Weed and Volunteer Corn Management in Replanted Corn Fields

We have received several questions about weed and corn management in replanted corn fields. Here are a few important points to consider.

The best weed management strategy in these fields will be to scout and spray postemergence herbicides. It is difficult to know how much residual herbicide is left in fields planted in early to mid April and soil applied herbicides have caps on the maximum amount of product that can be applied in a season. So, with the plethora of postemergence herbicides available for corn, we should be pretty successful at post weed control if herbicides are applied in a timely manner. Corn is now growing rapidly and corn growth stages must be monitored to avoid applications past the stages listed on the label. For a summary of maximum heights and growth stages with specific herbicides, see Table 7 in the Weed Control Guide for Ohio and Indiana.

http://www.btny.purdue.edu/Pubs/WS/WS-16/CornRainfast05.pdf

Killing the 1st corn stand in a replant situation. If 1st stand was not Roundup Ready one can use low rates of glyphosate (11 oz/A of Roundup Weathermax or 16 oz/A of other 3 lb ae/gallon products). This treatment will be most effective on corn that has 2 or more exposed leaves to maximize spray coverage. Obviously this treatment would need to be applied before the new corn emerges. If the 1st stand was Roundup Ready corn the situation is much more difficult. Post grass herbicides for soybean will generally have too much residual activity in soil to allow their use and it is unlikely that any of the manufacturers will stand behind their use. Consider using high rates of Gramoxone with some atrazine (if the field has been replanted and the new stand has not emerged) or replanting with Liberty Link corn and applying Liberty when the old stand has 2 or 3 fully developed leaves, or applying Balance to the emerged old stand, but before the new corn emerges. A Gramoxone treatment may be more effective if the corn has at least 3 or 4 exposed leaves. Treatments made too early might just burn off the top of the plant and not kill the growing point. Finally, tillage can be utilized to tear up an old stand, but may cause compaction, loss of soil moisture, and it may disrupt or dilute activity of previously applied soil-applied herbicides.

Dry conditions in Northern Indiana. Dry weather in parts of northern Indiana have resulted in a number of instances where weeds are breaking through soil applied herbicides. Rotary hoeing can still be used on some later planted corn if the weeds are just starting to poke through the ground (white stage). In early planted fields with larger weeds (1 inch tall or more), post herbicides will be the best choice at this time.