

David Hallauer
District Extension Agent, Crops & Soils

Tar Spot Confirmation – What Does it Mean?

The confirmation of Tar Spot in corn last fall didn't mean a lot to most producers. It came so late in the season and levels (in most cases) were light enough yield wasn't affected.

The confirmation of it in late June this season may end up being a different story. As of this writing, the disease has only been confirmed in Doniphan County and across the line in Holt County Missouri and Richardson County Nebraska. While that's a positive, it also means the areas surrounding those counties could soon see disease pressure as well.

What's next? Scouting is the best first step. Corn is the only known host for tar spot, so a previous crop corn or a neighboring field that had it last year are likely first locations to look. As the name implies, the lesion will look like a speck of dry tar on the leaf. You won't be able to remove it via rubbing on it with your finger like you will insect frass, and they may be pretty difficult to even find at first. Diseases like Physoderma brown spot are similar looking (and common this year), but distribution on the leaf will be a little different. If in doubt, contact any of our offices or submit a sample to the KSU Plant Disease Diagnostic Lab for confirmation.

If found, the decision making begins. The typical timing for most leaf diseases (VT/R1) actually work fairly well at reducing Tar Spot severity and protecting yield. If the disease doesn't show up until R3 or after, fungicide applications may not even be necessary. If the disease is severe, however, and earlier applications are required, keep scouting to make sure the disease hasn't returned. If disease pressure is low and temperatures stay high, a single, later application is an option to consider as well.

Early scouting across the Meadowlark Extension District thus far this season hasn't resulted in additional findings of Tar Spot. To follow the spread of the disease, check out the Corn ipmPIPE tracking website at: <https://corn.ipmpipe.org/tarspot/> . Additional information can be found in the KSU Agronomy eUpdate newsletter at: <https://eupdate.agronomy.ksu.edu/> or contact me at any District Office or via e-mail to dhallaue@ksu.edu .

Editor: for the past 15+ years, I've tried most weeks to submit a column with both an Agronomy and a Horticulture article. With the hiring of Laura Phillips as the District Horticulture Agent, horticulture related articles will now come from her! I will continue (as long as there is interest) to submit an agronomy related article. Use it as you see fit and if you find it is no longer of value to your publication, let me know! There's no sense in sending something that isn't needed!

If you have horticulture in my byline or with a picture, you can update it to Crops and Soils or however it might be noted. Horticulture can be assigned to Laura's picture/byline.

Thank you for the opportunity to submit to your publication and for working with me on multiple articles over the years. Your support is greatly appreciated!

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Livestock Quality Concerns

Last week we took a look at the amount of water required by different classes of livestock. While water quantity is important, all the water in the world will do no good if the quality is compromised. Water quality is important for animal health and performance. Water quality can be determined by appearance, odor, taste, pH and contaminants. Contaminants can include minerals (total dissolved solids), manure (coliform), microorganisms, nitrates, and algae. In part two today, we'll look at some common contaminants to be on the lookout for.

Dry conditions lead to water quality concerns, particularly in ponds. Declining water levels increase the concentration of total dissolved solids (TDS) in water, some of which are toxic to livestock. Dissolved salts or salinity goes hand and hand in this discussion of TDS. Some salinity can create increased intake, but too much will reduce intake creating health issues. Generally speaking, a TDS level of less than 3,000 ppm (parts per million) is considered safe.

A primary TDS concern is sulfates, since high sulfur can lead to polioencephalomalacia (polio/ PEM). High levels of sulfates can impact livestock health, especially in ruminants. Feeds may also contain sulfur, so the diet will influence the potential for sulfate toxicity. High levels of sulfate can reduce other mineral availability, such as copper. Elevated levels of sulfates may cause loose stool, with very high levels of sulfate inducing central nervous system symptoms.

Nitrates are of elevated concern in drought conditions. Not only can nitrates concentrate in reduced water sources, but also in plants used as livestock feed. This compounding factor can make a bad situation much worse, so monitor feed and water sources. Symptoms of nitrate poisoning include brownish discoloration of the blood, difficult and rapid breathing, muscle tremors, low tolerance to exercise, incoordination, diarrhea, frequent urination, collapse, and death. Pregnant animals may abort and death is always probable in high nitrate situations.

