

Wheat Disease Update Bob Hunger, Extension Wheat Pathologist

Looking at plots around Stillwater yesterday, I saw a lot of barley yellow dwarf and powdery mildew with leaf rust slowly building up in some plots but abundant in others (still not heavy on flag leaves however). Most of the wheat I saw was between heads half emerged to fully headed with flowering just beginning in a few plots.



Reports I have received from across the state indicate powdery mildew and leaf rust present, but that BYDV is showing-up everywhere. Severity and symptoms indicate that the infection most likely took place through the later winter and/or early spring, which was circumstantially supported by Bart Cardwell (Extension Educator – Garfield County), who indicated that he and Roger Gribble (Agronomy Specialist - Northwest OK) had visited fields in January-February and saw numerous "hot spots" of aphids (bird cherry-oat aphids). It didn't seem to me over this past year that I heard a sufficient number of reports of aphids being present or spraying for aphids to give an indication that BYDV would be severe this spring. However, it seems that there is plenty of it over the state and there will be some losses from this aphid transmitted disease.

In the lab, we have isolated the fungi *Fusarium* and *Bipolaris* from samples of wheat showing root rot symptoms. Most of these were from southwestern OK, but one was from Bryan County. Although root rots can be a major problem in OK, I have only seen root rot symptoms in a few fields and only in isolated locations in those fields. Hence, I wouldn't be overly concerned with root rots this year.

There also have been a few more confirmed finds of wheat streak mosaic virus from western/northwestern OK, and isolations of tan spot and septoria from wheat planted in no-till fields. In all cases, these were no-till fields where wheat has followed wheat. Also, Bob Woods (Area Extension Agronomy Specialist – eastern OK) reported the following: I have looked at wheat this week near Ft. Smith, Webbers Falls, Morris, East of Tulsa, and North of Wagoner. There was some powdery mildew on lower 1/3 of plants, not on top leaves, not completely covering any lower leaves, and fairly uniform across all locations. I found a few leaf rust pustules at Webbers Falls, only on lower leaves, only occasionally, and only 1 pustule on a leaf when I found it.

<u>OTHER STATES</u>: <u>13 Apr 2007 (Rex Herrington, Research Associate – Small Grains, Texas A&M University:</u>

Wheat leaf rust remains much lighter than normal here at College Station, while powdery mildew remains heavy. The following LR notes are on HRW varieties at College Station.

Longhorn-20MR, Coronado-30MS, Cutter-80S, Dumas-Tr R, Jagalene-100S, Fannin-0, Neosho-100S, Doans-0, Jagger-70S, Overley-5S, Endurance-0, Deliver-0, Guymon-60MS, TAM 101-0, TAM 111-0, TAM 112-25MS, Sturdy 2K-0, WinMaster-0, Mit-0, Ogallala-0, Duster-0, Shocker-0, Fuller-0, Kojack-0.



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