

Watch Fields Closely If You Delay Weed Control

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With planting delayed by wet weather, there's a mad rush to get the crop in the ground and worry about weed control later. "I understand the situation farmers are in this spring, with field work running behind schedule and the pressure to get corn and soybeans planted on time, but delaying weed management is risky," says Iowa State University Extension weed specialist Mike Owen.

Weed control and timing were among the topics discussed by ISU Extension specialists from across the state in their weekly "crop conditions update" telephone conference on April 28.

Works best if applied before planting

Owen urges farmers to give serious consideration to applying a preemergence herbicide to provide early season control of weeds in fields that germinate first and in the heaviest population densities. "I recommend that these treatments be applied before planting," he says. "But in situations where it isn't possible to do that, then you should apply the herbicide immediately after planting."

Owen is advising farmers to "Look closely at your fields and observe the need to apply a burndown herbicide. Winter annual weeds are out there this spring and they are in very high populations. They may be small but they are a problem. Don't think that you can eliminate the burndown herbicide treatment in preemergence applications--unless you do tillage and that tillage is done very close to when you plant and spray."

Will one-pass application work?

One strategy that has become more popular is the delayed application of residual herbicides, typically mixed with glyphosate, after both the weeds and crop have emerged. "This can be an effective weed management tactic, but the timing is critically important--the same as with any other postemergence herbicide," notes Owen.

If it is applied too late, you lose money. "By too late, I mean not to kill the weeds, but too late to protect crop yield from the weed competition," he explains.

Owen is also concerned that sometimes these treatments are being marketed as a one-pass application that will provide season-long weed control. He says the weed control is unlikely to last that long and farmers using this program should plan on using a timely second application of some type of postemergence herbicide.

Don't cut glyphosate rates

Due to the jump in the price of glyphosate this year, farmers are asking about applying reduced rates per acre. Will that potentially select for glyphosate resistant weed populations? Will the reduced rate of glyphosate kill most of the weeds but leave the resistant biotypes to survive?

That's certainly possible, says Owen. He tells farmers its best to avoid repeated applications of low glyphosate rates, in part because of the remote potential for selection of resistant weed biotypes, but mostly because you may not control the weeds with reduced application rates.

"Use the recommended rate of glyphosate that decreases the risk of poor weed management," he says. "Keep in mind that applying a low rate of glyphosate and selecting for resistant weeds aren't likely to result from a one-time application. But repeated applications of low glyphosate rates in succeeding years has the potential to select for weeds with quantitative glyphosate resistance."

What if you apply the recommended rate but make just use one application of glyphosate—as opposed to two applications per year? Does that increase the chances of resistant weeds developing? "One application of glyphosate, regardless of rate, has little potential for the selection of resistant weed biotypes," says Owen. "It is the repeated use of one tactic, whether glyphosate or any other herbicide, that imparts the selection pressure that allows the rare individual weed with the genetic capability for resistance to that herbicide tactic to survive."