Harvest Time Is Final Opportunity To Evaluate Soybean Weed Control Program



ROBERT BELLM

EDWARDSVILLE, ILL. With waterhemp now joining horseweed (marestail) on the list of glyphosate resistant weeds in Illinois, weed control in soybean production will become more challenging. Your future herbicide selection decisions will need to be based

upon sound knowledge of just how successful your past herbicide programs have been. This fall's harvest gives you one final combine-view opportunity to evaluate weed control, or lack thereof, on every acre of soybean that you planted. Be prepared to take advantage of it. Carry field maps in the combine, make notes of what weeds weren't controlled, and try to identify what possibly went wrong.

Just because a weed wasn't controlled by your herbicide program, doesn't mean that it is resistant. The wrong herbicide choice, application timing, poor choice of adjuvants and the environment can all lead to poor control. Careful observation at harvest will identify many of these conditions. Weeds present in wet areas, wheel tracks, point rows and sprayer skips are unlikely to be due to resistance. If several different species of weeds are present in the same field, the problem is likely not herbicide resistance. And if the weeds are species that normally aren't well controlled by the herbicide used, resistance is probably not the problem.

You might begin to suspect herbicide resistance if the following conditions are met. You have excellent control of all weeds except one type, especially if it is a species already documented to develop resistance to the herbicide you used. The weeds that are present don't follow any particular pattern that can be explained by drainage, wheel tracks or other issues mentioned above. Are the weeds found grouped in a way that indicates the seeds were dispersed by last year's harvesting equipment?

Your soybean check-off funds in Illinois are being used to conduct extensive weed control research aimed at helping growers manage weed resistance in soybean production. Based upon data collected so far, the best approach is a two-pass program of soil-applied residual herbicides applied at planting, followed by the nonresidual herbicides used in-crop. While this approach won't totally prevent resistance development, it will slow its spread and minimize the potential for high yield losses where resistance may occur. Δ

Robert Bellm is University of Illinois Extension Educator, Crop Systems at the Edwardsville Extension Center.