

David Hallauer  
District Extension Agent, Crops & Soils

### **Soybean SDS**

If soybean Sudden Death Syndrome (SDS) reared its ugly head in *your* fields this summer, harvest is providing you an opportunity to see how it affected yields. While losses are difficult to quantify – particularly this year with multiple late season factors affecting yield – heavy disease pressure can result in premature defoliation and fewer/smaller seeds.

The presence of SDS *this* year does not automatically equate to future problems. We have tended to see SDS in Northeast Kansas in years with vigorous plant growth, leading to lots of biomass with high yield potential. Moisture (particularly at planting) needed to do so sets us up for pathogen infection early in the growing season. The disease then lies somewhat dormant, showing up later as it moves through the plant, potentially reducing yield as it does. If SDS only shows up occasionally, maybe it's not much of a concern. If, however, you are looking at ways to combat it with *next* year's management, consider the following options.

Cool/damp soil conditions favor SDS infection that often occurs within a few days of germination. For fields previously exhibiting SDS, manage the planting window to avoid favorable infection conditions.

Resistant varieties are an option. Few have excellent resistance, and most are susceptible at least to a degree, but in higher yield (60+ bushels per acre) environments, susceptible varieties can yield as much as 40 percent *less* than resistant varieties where SDS is present.

Seed treatment fungicides can have some efficacy against SDS (foliar fungicides do not...), but they should be carefully for effectiveness. For more information on what works – and what may not – contact me via any of our District Offices.

Consider corn harvest practices as well since kernels left in the field may harbor the SDS fungus. Harvest management to minimize kernels on the ground can help with a number of issues – and reduce SDS risk as well.

What about the tie to SCN (Soybean Cyst Nematode)? We can have SDS without SCN – and vice versa, but research has linked the presence of SCN to higher levels of SDS (and increased yield loss). If you have fields with SDS not previously been evaluated for SCN, this fall might provide a good opportunity for SCN testing to eliminate it as a contributing factor.

For more information on Soybean Sudden Death Syndrome, check out this article from the Soybean Research and Information Network (and available upon request at any District Office):

<https://soybeanresearchinfo.com/soybean-disease/sudden-death-syndrome/> .

Ross Mosteller  
District Extension Agent, Livestock & Natural Resources

## Why Is This Cow Open?

With fall weaning happening now or very soon pregnancy checking of the cow herd to determine how many cows are open and need to take a trip to the auction market is happening now too. Cull cow value continues to be very good and checking for an open cow may have as much value this year as any. This got me thinking about open cows and the reasons why they are open. Abortion is one cause of open cows, let's spend some time talking about that topic.

The success rate for accurate diagnosis of cattle abortion is only 25-35%. That is concerning because identifying the cause is key to preventing future problems. One problem is abortions are often the result of something that occurred weeks or months before. That makes it difficult to determine the cause at the time of the abortion. In fact, many causes of abortion are unknown. If your herd has problems with abortions, here are some key questions to ask and discuss with a veterinarian:

- What's the problem? Was it a failure to conceive or were the fetuses lost? Were the cattle preg-checked? Pregnancy failure rate should be less than 5% as a production-loss goal.
- Which animals are involved? What's the difference between the groups that conceived and calved and those that didn't? Were the affected cows home-raised or new animals brought into the herd? Which age groups are affected? What was their vaccination status? Were modified-live (ML) or killed vaccines used? ML vaccines can cause abortion if given to pregnant cows, or to calves nursing previously non-immunized cows.
- Feed type, quality and condition are all important factors to consider. Moldy feed causes 3-10% of all abortions; inhaling mold spores is just as dangerous as consuming them. A vitamin A deficiency can also cause abortions.
- Which bulls were the cows exposed to? How did those bulls perform throughout the breeding season? Consider sexually transmitted diseases (STDs), especially if the animals were on a community pasture. Brucellosis, listeriosis and trichomoniasis are STDs that cause abortions. Do the affected cows have a common sire or dam?
- When did the problem occur? Were the fetuses lost at a certain stage of gestation? Abortion in the 9<sup>th</sup> month could be due to nitrates in the feed. Handling, or any kind of stress, can also trigger abortions. Did it occur on pastures or when feed was changed? Was the feed tested? Was it free of nitrates? Were cows affected suddenly, or did the problem pass through the herd slowly? Typical abortions occur at low levels of about 2% and are usually seen at the beginning of calving.
- Where did the problem occur? Did affected and unaffected animals reside in different pastures or ranges? What were the field conditions and stocking densities? Was feed and water plentiful?
- Why did it occur? Identify the cow that aborted and isolate it. Recover the aborted fetus and membranes. The stage gestation can be determined by fetus size and other characteristics: Submit as many fetus samples as possible to a diagnostic lab. The first calf to die is the most important, as a diagnosis may help avoid future abortions.

