot and septoria are extremely severe in one of the fields at the Lahoma Station. The abundant moisture along with mild temperatures has contributed to the severity of these two diseases. Now, with cool temperatures the inoculum of these diseases is moving from the residue on to the leaves of the wheat. As long as there is abundant moisture and rainfall coupled with cool temperatures, more inoculum will be produced and new leaves will continue to be infected. I would be especially alert for these diseases if you are in a no- or minimum-tillage operation where there is plentiful residue on or above the soil surface from previous years.

For a more complete description of tan spot and septoria, go to http://entoplp.okstate.edu/ddd/hosts/wheat.htm and click on the appropriate disease.

For the reaction of specific varieties to tan spot and septoria, please go to this site: http://www.wit.okstate.edu/varietyinfo/april2004wvcc.html

Drs. James Stack and Phillip Sloderbeck at Kansas State University also have a nice variety reaction sheet that can be viewed at: http://www.oznet.ksu.edu/library/plant2/mf991.pdf

Wheat Soilborne Mosaic Virus (WSBMV) & Wheat Spindle Streak Mosaic Virus (WSSMV): WSBMV and WSSMV symptoms are being strongly expressed in the soilborne/spindle streak nursery just west of Stillwater, and in Dr. Jeff Edward's variety-demo plot (also on the west side of Stillwater). In rating the nursery yesterday, I saw what I felt were symptoms of both viruses. Some varieties (for example 'Endurance') are showing symptoms, but testing for virus presence indicated that WSSMV is the only virus present.

For the reaction of specific varieties to these viruses and other diseases, please go to: http://www.wit.okstate.edu/varietyinfo/april2004wvcc.html.

Wheat leaf rust: I observed an increasing number of sporulating pustules of leaf rust on many of the varieties in Dr. Edward's variety-demo plot. However, the level of leaf rust is no where near the levels being reported in Texas. Rex Harrington (Research Associate in Soil & Crop Sciences at Texas A&M University) ratings of 40-60S on varieties like Cutter, Jagalene, and TAM 107 in plots located near Castroville, TX (on Hwy 90 west of San Antonio). In these same plots, Thunderbolt, Overley, and Ogallala were clean so far, Jagger was 20S, and Lockett was 10S. By contrast, on March 01, Rex reported moderate leaf rust in plots near McGregor, TX (west of Waco) but that early September planted Cutter was yellow and brown from leaf rust.

Wheat stripe rust: Still no observations that I know or have heard of stripe rust in Oklahoma. Rex reported seeing increasing stripe rust in the plots near Castroville, with the resistance in Jagger still holding-up.

Powdery mildew: Powdery mildew is present in Dr. Edward's variety-demo near Stillwater, with some of the pustules looking fresh. Rex also reported seeing powdery mildew in Texas, but only at light levels.

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