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Delayed Burndown Applications in No-Till

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Abstract
As the end of April nears with little field work accomplished, getting the crop in the ground becomes the priority for many farmers. No-till farmers may plant fields prior to killing weeds with a burndown herbicide, with the intent of returning later to control the weeds with an early postemergence application. While this strategy can be effective, it is important to realize that planting into established weeds greatly shortens the time required for weeds to impact crop yields (critical period).

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Delayed Burndown Applications in No-Till

April 22, 2008

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As the end of April nears with little field work accomplished, getting the crop in the ground becomes the priority for many farmers. No-till farmers may plant fields prior to killing weeds with a burndown herbicide, with the intent of returning later to control the weeds with an early postemergence application. While this strategy can be effective, it is important to realize that planting into established weeds greatly shortens the time required for weeds to impact crop yields (critical period).

When crops are planted into a weed-free seedbed, weeds typically compete with the crop for three to four weeks after crop emergence without impacting yield, but this isn’t the case when planting into established weeds. Factors that will influence the critical period include:
• density of weeds

• size of weeds

• cultural practices (row spacing, seeding rate, etc.), and

• environmental conditions.

Because of the many variables involved, it is impossible to accurately predict when weeds begin to affect yields; however, weeds present at planting may affect yields as early as the V1 stage of crop development. Thus, appropriate herbicides should be applied as soon after planting as possible to remove these weeds.

Due to the increased cost of glyphosate, an increase in the use of preemergence herbicides is anticipated in order to reduce the number of postemergence glyphosate applications. Certain preemergence herbicides cannot be applied if the crop has emerged, so be sure to determine label restrictions and crop stage of development prior to application.

_Bob Hartzler is a professor of weed science with extension, teaching and research responsibilities._

**Category:** Crop Production  Weeds

**Crops:**
Corn
Soybean

**Tags:** burndown treatment  herbicide  Weeds

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_Bob Hartzler is a Professor of Agronomy and an Extension Weed Specialist. Hartzler conducts research on weed biology and how it impacts the efficacy of weed management programs in corn and soybean. He also teaches undergraduate classes in weed science and weed iden..._