



## **The Chem Gro Crop Watch, Issue #3, 8/14/14**

Lonne Fry, CCA, Sales Agronomist, [lfry@chemgroil.com](mailto:lfry@chemgroil.com), 309-221-5000

**Sudden Death Syndrome (SDS)**. A month ago in my last newsletter I gave the prediction that we could have a bad SDS outbreak in soybeans with the environmental conditions that we are having during early pod fill. Unfortunately it is coming true. Here are some key take home points about SDS:

- SDS is an internally infected fungal disease that is taken up through the roots of the soybean plants at an early age (shortly after seedling emergence and seems to be worse in years when soils are cold and soybeans struggle to emerge from the ground like this year).
- Current fungicide seed treatments do not provide protection against SDS. However, there is “talk” that there will be a new seed treatment in the near future that will provide protection from SDS. If there is “proof in the pudding” for this new seed treatment, it will be an absolute game changer in soybean grain production.
- There is no true resistant gene to SDS; just varying degrees of tolerance from soybean breeding programs. I can remember back in 1998 when I moved to Western Illinois. There was some terrible tolerances to SDS in certain soybean varieties. I have witnessed some varieties dying at early pod formation before soybeans were even formed in the pods. Current varieties seem to hold the infection off long enough to at least get small beans to form in the pods before the plant dies.
- Above normal rainfall and cool weather during early pod formation triggers the internal infection of SDS to express itself. Until then it lies dormant in the plant. In hot and dry grain fill periods like the last 2 previous years SDS was all but extinct in most soybean fields.
- How much yield loss can you expect if you have it? Good question; and I do not have an accurate answer. I cannot even get close to guess soybean yields in a “good year”, let alone predict yields when there is a disease infection. I do know that SDS is a yield robber as it kills the soybean plant prematurely which prevents the beans from becoming fully developed. I expect some very colorful yield maps with wide ranges of bushels as the SDS disease tends to be heavier in pockets from certain parts of the fields.
- SDS has shown trends to be worse in compacted headlands, heavy Soybean Cyst Nematode areas, certain soil types (maybe drainage related or poor seedling emergence areas).
- Foliar fungicides do not offer any protection to this disease since this is an internal infection from within the soybean plant. Many fields that were sprayed with a fungicide 2-3 weeks ago are now showing systems of SDS.



- Crop rotation does not seem to help in SDS prevention. I have personally seen SDS in fields that have just been rotated back to soybeans which were previously 3+ years of corn. The specific species of the Fusarium fungus that is responsible for SDS seems to be extremely long lived in the soil.
- The SDS fungus causes the vascular system within the stem of the soybean plant to shut down, which causes the premature death. The bottom stem that is infected in the picture shows the rotting vascular system. The top stem is from a healthy plant.



*Now that I have you totally depressed, unfortunately there is nothing that we can do to help prevent the effects of this disease. “It is what it is” until seed treatments or genetics greatly improve. Go drown a few worms with the kids, drink a few cold “ones”, or kick the neighbor’s dog (if you happen to be my neighbor kick the little black one...I really don’t like him and he deserves it for keeping me awake at night while barking at NOTHING!!).*

*One thing about farming is no matter how bad you think you got it, someone else always has it worse. I drove to northern Minnesota a week ago for a fishing trip with my son. The corn and soybean crops from about 60 miles south of I-80 then all the way north look horrible!!! Too much water this spring and late planting. Corn was just finishing pollinating as I drove through. Soybeans in 30” rows had not even closed the rows yet. The wet ponded areas killed out the corn and soybeans planted in them. Those farmers would swap their crops for ours in a heartbeat!*

That’s my 2 cents worth.....the choice and decision is always yours.

Lonne