

David Hallauer
District Extension Agent, Crops & Soils

Soybean Seed Treatments – Will They Work?

It's always a bit of a tricky 'balance' when we get spring moisture like we did across NEK last week. We want (need...) it to help with emergence but if it leads to emergence issues (crusting, etc...), sometimes we'd just as soon the plant emerge before moisture arrives.

Sometimes the plant doesn't emerge, or emerges looking rough, requiring a deep dive into potential causes. Compaction, residue levels, cold stress, etc... all must be considered. So, too, does the possibility of a soybean seedling disease.

Most of our soybean seed is treated with some level of a seed treatment and they work well – so much so we often take them for granted. Still, understanding what that treatment is – and what it will combat – is an important part of diagnosing emergence issues when they are attributed to disease. For example, metalaxyl and mefenoxam have activity against diseases like Pythium or Phytophtora – but not Rhizoctonia or Fusarium. Even within products, differences exist in how well they provide protection. Sometimes that's due to active ingredient. Sometimes it's due to rate (fields with a history of Phytophtora will require higher treatment rates). Knowing what we have for a treatment can tell us a lot about what issues might potentially be ahead of us.

If you've used a top end seed treatment and still have issues, what's next? Resistance is a common concern in the agriculture product protection arena, with weeds in particular commonly exhibiting resistance. While resistance to seedling disease products can occur, it has been rare. That doesn't mean it can't occur, just that it's likely not the first thing we should look at.

What maybe should be more at the front of our mind is our expectation of what a seed treatment can do. Most of the time, treatments provide excellent results – to the point we take them for granted. They do have limitations, however. For example: seed treatments only protect seeds and seedlings for (give or take depending on product and rate...) approximately three weeks after planting. If environmental conditions conducive to disease don't arrive until after the protection period has lapsed, we may be past our protection window and at least some disease pressure is to be expected (particularly on a susceptible variety).

As with any crop protection chemical, an integrated management approach is always the best option. For fields with a history of soybean seedling disease issues, consider additional measures to help such as improving drainage, planting resistant cultivars, or planting time management to reduce factors contributing to disease pressure (compaction, heavy rains, etc...).

If seedling disease issues do arise and you're in need of troubleshooting help, drop me a line. The K-State Plant Disease Diagnostic Laboratory can test samples for multiple soybean seedling diseases to pinpoint exactly what might be going on so you can manage accordingly.



Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Making Stocking Rates Work

It is the time of year when ruminates are getting turned out onto high quality, green, growing grass. It might seem now like there is an over abundance of forage, but do you have a plan for properly stocking pastures? Whether it's native rangeland, cool season pasture or annual forages, proper use of pasture is a key to livestock operation success. To properly manage the land, a producer must be familiar with the amount of dry matter forage the pasture can produce and the forage required over the grazing season by each animal and the entire herd. Using a management program focused on stocking rates allows livestock producers to efficiently manage forage resources. Here are some key factors influencing stocking rates.

Grazing management. Continuous, season-long grazing can be an inefficient way to harvest plant growth. Losses due to trampling, plant maturation and leaf death, wastage, insect loss, disease, and degree of use are all higher with continuous grazing than with rotational grazing. A simple rotation involves two or more separate pastures that are grazed only once during the growing season. Such systems can provide 20% higher grazing capacity than a continuous grazing system. More intensive short-duration or time-controlled grazing systems that involve numerous areas grazed several times each season can allow up to 30-50% higher stocking rates than a continuous grazing system. These rotational grazing systems improve livestock distribution, reduce waste, allow longer periods of no grazing rest, and maintain plants in a more nutritious vegetative growth stage for longer periods of time.

Weather. Suggested initial stocking rate assumes "normal" weather, good plant vigor, uniform grazing patterns and level consumption. These assumptions are often incorrect, so stocking rate must be managed to fit the situation. Weather variation most frequently dictates stocking rate adjustments. We've been dry, until recently, so don't assume forage production this year will be "normal". Economic signals say expand, but what does weather say?

Plant vigor. Prior over-grazing or adverse weather conditions may reduce desirable plant vigor. Many areas have been dealing with prolonged drought which decreases plant health, vigor, diversity and stand density. Keep an eye on the plants for vigor and determine if there are management issues that might help enhance the plant component of the grazing operation.

Forage intake. Forage intake by a group of livestock during a grazing season varies very little, so stocking rate adjustments aren't needed. However, environmental stress, forage quality and previous nutrition of the animal may influence level of forage consumption greatly. Plan and monitor your pasture routinely to enhance your pasturelands and the condition of your cattle.