Laura Phillips  
District Extension Agent, Horticulture

### **Drought tolerant gardening**

The last few years in Kansas have been dry, causing many gardens and lawns to suffer. As our growing season winds down, it is the perfect time to brainstorm how to make your yard more drought tolerant for next year.

One way to prevent your garden from turning brown and crispy, is to plant drought tolerant species. Drought tolerant plants are accustomed to living without excess water, and will send deep roots into the ground to find moisture when our topsoil is dry. As any plant, these drought tolerant species will need extra moisture while germinating. Once they are established, however, will not require the same water consumption as other plants. Drought tolerant species include aster, showy goldenrod, lambs ear, coneflowers, coreopsis (tickseed), peonies, yarrow, and back-eyed susan. You can contact your local extension office for a longer list of drought tolerant species.

Even if you have drought tolerant species, you should work to increase your soil's moisture retention. This will help supply water to plant roots even when we go for weeks without rain. To help trap moisture in your soil employ the following techniques:

- **Cover any bare soil.** Bare soil that is exposed to the sun will lose water very fast. Planting groundcover, cover crops, or mulching around your existing plants will provide a layer of insulation to your soil. When the sun cannot reach the soil, you get cooler soil temperatures and less water evaporation.
- **Add in shade.** If your garden has no shade, consider putting up a thin shade cloth on hot days. Plants have pores under the leaves called stomata, where water is released and evaporates. That process is called transpiration. A hot, sunny day will increase the rate of transpiration. Shade cloths will keep plants cooler, decreasing water loss.
- **Add compost or manure.** Adding a layer of organic matter to your soil not only provides nutrient, but helps improve soil structure, which increases the ability for water to move through the soil. This helps increase water absorption and retention in your soil.
- **Use a soaker hose or drip irrigation.** Soaker hoses and drip irrigation put water straight into the soil and move water at a slower rate. If you have ever used a hose to water plants, you know that water will pool up on the soil where you are watering. By slowly adding water, you are giving the soil time to absorb it all, rather than creating run off.
- **Water deeply and less often.** Even when your top layer of soil has dried out, you often have moisture deeper underground. If we keep the very top layer of soil moist, plants may not have a reason to send their roots down to find moisture deeper in the ground. Try watering slowly, so that water goes 6 to 12 inches deep into the soil, and water less frequently, about once a month. This encourages plants to send their roots downward to find water and they do better in times of drought.
- **For lawns, mow taller and more frequently.** Tall grass has deeper root systems, and provides more shade to your soil. This both increases water retention and help your grass become more drought tolerant.

These strategies should help you to keep your garden green when we see little rain. For more information about water-wise gardening, you can contact your local extension office.

Teresa Hatfield  
District Extension Agent, Family and Community Wellness

### **The Importance of Sleep**

Most of us have had nights where we can't fall asleep or wake up in the middle of the night and can't get back to sleep. You toss, turn, and try to relax, but it's not working. Sleep can have a substantial impact on our physical and mental health. Your body needs sleep to repair muscles, make memories, regulate hormones and appetite, and help improve your immune system. There are so many reasons to get a good night's sleep, not to mention you feel so much better the next day.

Adequate sleep is essential to help our brains make new memories through consolidation. Getting enough sleep allows us to control our weight by processing and storing carbohydrates. Getting enough sleep helps to prevent accidents on the job, auto accidents, and medical errors. Sleep improves our mood and allows us to do our daily activities. Sleep improves our cardiovascular health by reducing stress hormones and lowering blood pressure. Sleep can also help us fight disease by improving our immune system, which can help us fight cancer.

Sleep needs vary depending on your age. Infants from birth to 2 months need 10 to 18 hours of sleep daily. As we get older, adolescents need 8.5 to 9.5 hours a day. As we get older, it may seem like we need less sleep, but we still need 7 to 9 hours of sleep per day. In older adulthood, it is common for sleep to be less satisfying and less recuperative. Older adults are more likely to get up at night for bathroom trips and have issues with aches and pain. So, it is normal to have occasional sleepless nights; however, if sleeplessness becomes a constant problem, you will need to consult your healthcare professional to ensure there are no underlying medical issues. If you are experiencing any of the following problems, consult your doctor.

