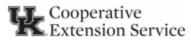
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Farm Update

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EDUCATION

Clint Hardy Daviess County Extension Office

May 10, 2025

Timing Post-Emergence Herbicide Application

Ideal weather in the last two weeks of April provided an opportunity to get more than half of the area corn and soybean fields planted. Since then, scattered rain has slowed activities, but warm weather has the crop growing fast.

Warm days and nights set the stage for rapid growth of corn and soybeans and the weeds that accompany them. Some fields have been sprayed for 7 weeks or more and have received more than 12 inches of rain. This is when we expect applied residual herbicide products to no longer prevent weed emergence. It is time to prepare for post-emergence herbicide applications in corn and soybean fields.

There are three keys to successful season-long weed control results from the postemergence herbicide application. First, it is important to know the crop stages required for the herbicide products you intend to use. Herbicides used in corn range from maximum crop size of 4 leaves up to 48" tall corn. For soybeans, it can be tricky. Some soil residual products allow up to two days after planting but before emergence, while others are only allowed between the first and third leaf trifoliate. That can be a narrow window if crops are growing fast. Timing the herbicide application according to the product is critical to prevent injury. Second, it is important to recognize the weeds present to ensure the product will kill everything that has

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emerged. Be aware of the maximum weed size allowed by the label. Some of the products are capable of killing weeds larger than described by the label, but larger weeds provide an opportunity for a failed kill and increased susceptibility to resistance. There is no reason to wait to spray because the weeds will just grow larger. The third and most important key is using a soil residual product in both corn and soybean fields to prevent later weeds from emerging. A weed that never emerges does not have to be killed later. If you think the field will be ready to spray in a week, it is probably ready now as long as the crop is within the required growth stage. In soybeans, good control with a residual might be the difference between one and two postemergence herbicide applications. While it helps, don't rely on crop canopy shade alone as your late season weed emergence prevention tool.

For corn or soybean weed control, the days of adequate weed control costing less than \$50.00 per acre are gone. Most soybeans are either Roundup Ready Xtend Flex, which are resistant to glyphosate, glufosinate, and dicamba, or Enlist, which are resistant to glyphosate, glufosinate, and 2,4-D. All of these programs work better on smaller weeds, and soil residual herbicide should always be included. Rainfall following application is important. Up to an inch of rain is required to completely activate the soil residual product in heavy residue conditions. Efficacy is reduced after 7 to 10 days have passed without rain. This is true for corn and soybean soil residual products.

Another consideration is using the same mode of action in the burndown program and post-emergence application. A benefit of Xtend beans or Enlist beans is that there is no wait to plant soybeans with those traits after application. Dicamba and 2,4-D are the standards for soybean and corn burndown programs. Never burndown with dicamba and plant Enlist

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soybeans, or burndown with 2,4-D and plant Xtend Flex soybeans. You will likely be disappointed with the results.

The University of Kentucky strongly encourages the tank mix of a post-emergence approved 2,4-D product and glufosinate for post-emergence application on Enlist soybeans. Dicamba is not available for post-emergence use in Xtend Flex soybeans, forcing the reliance of glufosinate alone to kill glyphosate-resistant weeds. In either case, follow the label requirements of glufosinate for the best efficacy. Use no less than 15 gallons of water per acre; 18 to 20 is preferred. Apply before waterhemp or Palmer reach 4 inches, and all other weeds achieve 6 inches in height. The product works best on hot, sunny days. Stop spraying an hour before dusk when possible, and never apply after dark. For more information regarding herbicide programs for corn or soybeans, contact the Daviess County Extension Office at (270) 685-8480.

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