

**HOUSE COMMITTEE ON OVERSIGHT & GOVERNMENT REFORM  
SUBCOMMITTEE ON DOMESTIC POLICY**

**ARE SUPERWEEDS AN OUTGROWTH OF USDA BIOTECHNOLOGY POLICY**

**STATEMENT OF TROY ROUSH  
July 28, 2010**

Good Afternoon Chairman Kucinich, Ranking Member Jordan and Members of the House Committee on Oversight and Government Reform, Subcommittee on Domestic Policy. Before beginning my testimony, I want to thank the Chair for this invitation to address the issue of glyphosate tolerant weeds and the crisis that it presents for the U.S. farmer and American agriculture.

My name is Troy Roush and I farm approximately 5500 acres with my father and brothers in central Indiana. We grow corn, soybeans and wheat – both conventional and organic – as well as popcorn and tomatoes. I also serve as Vice President of the American Corn Growers Association. (ACGA). I am here today to discuss how glyphosate tolerant weeds affect my farming operation and many others in production agriculture.

I have been using genetically engineered (GE) soybeans since 2000, when a lawsuit for patent infringement against my family was dismissed by Monsanto. After having endured two years of costly litigation that took its toll on my family, we decided that, in order to protect ourselves from future baseless lawsuits, we would make the conversion to biotech crops and began using Roundup Ready (RR) varieties for our non-organic crops.

During the first few years we were able to rely exclusively on RR technology for weed management, applying glyphosate for burndown and again to eliminate weed pressure after the crop emerge. However, due to problems with glyphosate tolerant weeds, the skyrocketing costs of RR seeds and the price premiums being paid for non-GE soybeans, we have since returned to using conventional varieties on approximately half of our 2,600 soybean acres. The diminishing effectiveness of glyphosate, as demonstrated in the dramatic increase in glyphosate tolerant weeds, destroyed any benefit from the technology.

Fortunately, Indiana enacted Farmer Protection laws in 2002 after my lawsuit with Monsanto to prohibit patent infringement cases where small amounts of GE content is detected in crops and fields. Without those protections, our return to conventional soybean production would have brought with it the potential of significant risk of patent infringement liability.

In 2005, we first began to encounter problems with glyphosate resistance in marestail and lambsquarter in both our soybean and corn crops. Since there had been considerable discussion in the agricultural press about weeds developing resistance or tolerance to Roundup, I contacted a Monsanto weed scientist to discuss the problems I was experiencing on the farm and what could be done to eradicate the problematic weeds. Despite well documented proof that glyphosate tolerant weeds were becoming a significant problem, the Monsanto scientist denied that resistance existed and instructed me to increase my application rates.

The increase in application rates proved ineffectual, and I was forced to turn to alternative methods for weed management including the use of tillage and other chemistry. In 2007, the weed problems had gotten so severe that we turned to an ALS inhibitor marketed as Canopy to

alleviate the problem in our preplant, burndown herbicide application. In 2008, we were forced to include the use of 2,4D and an ALS residual, to our herbicide programs. Like most farmers, we are very sensitive to environmental issues and we were very reluctant to return to using tillage and more toxic herbicides for weed control. However, no other solutions were then or are now readily available to eradicate the weed problems caused by development of glyphosate resistance.

Originally, we were attracted to GE crop technologies for the ease of use and convenience associated with the crops. Time was saved by not having to do pre and post plant tillage for weed control, and herbicide tolerant varieties simplified pesticide use by eliminating the need for precise timing of applications. Those benefits have now been lost as a consequence of glyphosate tolerant weeds.

The increased ease of use and convenience of herbicide tolerant crops enabled many farmers to significantly increase crop acreage which helped to offset higher production costs and, in some cases, lower yields. Biotech companies encouraged farm expansion by offering discounts for buying seed in bulk. The advent of glyphosate tolerant weeds necessitated the return to using tillage for weed control, eliminating the time savings that was initially afforded by using biotech crops. Farmers that expanded farm size are now finding it difficult, if not impossible, to manage the larger operations now that additional time is required for weed management.