Algae that builds up in ponds or large livestock tanks may be due to a specific species known as cyanobacteria often referred to as blue-green algae. Blue-green algae can be toxic to most animal life, with harmful algae blooms being found in stagnant water, lakes, and ponds, especially when water temperatures rise. High levels of blue-green algae make the water look like paint or motor oil has been dumped into the water and is a good indication of a problem. Signs of blue-green algae poisoning are diarrhea, lack of coordination, seizures, labored breathing, convulsions, and possibly death. More information on blue-green algae can be found in the K-State publication [MF3065](#).

There are several microorganisms that can create water quality issues for livestock. A short list is; fusobacterium, leptospirosis, coliform, and salmonella. Livestock having unlimited access to stand or swim in drinking water sources increase the chance of these microorganisms, solids suspended in the water, and add nutrients from manure and urine - which in turn leads to an increased chance of blue green algae. Limiting access to specific points with fencing, can reduce pond and stream contamination.

Clear water doesn't guarantee safe water, but having water tested does. Monitoring water quality is a way to manage risk. Knowing if there's a problem before symptoms show up is the best way to prevent performance losses or death. Taking a water sample and submitting it to a lab for analysis may take a few extra minutes and some investment of dollars, but extra effort is well worth the knowledge of knowing that the water is safe or not. While ponds are often the most questionable in quality, the water in tanks, troughs and wells may also need to be tested. We have water test kits available in the Extension office and I would be happy to talk through water testing with you. More information on this topic can be found in [MF3249](#).

Laura Phillips
District Extension Agent, Horticulture

Can Your Phone Identify Plants for You?

With thousands of different plants growing in our state, determining what you are looking at can be difficult. While field guides used to be the principal method of plant identification for beginners and experts alike, smartphones are shifting the way we approach the mystery plant in our backyard. Certain phone applications promise to instantly identify a plant using only a picture. The idea of snapping a picture and getting an instant identification has its appeal – but are they accurate, how do you use them effectively, and how can you tell when it is wrong?

The accuracy of these applications depends on the type of plant, what you include in the picture, and your standard for accuracy. Michigan State Extension found that apps were less accurate when identifying plants with subtle differences like grasses. A study at Rutgers University found these applications are better at identifying tree leaves rather than just the bark. Both studies consistently found the applications were good at determining the genus but are far less accurate at pinning down the species. Do not be surprised if your plant identification app thinks your Black Willow is a Red Willow.

Looking at the accuracy of some popular plant ID applications like iNaturalist, PictureThis, and PlantNet (all available on IOS and Android), we also see that these apps are not created equal. In recent studies, PictureThis consistently shows a 95% or above accuracy to the genus, while iNaturalist had around 90% accuracy to the genus. PlantNet and Plant ID trail behind in the 80% accuracy range. These numbers, however, are not static. Earlier studies on these applications show unremarkable accuracy, and our changing technology is continuing to improve their plant recognition abilities.

While recent studies show impressive accuracy, user error can lead to incorrect results. Blurry pictures or pictures with multiple plants confuse the application. A close-up only showing part of a leaf, or a picture taken from far away will not provide the application with enough detail. After you submit a good picture, it will generate a few possible identities, along with descriptions and example pictures. Examine the pictures and description to ensure it matches the plant you are looking at. Your phone only uses visuals for identification, and some plants have specific textures or odors that distinguish them. While many apps use your location to narrow results, use the description to see if the suggested identification grows in your region and the habitat you are in. If it suggests a shade-loving plant while you are in an open field, you have good reason to doubt the results.

What does all this mean? It means these applications are useful in particular instances. Never use these apps to determine what plant your pet ate before it fell ill or to find edible plants for foraging. Instead, consider these applications as one tool in your plant identification toolkit. They can help you determine weeds you might have in your garden, or what kind of flowers you are seeing while hiking. Reading plant descriptions on these apps can help you learn more about plant terminology and morphology, point you to what chapter in your field guide to turn to, or give you info to start a search on databases like USDA PLANTS. Some apps show what other users nearby are identifying, and help you learn more about the flora in your region. For the average plant enthusiast, these applications can be incredibly useful and, when paired with other tools, can show you the incredible diversity of life in your own backyard.

