



The Chem Gro Crop Watch, Issue #2, 5/4/09

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Well, there is no need to state the obvious, but when it dries out to the point of where field work can be done without significant amounts of compaction, we may be faced to make some important management decisions. Here are a few concerns that have been expressed by customers so far.

- **Should I be thinking about switching my corn hybrids to earlier maturities?** I would not change any plans until roughly May 20th. If the weather keeps persisting to be wet after this date, then I would want to change to some earlier maturity hybrids if you had hybrids fuller than 114 day. I would plant all pre-planned, fully adapted corn hybrids that were developed for our area ranging from 107-113 day clear through the end of May. Over the last 10 years, I have evaluated out of zone early maturity hybrids (less than 105 day maturities) in test plots comparing to normal maturity hybrids that are adapted for our region. These out of zone early maturity hybrids were bred for areas north of I-80. Although these hybrids always shelled much drier at harvest time, they never economically penciled out because of the excessive yield loss due to poor disease tolerance, drought tolerance, or both. These hybrids just simply are not bred to withstand our environment that we have in Central Illinois. *My point for all of this, if we get towards the end of May, I would not switch my original game plan in hybrid selection to “out of zone” early corn that may cost you more money in the end, despite them being drier at harvest.*
- **My ground still does not have any anhydrous nitrogen on. Should I switch to liquid nitrogen and just work it in?** As I mentioned in the 2/10/09, Issue 1, Chem Gro Crop Watch report; I am not a big fan of putting 100% of your total nitrogen broadcast on the surface of the soil and hoping that a field cultivator and timely rains will be enough to take the nitrogen down to the root zone. This puts your corn crop at risk for yield loss during prolonged periods of dry stress, especially the time period from 2 weeks prior to tasselling through grain black layer. Here are two alternative suggestions that I would suggest before using 100% broadcast nitrogen.
 1. Plant it unaked, followed immediately by spraying 12-20 gallons of 32% liquid nitrogen with a pre-emerge herbicide. I would then side dress the corn with anhydrous as soon as possible. Twelve gallons of 32% = 42 units of nitrogen per acre, which is what I would use for soybean stubble. Twenty gallons of 32% = 70 units of nitrogen per acre, which is what I would use for corn on corn. This will be enough nitrogen to carry the corn plants through V6 or so to allow you to side-dress the remaining nitrogen. I know there is concern that if you do not get rain within several days after the 32% application that you may lose some of the nitrogen to the atmosphere through volatilization. Only half of the nitrogen units applied from 32% or 28% liquid nitrogen is subject to this kind of loss over a period of time if the rains were to

- completely shut off. This risk needs to be weighed out, but I think it is a minimal risk since a good ½" rain or more is enough to prevent most of this nitrogen loss. **(I should also clarify that when I said to plant it "naked", I am meaning planting the ground with no nitrogen applied. I would hate to do a drive by and see a bunch of naked farmers dumping seed corn into their hopper boxes. Thank goodness most farmers have tractors with cabs and nobody takes my words literally!)**
2. Custom hire the anhydrous application while you are planting other fields. Just in Illinois, Chem Gro has three tracked tractors with auto steer purchased for the sole purpose for custom applying anhydrous ammonia. Let us reduce your work load while you concentrate on your final tillage passes and corn planting. (I know my Crop Watch reports get circulated throughout Illinois, Iowa, and even to Wisconsin; so I can only make our custom anhydrous offer good for about a 30 mile radius from each Chem Gro facility. I like pulling tanks, but pulling tanks to Wisconsin would be a LONG day!)
- **Resist the urge to "cheat".** I know this is easier said than done, especially now when it will become crunch time when it dries out. We all know that side wall compaction from the corn planter, and field cultivator compaction layers are bad when these actions are performed in wet or "heavy" soils; so I won't give you anymore lectures about that. Last year, a LOT OF CHEATING occurred just to get the crops in. However we were extremely lucky that we continued to get very timely rains that helped the corn roots to grow through compaction layers, and we avoided extreme heat during grain fill. So far this year we are even wetter than last. I generally tend to be an optimistic person, but just looking at the odds, I am going to be more of a pessimist and say that we will have hotter and drier growing conditions throughout this growing season compared to last.
 - Every style of soil finishing tool and planting practices have their own set of pluses and minuses, but last year I saw severe sidewall compaction where the seed trench opened up to expose the seed, especially in no-till planted corn fields. From growing up on a farm and working closely with farmers all my life I have come to realize that convincing some farmers to change farming practices is a bit like asking a person to change religions or political parties. This spring, many of us will be faced with tough decisions that can have a huge financial impact on our pocket books come this fall. The difficult question this spring is will the soil naturally create a good DRY planting environment, or will we have to artificially create one by using the proper tools that are available? If your normal planting "plans" don't require one of these tools (Turbo Till, Phillips Harrow, McFarlane Reel Disk, etc), but you discover when you are planting corn that there is more sidewall compaction that what you like; are you prepared to detour from your plans, or even your beliefs, to create a more proper seed bed that will make you more money if the rain were to shut off latter in the growing season?

That's my 2 cents worth. The choice and decision is always yours.

Lonne