



## **The Chem Gro Crop Watch, Issue #1, 2/18/11**

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

**2011. A New Year with New Hopes!** After 2010's dismal crop yields and this winter's tremendous grain market rallies; there is a new spark of optimism in about every grower's voice for the 2011 crop year. It is very exciting for someone like me who is involved in ag-retail when your customers come to you wanting to know what extras they can do to increase corn and soybean yields (rather than the other way around). After all, if you don't do anything different, then why would you expect anything to change? I am going to write two Crop Watch updates (one for soybeans, one for corn) with ideas that you may want to implement on your farm operation to see if you can grab a few more bushels than your normal standard program.

**The Illinois Soybean Association** has a yield challenge contest to entice growers in trying new practices to achieve higher yielding soybeans. The rules for the contest can be found at [www.ilsoy.org](http://www.ilsoy.org). In the contest, Illinois is divided up into 9 districts, and teams go to competition within each district. The winning team in each district will be awarded \$500/person! Each team requires sponsorship, and Chem Gro Inc. along with our chemical representatives will be sponsoring at least two teams in our district. If you have interest in participating, let us know and we will be happy to include you as part of the team.

### **SOYBEAN "TWEAKING" IDEAS FOR HIGHER YIELD**

I personally believe the big ticket items (drainage/pattern tile, reaching at least the minimal critical soil fertility levels, adjusting pH to optimum levels for your specific crops, preventing and eliminating compaction, etc.) in chasing high yields need to be met first. When those large yield influencers are achieved, then one can begin to focus on the "tweaking" ideas below that have the ability to achieve you smaller incremental yield gains.

- **The "Full Monty" soybean seed treatment.** Approx. cost: \$13.50 - \$15.00/bag. This practice has gained in popularity in part that the last two springs have been extremely wet and high quality seed treaters are being more common (like what we have here at Chem Gro Inc.). What I consider to be a "Full Monty" seed treatment is that it must have at least 3 components (a systemic fungicide, a systemic insecticide, and a long shelf-life soybean inoculant). This treatment package will provide you with protection against seedling rots, kill bean leaf beetles munching on your emerging soybeans, and add more rhizobia bacteria to the soil to enhance nodulation and nitrogen fixation on the soybean roots. All corn seed comes standard with a fungicide and insecticide combination, why should soybean seed be any different or less important?
- **Pre-emerge residual herbicide.** Approx. cost: \$12-15/acre with application. I feel good about my customers that we work with here at Chem Gro Inc. Of the custom application soybean acres that we spray, 99% of the acres receive a residual herbicide at the location I work from. I



was shocked to learn from talking with one of my chemical representatives that only about 1/3 of the soybean acres in Illinois get treated with a residual herbicide. Early weed competition is a yield killer in corn and soybeans! A single or two pass Roundup application is a lot to gamble on in trying to kill weeds small enough before they become too competitive (grasses taller than 40 become yield limiting, like the picture to the right showing residual vs. no residual). If that isn't enough



reason to use residuals, after attending this year's Illinois Corn and Soybean Classic meetings, we learned that waterhemp is now confirmed to have resistant populations to glyphosate in Brown, McDonough, and **HANCOCK** counties. Residual herbicides are the BEST choice in controlling and preventing resistant weeds from taking over.

- **Burn them beans!** Approx cost: \$9.50-\$19/acre depending on rate. In 1996, the first RR soybeans came into the market, and grew in market share as fast as seed companies could produce seed. In the old days when we chemically burnt soybeans with herbicides, a sometimes side benefit is that it caused them to put more energy into pod and yield production instead of tall and lanky vegetative growth. However, farmers were tired of looking at burnt soybean leaves from conventional broadleaf herbicides, and not being able to control tall weeds that grew beyond label height. Switching to RR soybeans allowed us to kill tall weeds, but soybeans grew up to chest height in many fields since Roundup does not burn soybean leaves. I personally believe in order to make soybeans yield more, you have to deliberately make them mad by stunting their growth in an early growth stage (R1, first bloom; typically at 3<sup>rd</sup> week of June). Over 10 years of research indicates that Cobra herbicide, which not only burns the soybeans leaves and can stunt the plants, but also has SDS and White Mold suppression properties. Valent, the manufacturer of Cobra, has this quote on their website: "White mold and SDS are common diseases found in Midwestern soybean production that, depending on time of infection, can cause significant yield loss. University research has shown a post-emergence tank mix of Cobra Herbicide plus glyphosate applied to Roundup Ready® soybeans will suppress soybean white mold and SDS development. Research indicates that after an application of Cobra, a soybean plant produces several isoflavones that serve to protect against disease development." Banvel or 24-D growth regulator products can also be used to stunt soybeans, but there is a fine line in dosage rates to cause stunting vs. plant death. Purposely burning your soybeans isn't for the weak at heart. You must have a strong spirit to tolerate all of the comments you will receive from your neighbors; but hopefully the end result will justify the means.
- **The "Full Monty" fungicide program.** Approx. cost: \$35/acre with application. Many farmers have been seeing an economical yield advantage of using a fungicide and insecticide application during the R3 pod fill stage. The next step is to add in a 1-2 qts of foliar fertilizer containing N,P,K and various micro-nutrients including boron, sulfur, zinc, and manganese; along with the fungicide and insecticide. Pod fill is a critical time period in a soybeans growth stage, and if fertility needs are not met; yield is sacrificed.
- **High yield experiments at Chem Gro.** This year, we will be conducting replicated, field length, soybean experiments in attempt to gain higher yielding soybeans. The treatments will include 10 gallon 32% UAN, 2 gallon Hydra-Hume (humic acid), and 9oz Headline fungicide; all individually in a 2x2 starter placement. We will also deliberately burn soybeans with 12 oz of Cobra herbicide at the R1 growth stage. Come harvest, I will share with you the results.



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

Lonne