

David Hallauer
District Extension Agent, Crops & Soils

Soybean Sudden Death Syndrome – Disease Cycle

With soybean planting from a month to three months away, a disease like Soybean Sudden Death Syndrome (SDS) may not be on your radar. After all, it shows up later in the growing season making it of little concern very soon even for early planted beans, right?

While there's some truth to that, the mechanisms in place that result in greater levels of SDS actually get kicked off early in the season. Like any fungal disease, it needs a host – the soybean, a pathogen – SDS, and the right environment. A fungi surviving in crop residue *and* soil, it is ever present (pathogen: check) and ready to infect soybean roots (host: check) at planting, maybe within a few days of seed germination.

The environment portion of the equation is a bit trickier. Every disease has a 'range' of conditions they persist in. Sudden Death Syndrome prefers wet soils. It also prefers temperatures during early vegetative growth in the cooler range (60-65 degrees F). While this is often a factor of greater concern with earlier planted soybeans, it's also not uncommon for later planted fields to exhibit greater symptomology than earlier planted fields. Conditions in the early vegetative stage are key and can help guide later scouting efforts as well.

Other factors can contribute to the disease as well. Frequent or heavy midseason rains favor early expression of disease symptoms and irrigation provides the ideal environment for SDS development. On the other end of the spectrum, hot and/or dry conditions during the early to mid-part of the growing season can actually delay or even stop SDS symptom development (unfortunately, they often contribute to yield declines in other areas...). Soybean Cyst Nematode (SCN) levels can increase SDS severity, but SDS can occur independently of SCN and vice versa. Low soil fertility, poor drainage, and even compaction may contribute as well.

Once infected, toxins move through the plant's water conducting tissue to leaves where we start to notice the disease. This typically doesn't occur until after flowering, but if a variety is highly susceptible or soil conditions are extreme, symptoms can occur even early in the season.

As with most diseases, management includes a fair bit of playing the weather game – and that can be difficult. Next week: the impact of some of our production practices on SDS issues.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Adding Small Ruminants to a Cowherd

There seems to be a longstanding feud between shepherds and cowboys, especially when it comes to sharing range between large and small ruminant animals. Maybe there was logic in those feuds, but there seems to me to be science to say that with proper management ruminants can co-exist to mutual benefit. Please read on, but if you'd like to learn more on this topic, I'd encourage participation in the Northeast Kansas Sheep & Goat school in Effingham on March 5, with K-State's Dr. Kelsey Bentley.

Beef producers may need to consider several items before adding small ruminants to their operation. Producers adding small ruminants have found that the old recommendation of adding a ewe or doe per cow without adjusting their stocking rate, while improving their pasture utilization by 10-20% is achievable. This can bring more profit potential to the operation. Following are a few considerations when adding sheep or goats to a beef operation.

Forage utilization is improved when you graze multiple species. Different species have different grazing preferences allowing better utilization of not only the grasses, but forbs as well. Sheep tend to like broadleaf plants and goats are known to browse woody plant material. This lends itself to weed and brush control. Limited grazing resources are better utilized with increased stocking density in a multi-species grazing environment.

Generally speaking, parasites of cattle cannot survive in sheep or goats nor can parasites from sheep or goats survive in cattle. With the parasite life cycle broken, producers have an additional tool to manage parasites. In many cases, grazing multiple species together can reduce parasite loads in the soil with proper management. Small ruminant parasite management is critical to implementation success in any operation. This is another topic that Dr. Bentley will discuss and is very knowledgeable about.

There are some management considerations that should be thought through before purchasing sheep and/or goats. Small ruminants have similarities to cattle regarding grazing and feeding forages. Small ruminants are notably more susceptible to mineral deficiencies and toxicity issues, notably copper for sheep. Greater care during lambing is needed for newborn lambs as they are more susceptible to the environment. Sheep and goats are not just small cattle, so their nutrition, care and management practices need to be considered and prepared for.

Predators can be an issue which often leads to the incorporation of guardian animals. Fencing can be a consideration as well, as fences that hold cattle in may not be sufficient for sheep or goats. Another thing beef cattle rarely deal with is trimming hooves, but sheep and goats may require hoof trimming to prevent lameness. Starting with healthy stock and maintaining a good vaccine and treatment protocol is important to work out with your veterinarian. Products that are labeled for the treatment of infections in small ruminants are limited.

