Farmers need more options to conquer herbicide resistant weeds

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

There are two things that I think just about every weed scientist can agree on:

- 1. herbicide resistant weeds make weed management more difficult; and
- 2. the key to battling herbicide resistant weeds (or any weeds, really) is to use a diverse weed management program.

One aspect of a diverse weed management program is herbicide diversity. . . . But this leads to the question:

How diverse are US herbicide programs?

. . . .

... [T]he diversity data suggests that herbicide resistance traits (either through biotechnology or conventional breeding methods) can either increase or decrease herbicide diversity depending on how they are used. These data don't support the claim that herbicide resistant crops, as a whole, have made the weed resistance problem worse (or better).... Glyphosate seemed to supplement alternative herbicides in corn rather than replace them, as occurred in soybean. Presumably, those alternative soybean herbicides were still available, but they were not being used.

Herbicide resistant crops provide an additional tool for farmers to use. Whether or not that tool is used to effectively combat herbicide resistance or exacerbate the problem depends on many other factors. Economics, crop rotations, previous experiences, weed spectrum, etc. all play a major role in how farmers select and use herbicides. My guess is the reason other soybean (and cotton) herbicides didn't see continued use after the introduction of glyphosate resistant varieties was that glyphosate was simply a **much** better herbicide. . . . If we're serious about increasing herbicide diversity, then farmers need *more* effective tools, not less. But we need to do a better job of using them appropriately...

Again, it is important to remember that reliance on herbicides to solve herbicide resistance isn't a winning proposition in the long-term. But increasing herbicide site of action diversity is generally agreed to be one important component for herbicide resistant weed management. If we agree that herbicide resistant weeds are a problem, and that we'd like to continue using herbicides for the foreseeable future, then the increased herbicide diversity observed in corn, rice, and wheat should probably be considered, on balance, a good thing.

Read full, original post: Herbicide Diversity Trends in US Crops, 1990-2014