



How to Grow Resistant Weeds in Your Field

Since the introduction and increasing use of herbicides, new management and farming practices are now being used that would make both your and my father or grandfather shake their head in skepticism. Would they have bought into a tool that would kill weeds, help save yield potential, reduce tillage passes, and save time? Maybe not then, but I bet they would now. Today's herbicides are those helpful tools, and each herbicide is like an individual tool in a toolbox.

Compare a herbicide to a tool that is packed in your toolbox and ask yourself, how many tools, once lost, will ever return to your toolbox? In comparison, a herbicide is a tool in your weed control toolbox and, like pliers or a wrench, if you don't take care of it, it's most likely lost forever!

Rotation is the one-word description of how to keep from losing a herbicide from your toolbox. A recent example of a damaged tool from the herbicide toolbox is sulfonylurea herbicides (the ALS family of herbicides). At first, ALS herbicides worked well, so well, we used them year after year without rotating them with a different family of herbicide. Because we did not rotate, resistant weeds adapted and now we have weeds such as waterhemp that are showing resistance to the ALS family of herbicides.

Have we learned anything from this ALS herbicide experience, or are we doing the same thing all over again? Mike Owen, a weed scientist with Iowa State University, is doubtful whether we have learned and offers Roundup® herbicide as an example. In an Organic Consumers Association publication, dated Dec. 26, 2002, he expects consumers will continue using glyphosate (Roundup or its related generics) in the same way so as to avoid other chemical expenses until they are forced by resistance to switch. Furthermore, there are few, if any, new blockbuster chemicals in the pipeline to be an alternative program for glyphosate herbicide.

Is glyphosate resistance really showing up, or is this a sales ploy by some chemical company to obtain some of Roundup's market share? At the recent North Central Weed Society Meeting in St. Louis, the states of Tennessee, Kentucky, Indiana and Ohio noted glyphosate resistance showing up in marehail. In addition, Iowa and Missouri are testing waterhemp that appears to be showing glyphosate resistance, and they are also hearing complaints of glyphosate resistance in velvetleaf, morning-glory and lambsquarters.

Roundup is one of the most popular and effective crop production tools in history, but its longevity is up to you and me. Weeds adapt, so the life of Roundup and the glyphosate generics may be shortened unless herbicide rotation is practiced. It must be a real concern, because makers of glyphosate products are now recommending herbicide rotation and limiting the times it's applied per year.

Because Roundup resistant crops work well, we think it is a good management program. We suggest, however, that you rotate every other year to a non-glyphosate herbicide to help prevent premature Roundup/generic glyphosate resistance. Ask questions while considering all of the options for herbicide rotation. One option is LIBERTY® herbicide, a non-glyphosate. Some may disagree because of their past experience with the product. LIBERTY is managed differently under its new ownership. The price of LIBERTY has dropped and is competitive with the cost of Roundup. In addition, the recommended rate of application has increased to provide an enhanced weed kill. If you plan to use LIBERTY herbicide, you will get an extra bonus with Hoegemeyer since LIBERTY herbicide resistance is a characteristic of most Bt hybrids we market. With our Bt hybrids, (1) LIBERTY resistance is an added benefit; (2) it is a good stewardship rotation for glyphosate; (3) and best of all, there is no "added-on" technology fee.

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