What is the disease outlook for the 2021 wheat crop?

Wow, the moisture we have received is awesome and with the warm temperatures, the wheat has really taken off with some tremendous growth. However, the wetter conditions can also set up some favorable conditions for diseases in your wheat this spring.

So what is the outlook for wheat diseases for this spring? Leaf and Stripe Rust are some of the most important concerns in the state and annually cause more yield loss than most other diseases of wheat and often become established in Texas and Oklahoma before spreading north to Kansas. Weather conditions in Texas in both the fall and spring can be used to predict the severity of the disease in Kansas in a given season. This year there were two significant weather events that may lower stripe rust pressure in Kansas including dry weather in the fall in Texas, and the February freeze event also in Texas. The early dry weather likely lowered overall rust inoculum levels heading into the spring. The freeze would have also likely killed off leaves with active stripe rust pustules in Texas. These two weather events together should delay arrival of stripe rust in Kansas and lower the overall final disease levels. However, be prepared to scout your wheat in the near future. For most fields, growers should focus on evaluating the need for a wheat fungicide application, later in the spring, between flag leaf emergence and flowering.

So what about leaf rust? Leaf rust was found in OK prior to the big freeze in February, but that tissue was likely killed off with the freeze. So no reports of leaf rust have been found yet in Kansas for the 2021 season. Some of the varieties that are resistant to leaf rust include Bob Dole, KS Dallas, LCS Chrome or WB 4792. Susceptible varieties include So producers will need to watch for signs of leaf and stripe rust as we approach flag leaf emergence in Kansas during April.

Tan spot is another wheat disease that may show up soon, especially in fields with continuous wheat which allows the fungus to buildup on the wheat residue over the winter. The initial symptoms of tan spot are small dark brown spots that expand to become tan elliptical or diamond-shaped lesions with a yellow halo.

Wheat Streak Mosaic is yet another viral disease that has emerged as a serious problem in all parts of Kansas in some years. This disease is spread by the wheat curl mite which volunteer wheat is a host. Most of the diseases favor the cool and wet conditions that we have been experiencing. So be on the lookout for any of these diseases.
K-State Research and Extension has an excellent publication entitled, “Wheat Disease ID Book” that is available either online or at any of our Post Rock Extension District Offices in Beloit, Lincoln, Mankato, Osborne or Smith Center.

For more information on disease management in your wheat, contact me at any of our Post Rock Extension District Offices. This is Sandra Wick, K-State Research and Extension, Post Rock District Crop Production Agent, have a great day!

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our blog site at postrockextension.blogspot.com. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.