



Field Notes for The Week Of 8-22-2022

Sudden Death!!!!

Where has August went? As I look at the calendar it is truly hard to believe the end of August is approaching and Labor Day is just around the corner. Late summer early fall is a very important time that many producers overlook. In agriculture there are three main seasons that we tend to dwell on the most, that is spring planting, fall harvest, and winter livestock management. For most late summer seems to take a back seat in management and is often the main time of year farmers will occasionally take a trip away from the farm before things get crazy in the fall! Late August is a critical time in plant growth and even livestock management. For instance, much of the quality and quantity of grain produced by corn and soybeans is determined in late summer, perennial forages begin to transfer nutrients and carbohydrates in the root system to prepare for winter, small ruminants begin breeding as the days get shorter, and this is also a great time to prepare spring calves for the fall feeder calf market. So, I guess what I am trying to say is stay diligent because late summer is a very important time in the production season. This week during my field scouting, I took note of many different issues arising in crop fields, even though much of the corn has completed growth and will soon reach black layer, many fields are exhibiting Anthracnose, this can equate to stalk rot issues, combine that with late season nitrogen loss standability might be an issue this fall. Second cutting and third cutting forage harvest continued this week with a nice stretch of dry weather. Forage is not immune to disease; I have noticed a lot of orchard grass showing summer blight and rust giving it a bright yellow appearance. These diseases do not harm livestock but can be detrimental to yield and stand quality. By far the number one issue I encountered this week was sudden death in the soybean crop, this disease has the proper name because it is very sudden (overnight) in nature, so I want to discuss what this disease is and options for management.

1. **What is it?** - Sudden death syndrome (SDS) is caused by a fungus called *Fusarium Virguliforme*, this pathogen can also infect other legumes like alfalfa, red clover, navy beans, and pinto beans.
2. **When does it infect the plant?** – This pathogen is a soil borne disease that can survive winter and thrives in the soil for many years. Infection occurs early in the growing season when soils are cooler and wet, as the plant matures the colonization of the roots increase at a rapid pace and by R-1 through R-6 infection will become severe enough that toxins move up the plant to new leaves through the xylem and show foliar symptoms. Leaves will begin to turn yellow and then brown between the veins of the leaf.
3. **Does it affect yield?** - Just as the name implies, death is sudden so effect on yield is very dependent on time of infection and death of plant. If death occurs late enough in the season yield will not be affected as much as if it would be early in the growing season.
4. **How do I manage it?** - Planting when soils are warmer (60°F or greater), seed treatments, and planting resistant varieties are all great way to manage, unfortunately there is no rescue treatments when symptoms appear. Studies also show that managing soybean cyst nematode populations can help reduce the chances of infection.
5. To learn more, check out this good article and factsheet- <https://ohioline.osu.edu/factsheet/AC-44>

