

David Hallauer  
District Extension Agent, Crops & Soils

### **Soybean Sudden Death Syndrome**

During a recent visit to the Kansas River Valley Experiment Field near Topeka, I passed by the Soybean Sudden Death Syndrome (SDS) rating plots. While no symptomology was readily apparent, it's the time of year when they begin to, increasing concern about this disease.

Foliar SDS symptomology is easy to recognize and includes small, pale green to yellow circular spots on leaves early on. Over time, the leaf area between the veins turns bright yellow, then brown, with veins remaining green. The loss of green leaf tissue (or leaf tissue altogether...) can not only look bad but result in flower/pod abortion or reduced filling. Below ground issues include everything from root discoloration to root and crown rot.

Like any year, the SDS 'forecast' for this year is highly variable. Since infection occurs in young soybean roots shortly after germination, planting conditions play an important role in whether SDS becomes an issue. If soybeans are planted in cool/wet soil conditions, young roots can be affected, with the fungus remaining in said roots until the late vegetative or early reproductive stages when it produces a toxin that moves upward through plant leaves producing the aforementioned foliar symptoms. It also prefers high soil moisture during the vegetative growth period and unseasonably cool temperatures prior to or during flowering and pod set. If those are the conditions your soybean crop has seen this year, it's good to keep an eye out.

Unfortunately, there's not lot you can do about SDS during the growing season. Sudden Death Syndrome is caused by a fungal pathogen, but since it remains in the plant's root system, fungicides won't have any affect on it.

What you *can* do is take note of how the disease looks differently across farms or across a single farm. Evaluate varieties for any notable differences between varieties planted under the same conditions. If a seed treatment was used – how did it work? If not, should you think about one the next time soybeans are planted on a farm?

Other factors to consider include soil compaction and the level of corn kernels left from the previous crop. Higher compaction levels favor SDS and since corn kernels are pretty good for harboring the SDS fungus, minimizing kernel loss can reduce pathogen levels. If you haven't tested for Soybean Cyst Nematode (SCN), consider that as well. There have been well documented associations between the presence of SCN in a field and SDS development.

Want to learn more about SDS? The 2024 Kansas River Valley Experiment Field Fall Field Day will include an update on SDS management based on recent research. This year's field day will be Tuesday August 13<sup>th</sup> at Rossville starting at 5:00 p.m. If you are interested in more details, contact me via any Meadowlark Extension District Office or [dhallaue@ksu.edu](mailto:dhallaue@ksu.edu) .

Ross Mosteller  
District Extension Agent, Livestock & Natural Resources

## The Horn Fly

I'm cognizant enough to know that not every newspaper has space to print my weekly submission each week, which is surely understandable. I'm also in tune enough to know that the topic selected to discuss each week may not be of interest to everyone. What I do hope, is that for those who have been following articles this summer realize it that flies have been a topic and this week is the third specie in a triple crown of Diptera pest effecting livestock - the Horn Fly.

Horn flies increase stress in beef cattle due to their painful bite. Elevated stress lead to reduced milk production and rate of weight gain. A collaborative research study conducted between Kansas State and Oklahoma State Universities determined stocker cattle with an insecticidal ear tag gained 0.21 more pounds per day compared to their counterparts with no horn fly control, resulting in a \$12 net profit over the cost of the tag during a 90-day grazing period.

Horn flies are a small black, blood sucking fly that feeds on the back, sides and belly of animals and are a very common fly found on cattle. During the summer months, a generation of horn flies can complete their life cycle in roughly two weeks, so populations can rapidly explode. We're approaching the time of year where a second peak in horn fly populations often occurs. Economic losses begin to occur when fly populations reach 150-200 insects per animal. Horn fly populations frequently exceed 300 flies/animal when no control measure is in place. It is not uncommon to see swarms of horn flies hovering over and on the herd during summer.

Much like face fly and stable fly discussion from past articles, control measures are most successful with a multi-pronged approach. Simple, self-applied, control methods such as dust bags or back rubbers are effective with proper placement and usage. If cattle are accustomed to being called, baited with feed or handled in the pasture, spraying is a good option. Pour-on products are also common and effective, but cattle will need to be moved through a working facility on a monthly basis for accurate application and with limits to product duration. Additionally, rain can reduce the duration of effectiveness for spray and pour-on products.

Insecticidal ear tags are another established horn fly control method. With roughly a three to five-month window of effectiveness, timing of tagging in conjunction with horn fly prevalence is critical. Feed and mineral products containing an insect growth regulator (IGR) are another convenient control measure. Horn flies utilize fresh manure piles to lay their eggs and IGR's work in the manure to prevent fly larvae from maturing to adult flies. These products should be in place in early spring for best results.

Each product varies in terms of application rate and number of applications within a season, so as always, be sure to read and follow label instructions. Following the label not only increases the effectiveness of the product, but helps to prevent potential development of product resistance. Rotation of chemical classes of insecticides is also helpful in resistance prevention. Keep in mind, that just because a product has a different name doesn't necessarily mean it contains chemicals from different chemical classes.

As with all animal health related topics, your herd veterinarian is a great resource to use to discuss fly control strategies. Extension has many resources as well and your local Extension agent can be a resource. The University of Nebraska has a good publication dedicated to Horn Flies called ["The Horn Fly" NebGuide G1180](#) that is accessible online.

Laura Phillips  
District Extension Agent, Horticulture

## Japanese Beetles

This time of year, many of us are combating Japanese Beetles in our gardens and lawns. Similar in appearance to other June bugs, the adult Japanese beetle is 1/4 to 3/8-inch long with a shiny, metallic-green head. The body has bronze wing covers and five clumps of hair that border the sides of the abdomen. The larvae are cream-colored grubs with a light brown head about 1 ¼-inch long at maturity.

