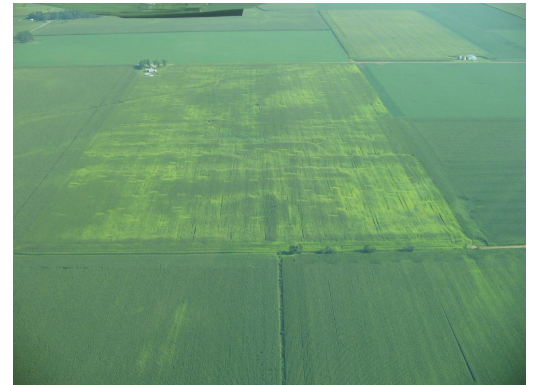




The Chem Gro Crop Watch, Issue #8, 8/24/09

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“Negative Nancy” or “Positive Paul”: Most generally, I am a “Positive Paul” when it comes to talking about the yield potential of our crops. However this year, after looking at several fields, I am going to be bit more of a “Negative Nancy”. Last week, I was able to go up in a 4-seater charter plane with a customer of mine. Driving around in a vehicle, the corn crop looks generally good. However, the view from a plane looks much different. It is very obvious to see which farmers made the investment of tile, and those who should have, or should have put more tile in. Granted, I have even talked with some farmers who said that that most of their ground is tiled, but some of these fields are just too flat. By the time the tile mains intersect with all of the other neighbors who are draining their fields into the same main; we just simply had way too much water to get rid of in a timely fashion this year. Because of this, especially in western and southern Hancock County; I am fully expecting 200 bushel variances in corn yield within many fields, ranging from 50 bushel to 250 bushel. Soybeans are a bit harder to judge right now, so I won’t even attempt in making any yield guess. I might be way premature in saying all of this for the simple fact that we are a LONG ways away from combining, but there are several things happening right now that I don’t like to see:



Corn Issues: Luckily, not all of the fields look like the one above in the picture that I took from last week’s air plane tour. However many fields do have large yellow areas with in the field that are showing severe signs of nitrogen deficiency and also oxygen deficiency. Not only did the nitrogen that was placed there was lost because of constant water saturation within the soil, but the roots were also unable to “breathe”. To make matters worse, our weather that we are experiencing during grain fill have been many days of cloudy weather. These cloudy days reduce the amounts of starch that a corn plant can produce during photosynthesis. This combination of low nitrogen levels and cloudy days then can result in an excessive amount of bottom leaves and stalk cannibalization in an attempt to feed the ear. When these “emergency back-up plans” run out of energy, the final result always ends up with excessive kernel tip back (kernel abortion) because the plant cannot produce enough starch to maintain kernel fill. Kernel abortion will continue until the corn plants finds an equilibrium of what it has available for energy vs. total number of kernels that it can support. Kernel abortion can occur all the way through early dent stage. The following picture below I took in our corn plot in an area of the field where the bottom leaves are heavily cannobilized and nitrogen deficient. These ears have



already lost about 37 bushel/acre (16 kernels around x 7 kernels long = 112 kernels. $112/3 = 37$ bushel lost.) A rough assumption is that every 3 kernels is approximately 1 bushel of corn in a 30,000 final stand.

For those who like to walk corn fields this time of year and do yield checks, it will be next to impossible to get any good firm numbers this year. First, I wouldn't yield check any corn until it has reached early dent stage just because if it is short on nitrogen, the ears will keep aborting back until it reaches the equilibrium stage of available energy vs. kernels. Second, the variability of good corn vs. yellow stunted corn within many fields is huge. Trying to get a good average will be extremely hard to do.



Soybean Issues: Sudden Death Syndrome has literally exploded in many soybean fields in the last 2 weeks. Most of us who have repeatedly had problems with this disease have come to realize that SDS can be a direct consequence of growing soybeans. There are some steps that you can do to help minimize SDS, but there is nothing that can be done to prevent it from happening (besides just not planting soybeans every again. I warned you that I was one of those "life is too short to plant soybeans" type of guys.) SDS is a fungal disease that infects the soybean plants through the roots of the soybean plant, usually during the first 30 days after planting. Cool and moist weather conditions after R2 (full soybean flowering) triggers the SDS to express itself and kills the soybean plant prematurely.



SDS prevention ideas for next year? Besides the normal practices of not planting soybeans extremely early in the cold and wet mud, and doing your best to not to add compaction which greatly enhance SDS, I do have two ideas that need to be tried and compared.

1. Roundup Ready 2 Yield soybeans for the spring of 2010 will all be treated with a 4 way mix of products that will be known as Aceleron seed treatment. Two of the four active ingredients that I am most interested in will include the same active chemical that is used in Headline fungicide, and a biological ingredient that is used to stimulate the soybean's own immune system to defend itself against fungal diseases. I find this cocktail of ingredients quite interesting. Knowing that SDS infects the soybean plants very early, will the combination of these two ingredients help defend the soybean plants from SDS infection?
2. In furrow application of Headline, Stratego, or Quadris at soybean planting. I know it is off label to apply these fungicides in this manner, but I would really like to see if this timing of application would prevent SDS in soybeans. If any of you still have the old Regent or Capture insecticide systems, or a pop-up in furrow fertilizer system on your planter and are in the mood for some experimenting in the name of science, let me know because I have some ideas for you.

That's my 2 cents worthó ..the choice and decision is always yours.