

Planning Your Weed Management Program in Corn

By Kevin Bradley

Whether you are planning to plant a Roundup Ready®, Liberty Link®, or a conventional corn variety this year, it is important to plan ahead and think about the type of weed management program you will utilize. Over the past five years, I've had the opportunity to evaluate a lot of different herbicides and herbicide programs for use in corn and recently I've compiled much of this data. Understand that these are not comparisons of specific herbicide treatments and trade names, but rather are comparisons of different herbicidal program approaches.

I was able to make a fair comparison of three different program approaches that have been evaluated in 37 trials in Missouri over the past five years. What I found was that in 64 percent of the trials, highest corn yields were obtained with a two-pass program consisting of a preemergence herbicide followed by a postemergence herbicide. A one-pass postemergence program that also contained a residual herbicide provided highest corn yields in 29 percent of the trials, whereas in 7 percent of the trials a one-pass preemergence herbicide program provided highest corn yields.

Collectively, what all of this indicates to me is that depending on the year, environment, soil type, and weed

March 28, 2008

spectrum that you have, either of these program approaches *might* work for you, but year-in and year-out, the two-pass preemergence followed by postemergence herbicide program should provide the highest levels of weed control and corn yield in either conventional, Roundup Ready®, or Liberty Link® corn. I want to emphasize that the response to these different programs is likely to vary from one location to another, and will be highly dependent on the weed spectrum that you have in your fields. So, if you have been using a one-pass preemergence herbicide program for years and have no complaints, chances are you probably have a pretty low weed density in your fields and/or you do not have very many weed species that germinate later in the season. In these situations, I agree that there's certainly no reason for you to switch herbicide programs at this time. However, with the typical spectrum of weeds that we have in Missouri, like cocklebur, waterhemp, common and giant ragweed, sunflower, etc., our data show that the postemergence application is usually required for weeds that have escaped or germinated since the initial preemergence herbicide application.

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