Note: K-State is neither endorsing nor expressing bias against any of the applications mentioned.

Further reading: <https://extension.illinois.edu/blogs/garden-scoop/2022-01-21-how-accurate-are-photo-based-plant-identification-apps>

<https://www.canr.msu.edu/news/plant-identification-theres-an-app-for-that-actually-several>

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Ending of the COVID-19 Health Emergency and Medicaid Redetermination

With the end of the COVID-19 Health Emergency by the Department of Health and Human Services (HHS), those with Medicaid will need to be on the lookout for a notice of redetermination. When the COVID-19 Health Emergency was in effect, the federal government put renewals for Medicaid on hold. It has been three years since people with Medicaid were required every year to review their eligibility for Medicaid. Now that the emergency is over, redeterminations will resume.

If you are a KanCare beneficiary, ensure your contact information is correct with KanCare. If your information is incorrect, you may not receive your redetermination notice and could lose your KanCare benefits. Contact KanCare at 1-800-793-4884 or visit kancare.gov and click the red chat bubble to verify your information. You should see your renewal notice in the mail the month before your Medicaid initially started.

Once you have received your renewal, review the information, sign the form, and return it to KanCare. An unsigned form could cause you to lose your Medicaid benefits. You will have 30 days to complete and review the form and return it to KanCare. If KanCare does not receive your form, they will contact your Medicaid provider, telling them that you did not return your review form, which could result in a loss of coverage. Your provider will attempt to contact you to let you know that you will lose coverage. You will have 90 days after disenrollment to submit the review form. Work with your Medicaid provider to have your coverage reinstated.

Aetna: 1-855-221-5656

Sunflower: 1-877-644-4623

United Healthcare: 1-877-542-9235

Those determined to be ineligible for KanCare will receive a letter stating that their coverage will end. You may be able to reapply. You will need to contact KanCare for more information about reapplying for KanCare. If you are ineligible for KanCare, you may be eligible for an Affordable Care Act plan. You can also contact a trained ACA Navigator for help selecting an ACA plan. Navigators offer unbiased information in choosing an ACA healthcare plan. For information on where to find a Navigator, call Cover Kansas at 1-866-826-8375.

The KanCare Ombudsman Office can help with questions, help resolve issues, give you help understanding applications and letters from KanCare, and help you complete an application or renewal. Contact the Ombudsman at 1-855-643-8180 or KanCare.Ombudsman@ks.gov.

Cindy Williams
District Extension Agent, Family & Community Wellness

Sesame Allergy: A Growing Concern

Those little seeds on top of hamburger buns look good, but to some people they are a health hazard. An estimated 1.5 million Americans have a sesame allergy.

Sesame is found not only on top of buns but in many Asian dishes and in hummus made with tahini paste. Sesame seeds range in color from white to black. Allergic symptoms include mild skin irritations and hives to anaphylactic reactions.

If you suspect you are allergic to sesame, take steps to find out for sure. See a board-certified allergist for diagnosis. Read food labels, all of them!!! Keep a food log to track what you ate. This is very helpful when seeing a doctor.

What is Alpha-gal Allergy?

Speaking of allergies, what is Alpha-gal allergy? The next time you work outside or do outdoor recreation, be aware of ticks and protect yourself from tick bites. The Lone Star tick has been linked to causing allergic reactions after eating red meat.

The Lone Star tick is a vector that can spread disease. Mosquitos and fleas are other insects that spread disease. The Alpha-gal molecule is carried in the saliva of Lone Star ticks. People bit by this tick can become sensitive and produce the immunoglobulin E (IgE) antibody. Unlike typical food allergies, which is a reaction to protein, this is a reaction to the carbohydrate galactose- α -1,3-galactose. This carbohydrate is found in most mammals, such as red meat animals. It can also be in products made from mammals. It is not found in poultry or fish.

Symptoms include rash, hives, difficulty breathing, drop in blood pressure, dizziness, fainting, nausea, and severe stomach pain. These symptoms can occur in 3-6 hours after eating red meat.

The Alpha-gal allergy can be severe, and potentially life-threatening. See a healthcare provider immediately for care.