

David Hallauer
District Extension Agent, Crops & Soils

Looking Ahead to Fungicide Applications

Mid-summer kicks off fungicide application season for many corn/soybean growers. If the confirmation this week of Tar Spot in NEK (https://eupdate.agronomy.ksu.edu/article/low-levels-of-tar-spot-have-been-confirmed-in-kansas-646-1) caused you to think refocus/reconsider applications, you might also be wondering how to maximize their value.

Start by understanding the disease in general. Plant Pathologists often reference the 'disease triangle' consisting of host, pathogen, and environment. The host is already planted. In the case of Tar Spot, the pathogen has been confirmed in our area, but other diseases (Southern Rust, Gray Leaf Spot, etc...) may also be of interest even if we haven't seen or heard about them yet. An understanding about what we are up against now or in the future is key. Take soybean diseases for example. There are fungal diseases in soybeans, but they tend to be yield limiting less often than diseases in corn. Understanding disease potential can help us make fungicide application decisions that are economical and environmentally sensible.

Next, figure out what fungicide best fits the disease(s) of concern. Not all fungicides are created equal against all diseases. University Plant Pathologists regularly update fungicide efficacy ratings for various crops. For Tar Spot, 26 products are listed. Only three are rated Very Good. Eight are listed as good to very good. Nine are either not labeled or efficacy is unknown. For Gray Leaf Spot, 15 products are rated Very Good to Excellent. Selection of the right product needs to begin with a hard look at what we expect that product to control.

Timing is key. Dr. Onofre outlines guidelines directly related to Tar Spot with some variability based on when you find the disease, crop growth stage, etc... Scouting is an important aspect of determining when to apply, not only for knowing what disease(s) might be present, but also to determine crop growth stage. Most fungicide products have a period of activity extending from 14-21 days after application. Apply too early, and there may not be enough active ingredients remaining in the plant to combat disease. Apply too late and there will be some diseases the product may not be able to get ahead of.

Pay attention to the small details. Product rates vary, often according to what we're trying to control. Mix order can be important products. Nozzles can make a difference. Environmental conditions are important – small droplets can evaporate after leaving the spray nozzle if humidity is less than 50 percent and temperatures are more than 92 degrees after application.

When a fungicide doesn't work as expected, we often look back at one or a combination of these factors to find the culprit. Planning on the front end might keep us from have to look back at all – because the result was what we hoped for all along. For a list of corn fungicide product ratings, visit https://cropprotectionnetwork.org/publications/fungicide-efficacy-for-control-of-corn-diseases or request a copy via any District Office or dhallaue@ksu.edu.



Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Foot Rot in Wet Conditions

There is something completing and satisfying to the life of a cowboy, when turning cattle out cows on green grass. However, the work is never done and challenges shift from one season to the next. The recent rainfall has been very welcome in keeping that grass green and growing, but it also has created pastures that are muddy, soggy, and standing in water. These conditions can increase the likelihood of "foot rot" in grazing cattle.

"Foot rot" is somewhat of a generic term used to describe infection, most often bacterial, in the foot of the animal. Foot rot is an acute or sub-acute necrotic infectious disease which causes swelling and lameness in at least one foot. The disease can cause severe lameness, decreased weight gain and lower milk production. If treatment is delayed, deeper structures of the foot may become infected, leading to chronic disease and poor recovery.

Fusobacterium necrophorum is the bacterium most often isolated from infected feet. This organism is present on healthy skin, but it needs injury or wet skin to enter the deeper tissue. Mechanical injury, cuts, bruises, puncture wounds or severe abrasions of the foot will damage the skin in the area between the toes and predispose an animal to infectious agents.

Lameness is usually the first sign of an infected animal, varying from barely noticeable to severe limping. Lameness is typically followed by reddening of the interdigital (between toes) tissue and swelling of the foot, causing the spreading of the toes. One or more feet may be affected simultaneously. Spreading of the dewclaws due to swelling is a classic sign of foot rot.

Treatment of foot rot is usually successful particularly when diagnosed early. The interdigital tissue should be cleaned and disinfected. Most cases respond readily to systemic antimicrobial therapy, administered the first days of diagnosis. If treatment is not initiated until later in the process, multiple treatments may be necessary. Visit with your veterinarian to determine the best antibiotic treatment for your cattle that have become infected with foot rot.

Prevention and control of foot rot begins with management of the environment. Management practices that help reduce interdigital trauma will help decrease the incidence of foot rot. Important preventative measures include a well-balanced mineral nutrition program and minimized exposure to conditions that can cause skin or hoof injury. Wet, muddy conditions in pasture was mentioned today, but allowing cattle to stand in ponds or muddy feedlots can be common culprits as well.

To summarize, foot rot is a major cause of lameness in cattle and can have a severe economic impact on animal health, animal performance and enterprise profitability. Skin and hoof lesions allow bacteria to invade live tissue. The most important preventive measures should focus on protection of interdigital skin health. Important preventative measures include a well-balanced mineral nutrition program and minimizing exposure to conditions that may cause skin or hoof injury. Treatment is frequently successful if the disease is diagnosed and treated early.

