

Dear Producer/Ag Industry Personnel:

### **Upcoming Meetings**

We will have an IPM meeting at will be Friday July 8, 2016 beginning at 11 am at Hoots BBQ. We will have CEU hours available for those. The Verification Program Tour will be in Lincoln County this year on July 14<sup>th</sup>.

### **Insect Issues**

Bollworm numbers have been as high 100 moths per night. I have not seen many moths or eggs in soybean or cotton fields. Most that I have talked to are seeing the same thing. Make sure to keep an eye on beans that are blooming and setting pods that are not lapping the middle. These fields are typically more attractive than the lapped and lush fields. Cotton will become attractive to the next flight as well once fields start blooming well.

### **Plant Diseases**

Southern Rust has been confirmed here but still at a very low infection rate. I am going to include a write up from Travis Faske that addresses this issue. Southern rust was confirmed earlier this week (June 23, 2016) from a commercial corn field south of Eudora in Chicot County. This is the first report of southern rust for the 2016 cropping season, which is about two weeks earlier than in 2015 when it was detected in three counties in central Arkansas. Disease severity and incidence was low (<1%) on corn at

R3 growth stage. Given the current and long range forecast of dry weather conditions, the southern rust in this field is unlikely to move much over the next few weeks, so this incidence is not a major threat the majority of the 2016 corn crop. This report is a reminder to scout and NOT a justification for wide spread use of corn fungicides. Below are a few key points on rust identification, conditions that favor southern rust development, and considerations for fungicide use.

Southern rust sporulates on the upper leaf surface, while common rust sporulates on both upper and lower leaf surfaces (less on lower than upper). Common rust pustules are elongate, brick red in color and typically found in the lower canopy (3 ft. and lower); however, this year it is common to find it in the upper canopy. Southern rust is almost always found above mid canopy (4 to 5 ft. from ground).

During the growing season rust spores are spread from infected corn fields progressively northward. Free moisture as dew or light rain is necessary for spores to germinate and infect corn. When conditions favor disease, symptoms appear about 3 to 6 days after infection and by 7 to 10 days the pustules rupture to expose mature rust spores. Conditions that favor disease consist of high temperatures (80 to 90+ °F) and extended periods of light rain or heavy dew. In the absence of these conditions infection and pustule development will be much slower.

Fungicides are effective at suppressing southern rust; however, there is no economic

threshold for a fungicide application. Factors to consider consist of corn stage of growth, yield potential, threat or observation of southern rust in the field, and prolonged conditions that favor disease development. It is generally accepted that a fungicide application between VT – R2 when southern rust is detected in the field AND conditions favor disease is the most beneficial time to apply a fungicide to protect yield potential. Yes, fungicides protect yield potential, but do not “add” yield, which is determined by genetic makeup and adaption of a hybrid to a growing area. Depending on corn maturity a fungicide may not be necessary or beneficial to protect yield potential. Given the current weather pattern corn will be moving quickly from silking to late stages of corn maturity, so be mindful of corn maturity when considering a protectant. Field corn within two weeks (50% starch line) from black layer will not benefit from a fungicide application to protect yield potential.

Of the fungicides labeled for corn diseases, strobilurin fungicides (FRAC code 11) are more effective before fungal infection (early detection in the field – trace amount of disease), while triazoles fungicides (FRAC code 3) are effective before and after fungal infection (post-infection activity reduces severity, but does not “cure” the plant of disease). Many products contain a combination of both strobilurin and triazole fungicides. A list of [fungicides](#) and [fungicide efficacy table](#) can be found in the MP 154. Many fungicides are very good to excellent for southern rust control, but a higher volume of water (5 to 10 gal/A by air and 15 gal/A by ground rig) will improve coverage needed to protect the upper- to mid-canopy from southern rust development.

I have walked some fields here in the county that I have seen low occurrence of Southern Rust, maybe more than usual amounts

of common rust (no need for treating) for this stage, small amount of gray leaf spot. Key is careful scouting especially during times of favorable conditions for a particular disease to further develop.

Please call if you have any issues that may arise. My cell number is 870-443-9826 in case you do not have it.

Sincerely,

Chuck Capps  
County Extension Agent-Staff Chair