Crop Scouting Update: April 29, 2024

Weather Station

According to the Lamar Weather Station, the temperature at 6:53 a.m. was 54.1F, but had reached a high of 75.6F by 6:41 p.m. Lamar received at total of 3.92 inches of rain between 4/25/24 to 4/29/24. More rain is forecasted for this week. While this rain is desperately needed to help us recover from the drought, this has brought up concerns about Fusarium Head Blight (scab) because some wheat fields are flowering currently. http://agebb.missouri.edu/weather/realtime/lamar.asp





📓 wheat flowering

Wheat

Wheat fields were checked in on the northwestern side of Jasper County. Wheat was around 35 to 40 inches tall and flowering. Farmer stated that he already sprayed some of his fields with Mirvaris Ace ahead of the rain to prevent head scab, but not all fields were sprayed before rain. Overall, the fields looked very good at this time. No sign of Fusarium head blight yet, but maybe too early to tell.

Corn

Recent rainfall has left some standing water on corn fields. This might inhibit some recently planted corn that has not emerged and could lead to some denitrification in the soil. The rate of denitrification is determined by the length of soil saturation, temperature (rate accelerates when temperature is above 60 °F.) and soil texture. Keep a look out for pale green or yellow plants. In corn fields, where corn has emerged, it was around V3 stage. Corn field did not show any noticeable weed issues at this time. Scouting was limited due to muddy, wet soil, but no cutworm damage was seen at this time.



Black Cutworm Alert and Pest Monitoring Network

Seven Black Cutworm moths were captured at the Lamar Insect Trapping Location on April 29, 2024 with an estimated cut date of 5/19/24. <u>https://extension.missouri.edu/publications/g7112</u>

*Moth captures in a pheromone trap do not indicate that treatment is necessary but indicates that fields should be scouted. Be aware that there are several species of cutworm, and this alert only applies to the black cutworm. Cut date is an estimated date of when damage may be seen in the field. It is based on actual and estimated temperatures. <u>https://crops.extension.iastate.edu/encyclopedia/black-cutworm</u>

The 2024 planting season is fast approaching, and Missouri corn growers should consider being on the lookout for early corn pests throughout the state. Growers can also sign up for the Pest Monitoring Network (<u>https://ipm.missouri.edu/pestMonitoring/</u>) and receive alerts when insect captures exceed certain threshold levels. Here we highlight some of the early-season insect pests of corn, scouting methods, and management recommendations. Pest Monitoring Alerts are for Black Cutworm, True Armyworm, Japanese Beetles, Corn Earworm, Fall Armyworm and Brown Marmorated Stink Bug. https://ipm.missouri.edu/croppest/2024/3/corn_pests-iv/

Fusarium Head Blight https://www.uaex.uada.edu/publications/pdf/mp404/chapter7wheat.pdf

Fusarium head blight (Scab) on wheat is primarily caused the fungal pathogen *Fusarium graminearum* as well as several other Fusarium species. This disease favors frequent rainfall, high humidity and warm temperatures around the time of flowering when infection occurs. Symptoms can be seen on the wheat heads a few days after infection resulting in individual spikelets or the entire inflorescence appearing prematurely bleached where pink or orange spores masses might be seen. These bleached spikelets usually contain shriveled scabby seed (tombstones). Brown or black lesions can sometimes be seen where the head joins the stem. Scabby grain is often lightweight, can contain one or more vomitoxins such as DON (deoxynivalenol) or nivalenol and might result in grain being docked or refused at the elevator. Scabby grain can be potentially lethal to livestock especially pigs and should not be fed to livestock. Since *F. graminearum* can also cause disease on corns, sorghum and rice, rotation with these crops may increase risk of disease. Tillage to bury crop debris and crop rotation to non-host crops can help reduce soil inoculum levels. There are no completely resistant varieties, but planting moderately resistant varieties and planting varieties that flower at different times can help reduce scab risk. Ideal chemical control involves spraying specific fungicides around the time of flowering/anthesis (Feekes 10.5.1). Early applications with Miravis Ace helped increase application time window. https://extension.missouri.edu/publications/g4351

Wheat Scab or Fusarium Head Blight in Wheat

https://ipm.missouri.edu/croppest/2024/4/wheat scab fusarium head blight-mb/

Control of Fusarium Head Blight (or Scab) in Wheat

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

Micah Doubledee Field Specialist in Agronomy MU Extension in Barton County 801 East 12th Street Lamar, MO 64759 mdoubledee@missouri.edu 417-682-3579