Wheat Disease Update

Bob Hunger, Extension Wheat Pathologist

Oklahoma: On Friday I examined the breeder and research plots located around Stillwater. I found active leaf rust (top photo) pustules on lower leaves in early-planted Jagalene in the variety demonstration plot. No powdery mildew or other foliar diseases were observed.

My soilborne/spindle streak (bottom photo) nursery is beginning to show strong symptoms. As the flush of growth comes over the next couple of weeks the difference between resistant and susceptible lines will become obvious. I also saw quite a few lady beetles on the move, but didn’t see any aphids.

Reports from other parts of Oklahoma are as follows:

Panhandle (Rick Kochenower, Area Research & Extension Agron Spec): Had seen a few leaf rust pustules in December, but it has been to dry for foliar diseases.
Northwest/northcentral OK (Roger Gribble, NW District Area Extension Agron Spec): Hasn’t seen any wheat disease so far – also needing moisture.

Southwestern OK (Terry Pitts, Area Extension IPM Spec): Has seen some septoria and tan spot but other foliar diseases are inactive; also has seen some aphids (greenbugs).

Southcentral OK (Mark Gregory, Area Extension Agron Spec): Has seen some insects/aphids, but not foliar diseases.

Updates from other states:

Kansas (Dr. Erick DeWolf; Extension Plant Pathologist, Kansas State University): Leaf rust was found in Montgomery County in southeast Kansas on February 17th. The active pustules were found on the variety Overley. Overly is known to be susceptible to leaf rust, but in the past years the disease did not arrive until later in the growing season allowing this variety to escape some of the potential yield losses. The disease incidence is still very low (less than 5%) and severity of individual leaves ranges from trace to 2%. Kansas has experienced some warm day time temperatures in recent weeks and the wheat is showing signs of breaking dormancy. The potential impact of the find is not clear. It is possible that additional cold weather will further suppress the pathogen population. The leaf rust detected here will only become important if conditions favor the spread of the disease to newly emerging leaf tissue before the infected leaves naturally senesce.

Leaf rust was not detected in four other wheat fields that I checked. No sign of stripe rust or stem rust.

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