Eradicating glyphosate tolerant weeds has also significantly increased production costs. The addition of Canopy to my pesticide management program has added \$7.00/acre to my production costs, while the use of 2,4D costs an additional \$1.75/acre. This compares to the \$2.25/acre in glyphosate (RR) costs.

As I mentioned earlier, I have now returned to the use of conventional soybean varieties for about ½ of my total acreage. That proportion of acreage will increase if supply of quality conventional seed varieties increases. While conventional soybean varieties have been very difficult to find, a number of small, independent seed companies are now beginning to respond to the demand. This year, I was able to find convention seeds from a small seed company that sources germplasm from an Ohio breeding program that allowed me to increase acreage in conventional varieties.

Conventional soybean seeds provide significant cost savings as compared to RR seeds. This year, RR soybeans cost \$50/bag which translates to \$65/acre. The conventional varieties that were planted from saved seed cost about \$15/acre to plant while the conventional seeds that I purchased this year cost \$22/bag or \$28.50/acre. Since the weed management/herbicide costs are nearly the same for both conventional and RR soybeans, the seed costs dramatically reduce overall production costs in the conventional system. Since there is virtually no difference in yields between the conventional and RR varieties, the difference in seed costs using the conventional varieties represents pure profit.

I not only reduce production costs through the use of conventional soybean varieties, but last year I received a 20% price premium for my non-GE soybeans. Last year that translated to an additional \$80,000 in profit.

These experiences are similar to that of many fellow Heartland grain producers. Short term, we can go back to using tillage and more toxic herbicides as a solution to the glyphosate tolerant weed problems, but that solution is short sighted and wrong-headed, as well as are the alternatives being contemplated by the biotechnology companies and the agri-chemical industry.

Mother Nature has repeatedly demonstrated an ability to thwart chemical cure-alls. We need to learn from our past mistakes or we are doomed to repeat them. Genetically engineering crops that are resistant to multiple pesticides are a disaster waiting to happen, particularly if those tolerances include pesticides such as atrazine, dicamba and 2,4D which would bring us full circle back to the use of the highly toxic pesticides that glyphosate and herbicide tolerant crops were supposed to eliminate forever.

While the problems associated with glyphosate tolerant weeds can arguably be solved through increased tillage and the use of other chemical pesticides, the subsequent development of weeds that are resistant to the proposed multiple pesticide resistant varieties, would leave us farmers without any known solution according to many weed scientists.

Anyone who has any experience with dicamba has witnessed its volatility. We are not talking about pesticide drift in this context. I have seen dicamba rise from fields and move across the ground damaging any and all vegetables, soybeans, fruit plants, flowers and gardens in its path. Dicamba is not widely used by farmers today for this reason. Even so, as recently as 2008 I had over twenty acre's of tomato's destroyed by dicamba drift. Genetically engineering crops that are resistant to these pesticides must not be approved.

Some would argue that it is not government's role to "stifle innovation" by regulating the commercialization of these crops. But can we trust industry to regulate itself? The history of the American farmer shows that the answer to that question is a resounding NO. If industry cannot be trusted to regulate itself, then who will step up to protect the interests of farmers and the future of agriculture in this country? It is USDA's job to regulate the biotechnology industry.

The time for rubber stamping all that is new, bright and shiny in agriculture is over. We are at a crossroads. Balanced and objective regulation is necessary. And we cannot afford for government policy to be simply cheerlead from behind unexamined commercialization of this herbicide-resistant technology. The future of American farming is at stake and should not be jeopardized simply so a few agrochemical corporations can reap increased profits from the sale of their herbicides.

Thanks you for the opportunity to testify before the Committee. That concludes my Statement and I would be happy to answer any questions that the Chair or the Committee may have.