

# Latest university data continues to confirm the importance of early-season weed control in corn

New research from a glyphosate-tolerant corn timing study conducted in 2007 and 2008 by Purdue University, Ohio State University and Southern Illinois University continues to prove the value of early-season weed control.

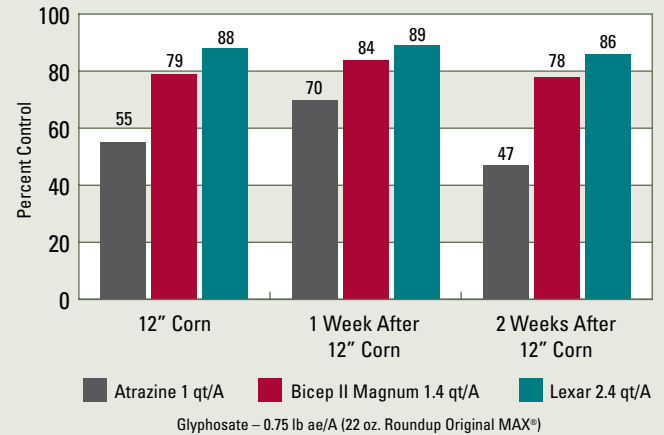
The data shows plots treated with foundation pre-emergence herbicide treatments early in the season performed better than post-emergence only applications against foxtail and giant ragweed and resulted in the highest yields.

In the study, plots were treated with different pre-emergence programs – atrazine, Bicep II Magnum® (atrazine + *S*-metolachlor) and Lexar® (atrazine + *S*-metolachlor + mesotrione). Weed control evaluations were taken prior to a post-emergence glyphosate application for three different timings: applying glyphosate at 12-inch corn, applying glyphosate one week after 12-inch corn and applying glyphosate two weeks after 12-inch corn.

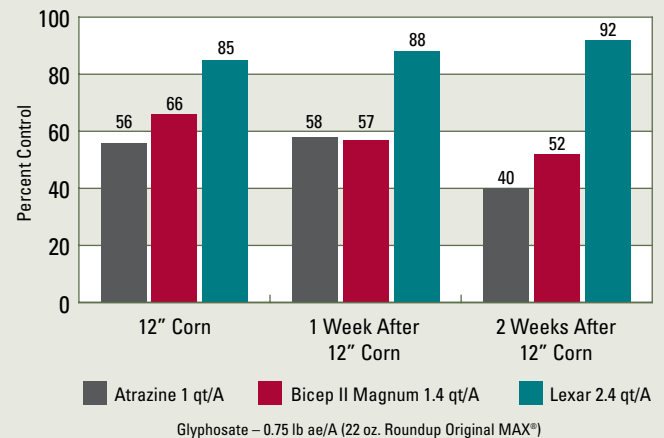
## Weed Control

For the two weeds tested, foxtail and giant ragweed, using a foundation pre-emergence program provided better weed control, leading to increased yields. Atrazine alone provided some weed control; however, Bicep II Magnum provided better weed control and Lexar provided the best level of control.

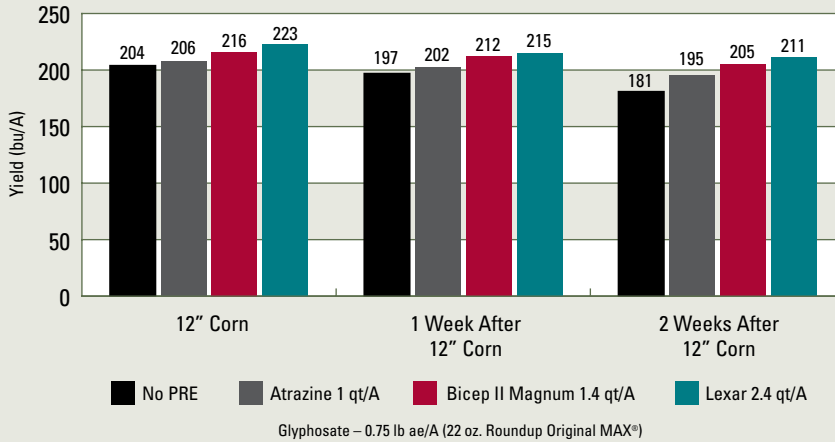
2007-2008 – RR Corn Timing Study  
Purdue/OSU/SIU average (6-site years)  
**Foxtail control at time of POST glyphosate**



2007-2008 – RR Corn Timing Study  
Purdue/OSU/SIU average (5-site years)  
**Giant ragweed control at time of POST glyphosate**



2007-2008 – RR Corn Timing Study  
Purdue/OSU/SIU average (6-site years)  
**Corn Yield**



## Results

The weed control graphs show the percent control of each weed at each of the three different post-emergence glyphosate applications. Comparing the same treatments at each different timing interval, each of the pre-emergence applications improved weed control and Lexar performed most effectively. When you evaluate the yield graph, the value of early-season weed control is clear.

The longer the weeds were allowed to compete with corn, the less corn yielded. **The plot treated with Lexar pre-emergence followed by a glyphosate application at 12-inch corn yielded 223 bushels per acre compared to 211 bushels for the Lexar plot treated with glyphosate at two weeks after 12-inch corn.**

The difference is even more dramatic when you compare to the plot that didn't receive a pre-emergence herbicide treatment. Three different plots received no pre-emergence treatment; instead, the plots received one shot of glyphosate at each of the three different timings. **The plot that received one shot of glyphosate at 12-inch corn yielded 204 bushels per acre, compared to 223 bushels for the Lexar-treated plot followed by one shot of glyphosate at 12-inch corn – a difference of almost 20 bushels per acre.**

## Bottom Line

Don't save quarters now to lose dollars later. Use Lexar, Lumax®, or Bicep II Magnum pre-emergence corn herbicides to protect corn fields from yield-robbing early-season weeds, which, in turn, will protect yield potential and your bottom line. It's simple, ask your retailer or Syngenta sales representative which solution is right for your farm.



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