



The Chem Gro Crop Watch, Issue #4, 9/3/14

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Most of the earlier planted corn is now or very near black layer (approximately 32 - 33% moisture). All of the grain yield has been captured for this season for your fields, unfortunately your yields can still come down at this point (poor standability and harvest losses). This fall has the making of becoming a long and drawn out harvest due to back up at the elevator lines (very high corn yields, extra drying, and shortage of grain transportation at the river terminals). Starting now, I would highly suggest checking all of your corn fields in 1- 2 week intervals to see if poor hybrid standability is going to create a problem for you in capturing your much deserved yield. Checking your fields on a repeated schedule will let you know if certain hybrids will need to be harvested sooner than others. Most farmers have shelled flat corn sometime in their career. That is a stress that no-body wants to repeat, especially when corn is making 200+ bushel !!!

The double ear media hype. Talk about making a mountain out of a molehill! The non-agricultural knowledge based media reporters seem to have led the general public to believe that our big corn crop is due to double ears on your corn stalks. The reality of it is much different. From a corn genetics standpoint, a corn plant will produce up to 5 corn ear shoots, however only the first two uppermost ear shoots will pollinate to create potential yield. From there, the corn plant determines how much yield that it can support to “feed or develop” the kernels. The uppermost ear (primary) gets the full attention from the corn plant, and the next ear below it (secondary) gets any leftovers in energy from the plant. With the changes in corn breeding over the years, the secondary ear rarely develops into anything that is useable. Early corn breeding programs selected corn hybrids that could maintain multiple ears on the same plant at low planting populations. However as planting populations increased, these same plants would barren out and not produce an ear at all. As breeding programs evolved to current days, the multiple ear tendency was bred out and replaced by genetics that can tolerate very high planting populations without barrening out. Current corn hybrids still often pollinate two ears, however the secondary ear almost always aborts off before much of any grain fill occurs.



With that said, you still may be seeing some double eared corn plants around the edges of your corn fields. Due to our very non-stressful corn growing season; corn plants around the perimeter of the fields had extra sunlight and no plant to plant competition are making some double ears that look quite “media” impressive. I am assuming most media people will not walk more than 2-3 rows of corn into the field, but had they did they would have noticed that the double ear freak show has gone away under more normal in-field conditions.

The “gangrene” secondary ears. As I already alluded to, our non-stressful corn growing season allowed the corn to pollinate two ears, and in some cases the corn plant began to devote starch to fill kernels on that secondary ear. However, at some point the corn plant realized that it was biting off more than it could chew, and it went ahead and aborted off that ear. Many of these aborted ears acquired enough carbohydrates from the plant prior to it dying that it is now a great food source for bacteria and fungi to survive on. Normally, these aborted ears would dry up and wither away. However, with the Amazon rain forest “like” conditions that we had this year gangrene has set in on many scattered corn plants in our fields. In many cases the leaf that is attached around this infection is dead, and the stalk behind the moldy mess is also infected (blackness in the rind). This will turn into standability issues. **Again, I cannot emphasize enough the importance to be scouting your fields prior to getting the combine out** and developing an action plan!



Non-gmo / Program Corn / Conventional corn. No matter what term you call it, this corn does not contain any genetically modified traits. If you planted this type of corn, particularly corn that does not have the genetically modified trait to kill corn borer, you should be walking your fields. European Corn Borer (ECB) seems to have rebounded to higher numbers compared to past years. I am not saying that their populations are at epic numbers by any means, but it is obvious that ECB is active in these non-gmo fields. Many tops of corn plants are turning red from the ECB boring into the stalk causing a starch build up since the starches cannot reach the ear. I have also seen some ECB in the ear shanks which in many cases can cause the ear to drop off before the combine can shell it. **Again, I cannot emphasize enough the importance to be scouting your fields prior to getting the combine out** and developing an action plan!

In order to save input costs for next year, I am already hearing talk that many farmers may switch to some or all non-gmo corn for next year. While I do agree the upfront seed costs is considerably less for seed that does not contain genetic traits, but make sure you think the process all the way through.

- Weed control costs tend to cost a bit more with non-gmo corn. Chem Gro has been very successful over the years in keeping clean fields with non-gmo corn, but it does come at slight increase cost. A well thought out chemical program made during the winter is always better than a last minute “OHH CRAP, my non gmo corn or beans have emerged along with the weeds and I have no herbicides down.....now what do I do?”
- ECB from this year came from last year’s crop of ECB. They overwinter from your fields and your neighbors’ fields. Weather conditions in 2015 will then determine how well they survive in non-gmo fields.
- Will you get a premium for your grain? I have noticed over the years that the elevators which have a premium for non-gmo grain are limited to the amount of bushels that they are willing to share it with. Early bird commitments gets the worm here.
- Scouting for ECB is time consuming but it can be done. Are you prepared to spend extra money for insecticide control if ECB becomes economical to treat? Timing of insecticide applications for ECB is absolutely critical as the window to kill ECB is very small before they burrow into the plant. Even with the best timing I would expect only 60-80% control.

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

Lonne