The OSU Fact Sheet AFS-3355 <u>Cause, Prevention, and Treatment of Foot Rot in Cattle</u> serves as the reference for this article and can be referenced to learn more. As with any health concern, consultation with your herd health veterinarian is often the most important first step.



Laura Phillips
District Extension Agent, Horticulture

De-Thatch Your Warm Season Lawn

If you have warm-season turf grass, like bermudagrass or zoysiagrass, now is the time to think about dethatching. Thatch refers to the layer of dead grass and roots that build up between your living grass and the soil.

Normally, thatch is not a problem. In fact, a healthy layer of thatch less than ½ inch thick can provide insulation from temperature fluctuations and help conserve soil moisture. But when thatch gets more than ½ inch thick, it can cause serious issues for your lawn. Thick thatch can harbor pests and diseases that attack your turf, and it can lead to poor root growth for your grass.

So, when the thatch in your lawn gets thick, it's time to dethatch. Because these operations thin the lawn, they should be performed when the lawn is in the best position to recover. For warm-season grasses that time is June through July. Buffalograss, our other common warm-season grass, normally does not need to be dethatched.

Thatch is best kept in check by power-raking and/or core-aerating. If thatch is more than 3/4 inch thick, the lawn should be power raked. Set the blades just deep enough to pull out the thatch. The lawn can be severely damaged by power-raking too deep. In some cases, it may be easier to use a sod cutter to remove the existing sod.

Bermudagrass will often come back if rhizomes remain in the soil. If not, you will need to start over with seed sprigs or plugs. If thatch is between one-half and a 3/4- inch, thick, core-aeration is a better choice. The soil-moisture level is important to do a good job of core-aerating. It should be neither too wet nor too dry, and the soil should crumble fairly easily when worked between your fingers. Go over the lawn enough times so that the aeration holes are about 2 inches apart.

Excessive thatch accumulation can be prevented by not over-fertilizing with nitrogen. Frequent, light watering also encourages thatch. Water only when needed and attempt to wet the entire root zone of the turf with each irrigation. Finally, where thatch is excessive, control should be viewed as a long-term, integrated process (i.e., to include proper mowing, watering, and fertilizing) rather than a one-shot cure. One power-raking or core-aeration will seldom solve the problem.



Teresa Hatfield
District Extension Agent, Family and Community Wellness

Strength Training Becomes Essential

It seems that the older we get, the harder we have to work at maintaining our fitness. Strength training is no exception. Strength training is essential for maintaining muscle mass; more importantly, it helps keep you independent and improves your overall quality of life. Strength training is not just for the younger folks.

As we get older, our muscle mass begins to decline. This decline starts to accelerate after age 50. Muscle loss can lead to frailty, balance problems, and an increased risk of falling. Strength training builds muscle, but it also improves our bones. As we age, we are more susceptible to osteoporosis; weight-bearing exercise helps to prevent bone loss. Building or maintaining muscle and bone mass makes daily activities easier, like climbing stairs, carrying groceries, and getting up and down from a chair.

It's not hard to get started. K-State Research and Extension offers an eight-week strength training program called Stay Strong, Stay Healthy. Stay Strong, Stay Healthy is an evidence-based program developed by the University of Missouri that offers low-impact exercise to help improve strength, flexibility, and balance in a safe, supportive environment. Another bonus to the class is that you will get to make new friends.

Our next Stay Strong, Stay Healthy opportunity begins on July 22, 2025, at the Meadowlark Extension District office in Seneca. The class will meet for 16 one-hour sessions on Tuesdays and Thursdays. Registration is required as class size is limited. Call the Meadowlark District Extension office to register or for more information call 785-336-2184.

Aging is inevitable, but frailty doesn't have to be. Strength training empowers older adults to take charge of their health, maintain independence, and enjoy life to the fullest — one repetition at a time.



Cindy Williams

District Extension Agent, Food, Nutrition, Health, and Safety

General Home Ownership Checklist

June is National Homeownership Month. Homeownership plays a vital role in our economy and can help build individual wealth, promote community stability and improve overall health. But like any investment, a home requires regular maintenance to keep it in good condition.

As we enter the summer months, here are a few maintenance tips to keep your home in top condition:

Indoor Maintenance Tips:

- Ensure windows and doors open and close smoothly.
- Replace your air conditioner filter.
- Test ceiling fans for proper operation.
- Clean dryer vents and screens.
- Check smoke detectors and carbon monoxide alarms.
- Look for signs of leaks around windows and door sills.

Outdoor Maintenance Tips:

- Confirm water drains away from the house.
- Clean gutters and downspouts.
- Inspect shingles for damage or signs of leaks.
- Service your air conditioning unit before the heat hits.
- Check for peeling paint and make touch-ups as needed.

By addressing maintenance issues early, you can help prevent costly repairs down the road.