

Crop Scouting Update: April 22, 2024

Weather Station

According to the Lamar Weather Station Temperature at 4:06 a.m. was down to 35F, but was up to a high of 68.8 F by 3:58 p.m. Booting, heading and flowering wheat can tolerate down to 30F for two hours at this stage. This morning's cold drop should be no concern. According to Spring Freeze Injury to Kansas wheat pdf. <https://bookstore.ksre.ksu.edu/pubs/c646.pdf>



WHEAT

Three different wheat fields were scouted in the northeast side of Jasper County.

Field one was early boot stage to boot stage. Plants were between 17-20 inches tall. A few random heads were noticed. Few to no aphids were noted. A few random plants exhibiting virus signs (no concern). Overall, healthy looking field, little to no disease issues detected.

Field 2 was in early boot stage to boot stage. Plants were 16-19 inches tall. Aphids were noted, but appears to be under threshold. A few random plants exhibiting virus signs (no concern). Overall, healthy looking field, little to no disease issues detected.

Field 3 The majority of the field is heading but has not started flowering yet. Plants were around 25-32 inches tall. Aphids were noted located at the bottom of plants. A few plants were noticed with flagging color signs of virus among the sea of green, not enough to be noteworthy and no dwarf symptoms noted. No signs of head blight or disease noticed on emerging head. Overall, healthy looking field with little to no disease issue detected.



Yellow leaves poking out among the sea of green. Possibly Barley Yellow Dwarf Virus symptoms. Not enough to be of any concern.

Barley Yellow Dwarf Virus

Is a virus spread by several species of aphids, notable the Greenbug aphid and the Bird Cherry Oat Aphid. Aphids are borne virus free but spread the virus to new plants after feeding on an infected plant. Symptoms include plants that are stunted, poor tillering, plants with small root systems, stiff upright leaves (yellow, red or purple in color) usually starting a leaf tip. Symptoms can be confused with nutrient deficiency symptoms. Fall infection usually results in more plant stunting and yield loss than plants infected in spring. Spring infected plants usually show a stiff, upright flag leaf that is yellow, red or purple in color.

Economic threshold of greenbugs are 50 to 100 or more aphids present on wheat 6-inches or less in height during fall. In wheat over 6-inches in height the economic threshold would be 300 or more greenbug present per linear foot of row. Economic threshold of Bird cherry oat aphids are 12-25 or more aphids present per tiller plant emergence up to head emergence.

<https://ipm.missouri.edu/croppest/2011/4/Aphid-Populations-Present-in-Wheat/>

MU Plant Diagnostic Clinic is offering free wheat virus tests in 2024

<https://extension.missouri.edu/news/mu-plant-diagnostic-clinic-offers-free-wheat-virus-tests-in-2024>

If you have any concerns about potential virus issues in your wheat field, please contact me or the disease diagnostic lab to submit a sample to the lab. This free testing is a 65-dollar savings and will test for 5 different viruses.

Rain in the forecast

Since rain seems to be in the forecast for the next several days and many of our wheat fields maybe close to heading or are heading or close to flowering. Here is some good links to some information for spraying for controlling Fusarium head blight (Head Scab) in wheat.

<https://ipm.missouri.edu/croppest/2022/5/fusariumHeadBlight-MB/>

<https://extension.missouri.edu/publications/g4351>

<https://crop-protection-network.s3.amazonaws.com/publications/cpn-3001-wheat-optimizing-fungicide-use-for-fusarium-head-blight-scab-and-associated-mycotoxins.pdf>

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