- Daytime sleepiness
- Irritability or moodiness
- Difficulty staying awake when sitting still, watching television or reading.
- Falling asleep or feeling tired while driving
- Difficulty concentrating
- Told by others that you look tired.
- Slow reaction time
- Trouble controlling your emotions.
- Feeling the need to take a nap almost every day.
- Dependent on caffeinated beverages to keep going.

There are some tips and techniques you can use to try and get a better night's sleep. Following good sleep practices can help improve your quantity and quality of sleep.

- Use your bed for sleep and sex only. Try to avoid reading, conversing, or watching television.
- Use relaxation techniques to reduce stress.
- Stay in bed only a short time if you can't go to sleep. Get up and do a relaxing activity.
- Avoid caffeine, nicotine, and alcohol at least 3 hours before bedtime.
- Daytime naps could make it difficult to fall asleep.
- Eat a balanced diet, and don't eat heavy meals close to bedtime.
- Keep a slightly cool bedroom temperature.
- Seek treatment for allergies, colds, or sinus issues.
- Go to bed and get up at the same time every day, including weekends.
- Avoid screen time at bedtime; no computers, phones, or pads.
- Avoid worrying about problems too close to bedtime.

Sleep is necessary for our overall health and well-being. Getting a good night's rest is vital to waking up feeling rested and ready for the day. Ignoring the problem can lead to poor health, impaired job performance, and increased stress. Remember, consult your healthcare provider if this is a continuing issue.

Cindy Williams  
District Extension Agent, Family & Community Wellness

### **Small Changes Can Make Favorite Foods Healthier**

Recently I had some nice feedback on a news column that I had done and this is why I am writing this one for this week. It was been well documented during the COVID-19 pandemic that Americans spent more time eating, working and cooking at home. For many, that included many more visits to the family's favorite recipe book.

Recipes are fun, but they are also a science. You can make some modifications and tweak recipes in some cases, but in a lot of baked goods, those measurements are based on scientific proportions. So, being accurate and following the recipe is really important.

Science is ever-changing. Because good nutrition is a very new science in comparison to many other sciences. The fact that nutritionists once advised people to choose a low-fat or nonfat diet.

That science has changed because now it's not just that you look at low-fat or nonfat foods, but it's the type of fat in that food. We always knew there were different types of fat, but years ago we thought they were processed the same in the body, and now we know they are not.

We recommend that people use unsaturated fats, rather than saturated fats. Things that we told people years ago to avoid, we now say to eat these because they're good for you, even though they have fat in them.

Those types of changes have helped form guidance for how to adapt time-tested recipes, some of which may have been passed down through generations of families.

Here are some other thoughts for choosing healthy recipes or adapting existing recipes to make them healthier:

**Look for vegetables:** We know that fruits and vegetables are important in the diet and the recommendations for how much to include have actually gone up over the years. One idea is to look for recipes in which vegetables can serve as a main dish and then if you want add meat with the meal, add a side dish of fish, grilled chicken or the occasional red meat. Instead of making the meat the main dish, make the vegetables the main dish.

**Use whole grains:** If a recipe calls for white rice, consider substituting brown rice or another grain. You can experiment a bit even with some of the ancient grains. Think about mixing grains, go half and half with pasta and rice, or half white/half whole grain pasta or rice.

**Use whole wheat flour instead of white flour:** This is an easy substitute for any recipe that is not leavened by yeast, including cookies and quick breads. If your family is not keen on traditional whole wheat flour, used white whole wheat flour.

**Bake it to make it:** If a recipe calls for frying a food, bake it instead, and avoid breading, which adds fat and calories.

**Cut the sugar:** Use one-third to one-half less sugar in recipes for such goodies as cookies, muffins and quick breads. If there's a recipe you use often, such as a family recipe, start by reducing maybe one-fourth of that sugar. Then each time you make the recipe, cut out a little more and note how much you used eat time. When you get to the point where that recipe is not working anymore, or your family may not like it, the you know that's how much you can cut out. Alter the recipe from there on. The same strategy can be sued in cutting back on salt.

**Substitute herbs and spices for salt:** Herbs and spices can be more pleasing in many foods. Many people's state buds are trained for salt, but with small changes, they can be re-trained to enjoy certain herbs and spices in foods.

**Choose dark greens:** Iceberg lettuce is the most popular type of lettuce, but it's mostly water. If you're going to use iceberg lettuce for a salad, load it up with lots of other vegetables--- tomatoes, cucumbers, peppers and more. Other suggestions for leafy greens include spinach, mixed greens, arugula and kale.

**Eat Mediterranean style:** This is a diet choice that incorporates fruit, vegetables, nut seeds, fish and leaner meats and lots of vegetables.