



August 9, 2013

GLYPHOSATE RESISTANT WEEDS

This past week I attended a UNL Weed Science Field Day on the west edge of David City. There was glyphosate or Roundup® resistant giant ragweed at this field site and at Fremont, the following day, the field site had glyphosate or Roundup® resistant water hemp. UNL Weed Science staff showed herbicide treatments that worked and did not work.

Roundup Ready® corn and Roundup Ready® soybeans, and only using the herbicide glyphosate (because that's the cheapest option once the seed is purchased), is leading to problems. Farmers have been warned of a potential problem of losing a one-time in 100-year discovery that changed the face of agriculture and increased production. What appears to be almost perfect weed control allows the few survivors that have tolerance or resistance to survive and multiply. Using the same mode of action every year is a recipe for disaster, it worked great for 6 to 10 years but now it's changing.

The agricultural industry has no new active ingredients in the pipeline for herbicides. It is all about creating newer seed technology and stacking multiple traits. Getting closer is Enlist corn (2,4-D tolerant corn) and Dicamba (Banvel) tolerant soybeans. Finally, we will have a solution to trees growing in continuous no-till fields, maybe by 2015.

There are 60 plus glyphosate products but none will work if you develop glyphosate resistant weeds on your farm or they might come in from the neighbors. Adding more surfactant does not work. Adding more AMS to the solution does not work, and at David City, a 16X rate of glyphosate or 352 ounces per acre did not kill the giant ragweed.

In the plots at David City, some of the herbicide combinations were a disaster and some worked really well. For instance, for a burn down treatment early when the resistant weeds were small, Valor and Boundary plots were not good, but just the simple addition of 2,4-D looked great with a follow-up pre-and-post with different combinations. That's why the adjacent no-till corn field looked great in terms of weed control. There are still multiple choices to handle the problem, but we can't rely on the new solution 3 to 5 years in a row, because we will then create a double stack resistant weed. If we create triple or quad stack resistant weeds in the future, the only option is tillage and back to cultivation for weed control and hand roguing.

So, if you are in the real estate business, the most important issue is Location, Location, Location. Farming today, the most important issue to respond to a growing problem with herbicide resistant weeds is Rotation, Rotation, Rotation. Rotating crops, rotating traits (i.e. Liberty trait) using multiple modes of action with herbicide, using fall treatments, and using pre- emerge treatments and not entirely post-emerge treatments. Utilizing crop consultant reports are very important again.

And yes, it will cost more, but considering the alternative path, we cannot go there.



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