

CROPS

Farmers convene to learn how to prevent fungal disease

By JACK McCLELLAN

jmcclellan@iowainformation.com

Iowa State University Extension and Outreach held a meeting near Ogden last month to address tar spot concerns and convey management considerations after tar spots were found across central Iowa.

Tar spot is a fungal disease that affects corn yields by infecting and damaging leaves. It was first discovered in 2015 in Indiana and Illinois but has now been found in every county in Iowa, causing concern for some farmers and agricultural professionals.

Meaghan Anderson, a field agronomist for ISU Extension and Outreach who spoke at the meeting, said tar spot depends on leaf wetness to spread, which is why it has been more prominent in Illinois and Indiana, especially in areas that utilize crop irrigation.

Anderson said the spores spread through the air but require seven or more hours of leaf wetness to infect leaves.

"After these finds last week, and now this week, Allison [ISU Extension field agronomist] will tell anybody that she feels like she knows less about this pathogen than she ever has before," Anderson said. "Because we would not have expected to have found it given the weather conditions that we've had."

Anderson said tar spot does seem to lead to greater yield loss when compared with other plant pathogens or diseases, especially in the later stages of the disease once it has covered a greater percentage of the leaves.

Anderson said the main ways to prevent tar spot are by choosing hybrids that are resistant to the disease and treating crops with fungicides. While it is too late in the season to select a resistant hybrid, it's plenty early

to begin treating with fungicides.

Anderson said tar spots can be tricky to identify, mostly appearing as dark dots on the lower canopy of corn's leaves. She said the trick to identifying tar spots is that they cannot be wiped off the leaf, unlike dirt or insect fecal matter. She also said tar spot should be visible from the underside of the leaf as well as the top.

"Tar spot can be sort of a dot with a line through it right, and sort of lengthened out spots and it can show up on the foliar, on the leaves, or it can even show up on the husks," Anderson said. "Last year was the first time I ever saw it on husks in Iowa."

Tar spot typically takes three to four weeks between the time of infection and the time it actually begins to appear on the plant in the form of dark spots. Anderson said this means that the Tar Spot that has been identified currently has been in the field for a number of weeks and that more will likely appear as the season goes on.

Anderson said if crops consistently have as much as 5% leaf coverage from tar spot by the R5 growth stage, they've likely suffered yield loss. She said she's seen as much as 15% of leaf coverage in southeast Iowa, but that it is usually less significant further west in the state.

Anderson said fungicide can be very effective against tar spot as well as other foliar, fungal diseases but that it's important to properly time

the application. She said the optimal time to apply fungicides is between when tassels begin to appear (VT), and the milky stage when kernels are yellow and filled with a milky fluid (R3).

"Time estimate from the VT to R3 is gonna be probably about 20 days, maybe a little bit longer than that," Anderson said. "And so we've got a 20 to maybe 24, 25 day window that we have an opportunity to make that application and still be within that timely window for fungicide."

Anderson said fungicides with longer residual effectiveness will be most effective when treating tar spot, especially when applied closer to the VT timeframe. She said the most effective products will be the two to three mode of action fungicides.

Ryan Clayton, a field agronomist at Pioneer Seed, said most important is for farmers to talk with their crop protection providers to find out what's available and what diseases to look out for.

While Tar Spot is new and can lead to some yield loss, farmers still need to be aware of the various other diseases that could affect their crops. He said it's also important to focus on products with both a preventative and curative mode of action.

Clayton said it's also good to look for products with longer residual activity, allowing farmers to apply their fungicide earlier in the season while staying protected as long as possible.



JACK McCLELLAN | AG HERALD

Meaghan Anderson pictured during her presentation on identifying and preventing tar spot.

Their jobs are dangerous enough. The last thing they need to worry about is you driving into their utility truck. Move over and slow down for crews at work. #moveoveriowa #moveover

MOVE OVER SLOW DOWN

Raccoon Valley Electric Cooperative
A Touchstone Energy® Cooperative
Reliable • Affordable • Responsible

VAN HORN INS. AGENCY, INC.

Glidden, IA 51443
Lohrville, IA 51453

Owner Agent:

Lisa M. Borkowski

Agent: Angie Fremel

Work: 712-659-2264

Fax: 712-659-2399