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What to Expect from Fungicide Applications to Corn

Most years at this time, our corn crop looks good, but precipitation prospects start to decline. At the same time, we can see high humidity during the day and even heavy dews overnight that keep the crop's canopy *just* wet enough to provide the potential for disease pressure. It can make our decision to apply a fungicide – or not – more difficult than we'd like.

If you're on the fence about a fungicide application, start with a look at hybrid disease susceptibility as well as the previous crop and weather outlook. Southern rust (confirmed thus far only in a few counties in Georgia-Florida...) likes nights above 80 degrees and high humidity. Tar spot likes cooler temperatures and prolonged leaf wetness. Gray leaf spot and Tar spot both survive on corn residue, making previous crop important, whereas Southern Rust has to blow in each year. If you scout knowing these factors, it can make the decision-making process a little easier. For example: if a susceptible hybrid is showing disease symptoms on the third ear below the ear or above on 50 percent of the plants, it's probably good to at least consider a fungicide, whereas many resistant hybrids may not require anything at all (depending on disease...).

If you do elect to apply, do so in as timely a manner as possible. Tassel to R1 applications are typically the 'sweet spot', but make timing decisions in collaboration with scouting. If little to no disease is present, waiting until R1 might be worth it. Fungicide efficacy will begin to decline in three to four weeks, with later applications providing better potential to protect against later season pressure (some data suggests we might even be able to go later...)

Will it pay? University of Illinois corn fungicide trials have shown that if at least five percent of the ear leaf was affected by disease at season's end, a fungicide application at VT to R1 would likely have been beneficial. You can help make plans for *next* year by doing end of season evaluations to see how much disease pressure was actually present.

Want to track disease movement, visit <https://corn.ipmpipe.org/> . It's useful to monitor Southern Rust and Tar Spot. Individual field scouting is likely a better option for Gray Leaf Spot.

Bagworm Hatch

If you've ever fought bagworms, you know how quickly they go from hatch to damaging to uncontrollable. While they're relatively easy to control when young, they're difficult to find. Further compounding the management process is the fact they may hatch over several weeks.

Control efforts will depend a lot on potential pressure from previous year's bags as well as the health of your trees. With that in mind, scout now. Young bagworms were confirmed this past week almost as far north as the state line, with larger larvae likely further south.

Lots of products can control bagworms (and on smaller shrubs, hand picking may be as effective as anything), but all require good coverage (top to bottom and inside to outside) when bags are small. If you've got evergreens, start scouting now to prevent bigger issues later. For information, see our bagworm resource at: <https://bookstore.ksre.ksu.edu/pubs/MF3474.pdf> .

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Livestock Water Requirements

Nothing can be quite as refreshing as a cool drink of fresh water on a hot summer day. While this true for us, it is equally true for our livestock. Water quantity and quality are critical to the health and performance of livestock. Hot weather and drought conditions can impact both water quality and quantity. As the weather warms up and much of the state continues to deal with long-term drought conditions, keep these points in mind. Let's call this article part number one of two and focus on water quantity this week.

The importance of water is often overlooked, and performance can be affected by water intake. So how much water do livestock need? There is no one answer for how much water our livestock consume, because needs are influenced by environmental temperature/humidity, class of livestock, weight, and stage of production, to name a few. The warmer the weather and more active the animal, the more water needed. Feeds with higher water content (lush grass, silage, etc..) will contribute to overall animal water intake, so water isn't just in the tank or waterer. These many factors make water needs difficult to measure at times.

Some general NRC guidelines for livestock water needs are as follows:

Beef Cattle: Lactating cows need 2 gallons of water per 100 pounds of bodyweight per day. Bulls, dry cows and growing calves need 1 to 1 ½ gallons of water per 100 pounds per day. Milk is 87% water, so lactating animals require more and nursing animals get some water from milk.

Dairy Cattle: Calves and developing heifers require 1 to 1 ½ to as much as 10 gallons per head per day. Dry cows range from 9 to 13 gallons per day. Lower production cows can consume 18 to 22 gallons, but high production cows will consume 35 or 40 gallons of water per day.

Horses: Level of activity can have a major impact on horses and the more they exercise and work, the more water needed. Yearlings will consume about 5 gallons per day, ranging up to mature, active horses needing 20 or more gallons on a hot day.

Small Ruminants: Lambs and kids will consume anywhere from ¼ to 1 ½ gallons per day. Mature animals will be in the range or 1 to 2 gallons per day. Ewes or does raising twins or more require double the amount of water to support fetal growth and lactation.

Swine: Growing pigs have an incremental increase in needs, ranging from nursery pigs needing about ¼ gallon to finishing pigs requiring up to 3 gallons per day. Non-pregnant females and boars will need 3 to 6 gallons per day, with lactating sows consuming 5 to 8 gallons per day.

Poultry: Work at the University of Georgia provides the general rule of thumb that for each pound of feed consumed, poultry will need 1.55 to 1.75 pounds of water (8.34 #/gallon).

Water is considered the most-important nutrient, because of the vast number of biological functions that rely on water. Growth, development and reproduction may be inhibited by not providing enough water. The best way to ensure that livestock have access to the complete recommended amount of good-quality water, is to have reliable water sources. It's particularly important that young animals are able to reach the water to drink. Watering systems need to be able to provide adequate drinking space, volume and recharge capacity for the animal demand, especially in hot weather.