If the determination is made to add sheep and/or goats, the question then becomes what is the best breed to raise? The short answer is those that fit the goals and system, matches resources, and is profitable. Common wool of lower quality is becoming less valuable all the time, so if wool is a focus, fine wool breeds need to be considered. If meat production is the goal and producers do not want to shear, then hair sheep breeds may be the better choice, something goats already have an advantage in. Just like cattle, crossbreeding will improve hybrid vigor and help to sell more pounds of lamb and goat.

For more information on small ruminant management, the K-State Animal Sciences Sheep and Goat website is a great resource: <https://www.asi.k-state.edu/extension/sheep-and-goats/> If you're interested in joining us at the NE KS Sheep and Goat School, reach out to any Extension office in the Northeast corner of Kansas. Hope to see you March 5!

Laura Phillips
District Extension Agent, Horticulture

Garden Talk: Transplants or Seeds?

As you start planting your garden, you might be wondering – when do I put seeds directly into the garden and when should they be started inside? Starting seeds indoors can prolong your growing season. If warm season crops like tomatoes and peppers cannot germinate in colder weather, they will not start sprouting and growing until May. But if you start them inside where it is warm, they can get a head start on growing, hopefully lending to more produce.

While it might seem like a good idea to start everything inside, some plants simply do not thrive when transplanted. These plants tend to have delicate root systems that cannot survive disturbances. Beans, peas, and corn are common victims of this transplant shock. Another issue is that root vegetables can lose their fibrous taproot during transplanting, and while the plant may survive, the main harvest is lost.

Other plants germinate so quickly that there is not always a need to start them inside. For example, lettuce can germinate in the warm temperatures of late spring and early summer within a few days. Conversely, if you are planting in the early spring, you may want to use transplants, as lettuce can take up to two weeks to germinate in colder temperatures.

If you buy a packet of seeds, look on the back for growing instructions. It should tell you if the seeds need to be directly sown into the soil or if you can start them inside. Many plants can be grown either way, and it is up to you how you want to plant them. As we enter spring, take a moment to research and determine which of your plants can be started inside, and which will do better directly sown into the soil to maximize your garden's productivity this year. Your garden will thank you for it!

Plants to Directly Sow Outside

- Beans
- Beets
- Carrots
- Parsnips
- Peas
- Radish
- Rutabagas
- Sweet corn
- Turnips

Plants that do Best Started Indoors

- Brussels sprouts
- Celery
- Eggplant
- Leeks
- Melons
- Pepper
- Tomatillo
- Tomato

Plants that can be either sown directly or started indoors

February 27, 2026

- Broccoli
- Cabbage
- Collard
- Cucumber
- Endive/Escarole
- Kale
- Lettuce
- Pumpkin
- Spinach
- Squash
- Swiss chard

February 27, 2026

Teresa Hatfield
District Extension Agent, Family and Community Wellness

No news this week.

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

It's Not Too Early to Check Your Pressure Canner

I know that calendar still says its winter, the weather feels like early spring and gardeners are working on selecting their gardening seeds, so signs of spring are in the air! I don't think that we are done with winter yet, but we can hope! With those signs of springs, it is not too early to have your pressure canner dial gauge tested so when the produce is ready, your canner will be ready, too. Here are some other reminders.

All the extension offices in the Meadowlark Extension District have the Presto® Gauge Testing Unit. This can test pressure gauges on the brands Presto®, National, Maid of Honor, and Magic Seal. We have offices in Oskaloosa—785-863-2212; Holton-785-364-4125 and Seneca---785-336-2184. It is a good idea to call ahead to be sure someone is there that can do the testing.

This testing unit cannot test All American pressure gauges. Newer models of the All-American canner have both regulator weights (weighted gauge) and the dial gauge. This canner is actually a weighted gauge canner. The weight is more accurate than the gauge and customers should use the eight to achieve the pressure needed.

If the weight begins to rock at the desired pressure and the gauge is off by more than 2 psi, the company recommends replacing the gauge. The dial gauge is now used as a reference to know when the unit is at 0 psi and can safely be removed.

Come by any of our offices as we have several publications on canning, freezing, drying and preserving foods of all kinds. We also have specific publications on various food items, like tomatoes, cherries, beans, vegetables, etc. We also have a food preservation newsletter that comes out every other month and can be emailed to your home. Ask about that when you are in the office. If you have further food preservation questions/concerns, contact Cindy at 785-863-2212, at the Oskaloosa Office. There is no charge for any of these publications, newsletters or services.