Adult female Japanese beetles lay eggs in July beneath wet lawns. Upon hatching, larvae feed on the sod roots and overwinter until the following summer. In June, the larvae pupate and adult beetles emerge to feed above-ground. Japanese beetles are incredibly destructive, and feed on every part of the plant. The beetles skeletonize leaves and consume flowers and fruit entirely.

Hundreds of varieties of plants can play host to this non-selective pest. Some plants, however, are more attractive to Japanese Beetles than others. If you are looking to put in new flowers, trees, or shrubs, reach out to our office for a list of plants that do not attract Japanese Beetles.

In many cases, you inevitably want to grow something that attracts these pests. Controlling them is a challenge this time of year as new adult beetles emerge from underground daily over several weeks. In small quantities, beetles can be manually removed from plants and dropped into a bucket of soapy water. Check plants daily to look for symptoms. Mornings are the best time to observe as beetles are slower and easier to catch.

While you can buy traps that lure Japanese beetles into a container where the pests can be gathered and disposed of, these are not recommended for controlling the beetles. The traps use pheromones used to attract the beetles can draw in even more beetles than would naturally appear. Not all of these beetles may end up in the traps and the result, and you may catch native beetles as well.

Insecticides such as cyfluthrin (Tempo), bifenthrin (Hi-Yield Bug Blaster II) and cyhalothrin (Bonide Beetle Killer, Spectracide Bug Stop Indoor + Outdoor Insect Killer, Spectracide Triazicide, Bonide Caterpillar Killer) can be used for Japanese beetle control with about two to three weeks protection. Carbaryl (Sevin dust) can also be effective but only for about one to two weeks. The downside of using such products is they will also eliminate parasitoids and other natural predators. Neem products (Natural Guard Neem-Py, Fertilome Triple Action Plus) and Pyola (pyrethrins in canola oil) can offer control for three to four days.

Teresa Hatfield  
District Extension Agent, Family and Community Wellness

### **Alzheimer's: Know the Signs**

The number of people with Alzheimer's disease in the United States is stunning. Estimates suggest that one in ten people over the age of 65 has the disease. As the older adult population grows, so will the number of people with Alzheimer's.

Alzheimer's is not a normal part of aging. It is a disease that slowly destroys memory, thinking skills, and the ability to accomplish the simplest daily tasks. Alzheimer's destroys the brain when beta-amyloid plaques and neurofibrillary tangles interrupt the communication signals in the brain. The first part of the brain affected is the hippocampus, where we store our short-term memories. This deterioration eventually impacts the entire brain, finally leading to death.

The Alzheimer's Association has defined ten warning signs for detecting Alzheimer's disease. Early diagnosis is essential, as it will help us understand how to slow the disease's progress.

1. Someone with memory loss that disrupts their daily life: This is the ability to remember recently learned information. They may forget important dates and events, ask more frequent questions, or repeat information.
2. A person who has difficulties with planning or solving problems: They may have trouble concentrating, following a plan or recipe, or working with numbers. Tasks may take longer to complete.
3. An individual has trouble completing familiar tasks at home, work, or leisure. Examples would be driving to a familiar location, completing a task at work, or remembering how to play a familiar game.
4. Confusion with time or place. An individual may lose track of dates, the passage of time, and seasonal changes. As the disease progresses, they may forget where or how they got there.
5. Struggling to understand visual images and spatial relations. Someone may struggle with reading or judging the distance between themselves and another object or person. They may have trouble with the differences in color and contrast.
6. Experience new problems with words in speaking or writing. They may have trouble participating in or following a conversation. They might seem disinterested, repeat themselves when speaking, or call objects or people the wrong names.
7. People may misplace items and lose the ability to retrace steps. They may also put items in weird places, such as shoes, in the refrigerator.
8. A person may display poor judgment, give large amounts of money to telemarketers or charities, or change their personal hygiene.
9. Withdrawal from social activities. They begin to retreat from social activities with family and friends, sports, hobbies, or work projects.
10. Changes in mood and personality. An individual may experience changes in mood and personality, become easily upset, and feel confused. They may find it challenging to visit people or places that are unfamiliar to them.

If you or someone you know is experiencing cognitive changes, make an appointment to see your healthcare provider as soon as possible. These changes may not be related to Alzheimer's, but it is vital to find out sooner if they are.

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

### **Tips for Canning Tomatoes**

Many gardeners plant tomatoes and they are starting to ripen. Preserve them by canning, freezing or dehydrating to use later in many recipes. While it is fun to make salsa, spaghetti sauce or even a barbecue sauce, having basic options such as whole tomatoes, tomato juice or tomato sauce allows you to use tomatoes in many more recipes.

Here are some reminders about tomatoes:

- Although tomatoes are usually considered to be acidic in flavor, most have pH values slightly above 4.6, which makes them a low-acid food. As such, tomato products must be acidified to a pH of 4.6 or below with bottled lemon juice, vinegar, or citric acid. Properly acidified tomatoes can be safely processed in a boiling-water canner or pressure canner as an acid food.
- Pressure processing instructions are equivalent in heat treatment to water bath processing. Caution: Both methods require acidification. There are not recommendations or processing tomatoes without acidification.
- Tomato-based recipes for products such as salsa, barbecue sauce, ketchup and others will also include added acid. Do not reduce the amount of added acid in these recipes.
- Tomatillos can be substituted for tomatoes in the same amount stated in a recipe, such as in salsa.
- Salt is for flavor only and can be omitted, if desired.
- Still have tomatoes on the vine? Pick them before a frost or freeze to finish ripening. After a frost or freeze, the acidity of tomatoes still on the vine decreases. This increases the risk for botulism if these tomatoes are canned.