PLANT DISEASE AND INSECT ADVISORY

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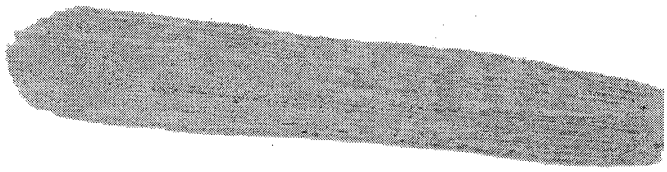
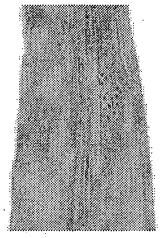
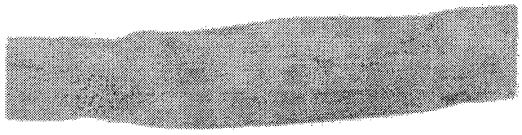
Wheat Disease Update
Bob Hunger, Extension Wheat Pathologist



Monday, March 11th I scouted wheat fields & variety demonstrations from Stillwater west to Hennessey, then south to Kingfisher and Minco, and then down to Chickasha and west to Apache. I found wheat leaf rust in only two fields, one of Jagger immediately west of Stillwater, and the other in a field of an unknown variety (although I suspect it was Jagger) located near Apache. In neither of these fields was leaf rust severe, but several sporulating pustules were present.



I didn't see any other foliar diseases such as septoria, tan spot, or powdery mildew. Viruses such as wheat soilborne mosaic (WSBM) and wheat spindle streak mosaic (WSSM) were not obvious because of the necrosis/burning of the leaves and leaf tips from the recent freezes, and because of a lack of growth.



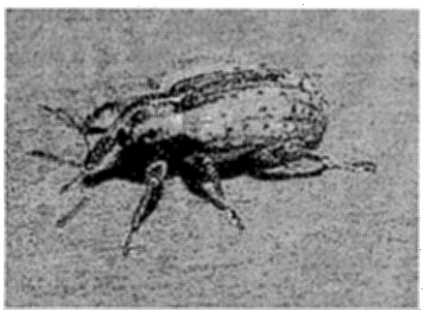
Many fields had been grazed to the ground, with some of these fields still supporting cattle while the cattle had been removed from others. Unfortunately, as much ground as growing wheat could be seen in many fields – both grazed and ungrazed. Some grain-only fields looked pretty good, but were burned badly from the recent extreme freezes. This was especially true north of I-40.

I didn't see any aphids, and although I thought I saw some barley yellow dwarf (BYD), I couldn't be sure because of the amount of leaf damage from the recent freezes and the lack of new growth. Overall, many fields appeared to me to be stressed for moisture, although this appearance may also have partly been due to the recent freezes and leaf burning.

In summary, there is a small amount of leaf rust present in central Oklahoma, but other foliar diseases appear to be extremely sparse. Additionally, the spring growth spurt has not yet occurred so appearance of viruses such as WSBMV, WSSMV, and BYDV are still difficult to detect.

Alfalfa weevil egg population up in 2002

Phil Mulder - Extension Entomologist



On February 20-22, 2002 alfalfa samples were taken at 11 sites across the state to ascertain the status of egg populations of alfalfa weevils. In light of the recent winter freeze we experienced, we saw a dramatic decrease in the high numbers of eggs recovered compared to January. Numbers presented in Table 1 reflect weevil eggs per square foot during the January and February samplings. These numbers indicate the severity of the freeze on alfalfa weevil egg numbers, and subsequent to these samples the effects on larval infestations were even more dramatic. Some areas of the state experienced an 85% reduction in larval populations from the last cold front that swept through the state. Alfalfa weevil egg viabilities for the last two sample periods are also depicted in table 1. In addition, the degree days through February 11, 2002 are presented in the last column of this table. Viability of the eggs counted so far reflect average percentages. Fortunately, although we had 93% hatch of some of these larval populations, the mortality levels from the recent freeze served about the same purpose as an insecticide application. Unfortunately, the little amount of growth we already had on the alfalfa was also burned back and moisture is still limiting in many areas across the state. Growers should be encouraged to scout their fields thoroughly over the next two weeks and assess the weevil population in light of the information in Current Report No. 7177. Careful attention should be paid to the alfalfa height, degree days, and numbers of larvae per 30 stem sample.

Growers in northwest Oklahoma are still finding army cutworms in alfalfa and wheat fields. We need some moisture to help combat these problems. For those growers that may be experiencing both problems at once, a stubble spray of Fury or Warrior should suffice in reducing the cutworm situation and may even provide sufficient control of alfalfa weevil in light of the help from the freeze. We'll continue to keep you posted on what we're finding around the state.

Table 1. Alfalfa weevil egg populations at select sites across the state in 2002.

COUNTY	January 2002	% Viable	February 2002	% Viable*	Degree days 2002**
Grady	396.8	67	116.4	81	247
Kingfisher	190.0	90	No data	----	232
Muskogee	235.6	80	98.8	80	232
Payne (2-14)	57.4	79.6	59.6	----	228
Pittsburg	802.8	87	223.2	75	251
Pottawatomie	170.0	64	103.6	81	232
Rogers	189.2	87	99.6	75	199
Stephens	1487.2	93	114.8	73	273
Tillman	95.2	88	18.8	----	319
Washita	139.2	89	40.8	----	247
Woods	65.2	53	10.4	----	233
Mean*	348.0	79.8	88.6	77.5	244.8

*Viabilities not calculated from areas where less than 100 eggs per square foot were recovered.
** Degree days through February 11, 2002.

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