Regardless of water type, ensuring that fresh, clean water is freely available is the easiest way to encourage feed intake to promote animal growth and production. During periods of high-water consumption, like lactation or heat stress, it will be beneficial to provide additional water, maybe even water sources. Next week we'll take a look at some of quality related issues to consider with livestock water, in part number two.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Listeriosis-Food Borne Illness

On June 21, 2023, the Food and Drug Administration (FDA) issued a voluntary recall for certain frozen fruit products linked to contamination with *Listeria monocytogenes*. Retailers and products involved in the recall are:

- **Walmart:** Great Value Mixed Fruit, Great Value Dark Sweet Cherries, and Great Value Mano Chunks sold between January 19-June 13, 2023.
- **Whole Foods:** 365 Organic Tropical Fruit Medley, 365 Organic Pineapple Chunks, 365 Pineapple chunks, 365 Organic Strawberries, 365 Organic Sliced Strawberries and Bananas, and 365 Organic Blackberries distributed across stores throughout the U.S. from November 1, 2022, to June 21, 2023.
- **Trader Joe's:** Trader Joe's Organic Tropical Fruit Blend distributed to select center stores from March 28 to April 11, 2023
- **Target:** Good & Gather Organic Cherries and Berries Fruit Blend, Good & Gather Dark Sweet Whole Pitted Cherries, Good & Gather Mango Strawberry Blend, Good & Gather Mixed Fruit Blend, Good & Gather Mango Chunks, Good & Gather Blueberries, and Good & Gather Triple Berry Blend distributed nationwide from October 14, 2022, to May 22, 2023.
- **Aldi:** Season's Choice Tropical Blend distributed between October 11, 2022, to May 22, 2023
- **AWG (Associated Wholesale Grocers) Best Choice** Pitted Red Tart Cherries Unsweetened distributed between April 5 to May 4, 2023.

The FDA reports that to date, there have been no illnesses associated with the voluntary recall. The FDA argues that consumers check the freezer for the recalled product, not consume it, and either discard it or return it to the store for a full refund. For more information about the recalled products, visit the FDA website at: <https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts>.

What to Know About Listeriosis

Listeriosis is a foodborne illness that is more of a concern for certain groups of people. The *Listeria* bacteria causes the illness. *Listeria* is a bacteria that is found widely in nature. The bacteria can live even in extreme environments like your freezer or refrigerator. Symptoms of listeriosis include fever, headache, tiredness, aches, and pains. Less common symptoms include diarrhea, nausea, and abdominal cramps. Older adults, young children, pregnant women, and people with compromised immune systems are at the most significant risk. Listeriosis can be very dangerous in these groups.

Reduce Your Risks

- Wash your hands before preparing food, including ready-to-eat food.
- Keep your refrigerator clean and operate between 34° F and 40° F.
- Wash utensils, cutting boards, and kitchen appliances after handling raw food to prevent contamination of cooked and ready-to-eat foods.
- Wash and dry fruit and vegetables before you eat them.
- Thaw frozen food in the refrigerator, don't thaw at room temperature on the counter.
- Thoroughly cook all meat, chicken, and fish. Use a meat thermometer to check for the required temperature.
- Keep hot food hot (140° F or hotter). Keep cold foods cold (40° F) or colder.
- Reheat leftover food until steaming hot.

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- Store raw meat, poultry, and fish separately from cooked and ready-to-eat food in the refrigerator. Store raw foods below other foods so there is no chance they will drip onto other foods.

For additional information, contact Teresa Hatfield at the Meadowlark Extension office at 785-354-4125 or thatfield@ksu.edu.

Cindy Williams
District Extension Agent, Family & Community Wellness

Effective Delegation in the Family

If everybody in a family helps create the work, why shouldn't everybody join in getting things done? As long as one person works double time, others are less likely to pitch in and help. There are four common reason why people choose not to delegate:

- They feel like they aren't doing their job
- It is easier to do the job themselves
- They like being recognized for doing the job
- The responsibility for a task may be too scattered

Whether you are volunteering within a local group, serving on a committee at work, or dealing with a family situation, dividing large tasks into smaller segments that can be shared is beneficial for everyone. Don't let guilt feelings interfere with good intentions. If you find it difficult to delegate, follow these suggestions:

- Define responsibilities clearly. Allow for individual differences in the way tasks are done, but define limitations to provide consistency.
- Delegate complete segments of a task. Make sure others can see the end goal. Others may lack motivation if they are asked to do only bits and pieces of a project.
- Feedback is important, but be honest and accurate in your assessment. Emphasize what went wrong, not who did something wrong. Praise efforts of family members, and expect some mistakes in the beginning.
- Set goals and performance standards. Discuss expectations and deadlines for particular tasks. It maybe helpful to write out responsibilities and deadlines.
- Provide support. Share your knowledge, information and plans. If special skills are required, teach others or provide the means for them to attend necessary classes in the community.
- Share decision-making. Let others have a voice in the plan. If you ask your spouse to do the grocery shopping, let that person plan the schedule and decide if it is easier to go once or twice a month.
- Let go of authority. Transfer authority to allow others a feeling of personal success or failure. Perhaps the most difficult part of delegating is letting go.
- Remember to say "Thank you." After a job is done, acknowledge the accomplishments of others. Commend and encourage family members as they learn new responsibilities.

Delegating has a long-term advantage. You teach someone else skills and responsibilities. It is easier on everyone's schedule if tasks are divided among many members. On the job, at home, and in the community, most work is the responsibility of a group, not just one person.