If cow-herd expansion is in your plans, what's the first thing to do to provide more pasture? Should you rent or buy additional acres, add legumes and/or fertilizer to increase production, or perhaps increase the number of paddocks? Traditionally, the thought is more land for more grass but, depending on current use of grazing systems, inputs into existing systems might be cheaper than purchasing land, especially as grass acres are rapidly disappearing.

An action item the grazing manager needs to consider in growing more forage is to plan for additional cross fencing to improve grazing management. Increasing the number of paddocks is the first option to evaluate toward increasing the grazing management. Adding cows also means more winter feed, so that portion of forage inventory also needs to be considered.

Keep all of these things in mind when planning on how you will manage your grass resources this spring and summer. Good luck and keep praying for rain this summer.





Laura Phillips District Extension Agent, Horticulture

No news article this week.



Teresa Hatfield
District Extension Agent, Family and Community Wellness

Sip Smart: The Importance of Staying Hydrated

It will be warming up in a few weeks and usually gets downright hot shortly after that. With the warm and hot weather, it's essential to stay hydrated. Water is vital for our health. We need water to help us digest food, in the blood to transfer nutrients and oxygen, and to carry away waste. Water also helps to regulate our body temperature, reduce constipation, improve energy levels, and improve brain function. For all these reasons, it's important to drink plenty of water.

How much water you need to consume each day depends on many factors. People use up to 2 ½ quarts of water by breathing, sweating, and eliminating body waste daily. Other things can affect the amount of water you need, such as if your diet is high in sodium if you live where it is hot outside, if you are active, or if you are ill. You generally take in 20% to 30% of your water intake from the foods you eat and the rest from fluids. To keep hydrated, you need to drink eight 8 oz glasses of water daily. Foods that contain significant amounts of water include lettuce, watermelon, cucumber, grapefruit, and broccoli.

A dry mouth, chapped lips, and dark urine are signs of dehydration. You need to drink more water if your urine is bright yellow to yellow-orange or dark gold. Ensure you drink water throughout the day, and do not limit your intake to avoid going to the bathroom. Dehydration can become dangerous; severe dehydration can cause swelling in your brain, seizures, and kidney failure.

Do you need help getting enough water daily? Here are some tips.

- Drink a glass of water every morning when you wake up
- Use a reusable water bottle and keep it with you all day
- Use fresh fruit to flavor your water; even try mint or cucumber.
- Make fruit ice cubes by freezing juice in ice cube trays or use frozen berries in your water
- Add fruit juice to seltzer or club soda for a bubbly spritzer.

Try this recipe to flavor your water.

Fruit Ice Cubes

Ingredients
½ cup blackberries
½ cup strawberries
½ cup honeydew melon
One kiwi
1 cup water

Directions

- 1. Place all ingredients in a blender or food processor and blend until a smooth consistency.
- 2. Pour the fruit and water into an ice cube tray, filling each hole evenly.
- 3. Put the ice cube tray into the freezer and leave overnight.
- 4. Use fruit ice cubes as you typically would for beverages.

(Recipe from the University of Missouri, Stay Strong, Stay Healthy)



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

Celebrate Mother's Day and Learn About Traditional Mexican Food

May 5th, known as Cinco de Mayo in Mexico and in parts of the United States, is a holiday commemorating the Mexican Army's victory over the French during the Franco-Mexican War in 1862. In the United States this holiday has become a celebration of Mexican culture and heritage.

Like many cultures, family plays an important role in Mexican lives. In Mexican households, families gather at meals to build a sense of togetherness. Traditional staples of their meals might include grains and legumes. Among the most important ingredients in Mexican Cuisine are corn, beans, squash, tomatillos (the Mexican corn husk tomato), and various types of chili peppers.

The national dish is mole, a sauce served at daily meals. Depending on the recipe, moles may have over 20 ingredients! Many people believe that mole is high in fat and sodium. However, there are many ways to prepare moles, and other traditional Mexican dishes, in a healthier way.

One way is to use olive oil in place of lard or other high-fat oils. To make a low-sodium meal, use herbs and aromatics instead of salt to boost flavor. These can include: basil, oregano, garlic, onion and the traditional varieties of green chilies. It is also suggested to keep ingredients high in fat and calories, such as cheese, to a minimum---or leave it out all together and limit serving sizes at meals.

This Mother's Day try preparing a Mexican dish, like mole, using healthy ingredients in a traditional recipe. It is sure to be a great way to tell your mother, "Te quiero" (I love you).