

## **Weed Control Considerations for a Late Spring**

News flash, it's been a late, wet, challenging spring for a number of reasons. Okay, that's not much of a news flash. The USDA-NASS Wisconsin Crop Progress report released today indicates that as of May 26, 64% corn is planted with 27% emerged, and 29% soybean is planted with 5% emerged. I'm certain that many of those fields were planted right between rain storms. Since that means roughly ¼ of our corn and soybean acres in the state will have seed in the ground without plants emerged, and many of those fields may have been too wet for herbicide and/or fertilizer applications, I suspect there are a lot of critical weed control decisions that could be encountered in the next week, particularly when 'Plan A' didn't work out well.

### **Considerations for planted corn fields needing herbicide**

In corn, some common scenarios for 'Plan A' likely included a nitrogen application before the corn was planted. Secondly, the plan may also have been to apply nitrogen in the form of Urea Ammonium Nitrate (UAN) as a carrier with a preemergence (PRE) herbicide. Those are a couple of traditional practices and there are a lot of PRE herbicides that can be applied before and after corn plants emerge, and a lot of PRE herbicides that can be applied with UAN as a carrier. However, if you chose an herbicide and nitrogen program with the full intention that the applications would be made before plants emerge, and now you find yourself needing to accomplish these applications after plants are emerging, there are some considerations that should be double-checked to avoid problems.

For starters, the maximum growth stage at which an herbicide application can no longer be applied postemergence (POST) is different for every product. Of particular importance, though, is that there are some herbicide products like Fierce, Sharpen, and Verdict (as examples) that cannot be made to emerged plants. Second, there are products that can be applied with UAN after corn plants emerge, but the risk of crop injury is greatly increased with these combinations. Please be cautious and double check the label for recommendations regarding limitations on crop stage, tank-mix combinations including adjuvant interactions, and rates of both herbicides and UAN. If you planned to apply 100% of your nitrogen needs as UAN, you may have to consider side-dressing applications to reduce the up-front nitrogen rate mixed with herbicide if the crop has emerged.

### **Considerations for planted soybean fields needing herbicide**

In soybean, there are also some herbicides that can be applied before and after plants emerge, but there are many more products that CANNOT be applied once the plants start to emerge, and some are further restricted to applications no more than 3 days after planting. These products include (but may not be limited to): Authority Assist, Authority First, Authority MTZ, Authority XL, Enlite, Envive, Gangster, Lorox, Metribuzin, Optill, OpTILL Pro, Sharpen, Sonic, Valor, and Valor XLT.

Moreover, another consideration that may soon be encountered is whether soybean can be planted in fields that were planned for corn. If there have already been herbicide applications made in preparation for corn, the labels of those products will need to be checked to make certain it is possible to plant soybean there. There are a few herbicides that can be used at similar rates ahead of both corn and soybean, but in many cases this will be a limiting factor. If corn herbicides have been used that restrict soybean planting, I'm afraid you are 'locked' in for corn.

Options in this scenario would include proceeding with corn with reduced yield expectation or exercising preventive planting options. For more information about corn agronomic considerations of late planting visit the UW Extension Corn Agronomy web page: <http://corn.agronomy.wisc.edu/>, and for more information about regarding insurance considerations consult a recent article by Ag Economist Dr. Paul Mitchell: <http://www.aae.wisc.edu/pdmitchell/CropInsurance/LatePreventPlant2013.pdf>.

### **Considerations for fallow fields from prevented planting**

If a grower is considering the option of taking a preventative planting payment for not establishing a crop, there are a couple of considerations about weed control that should be taken into consideration. First, an obvious statement, fallow ground will be a haven for weeds to flourish for the rest of the season. An important component in an integrated management system will be to limit any seed production of weeds during the fallow year. Options will include repeated herbicide applications, repeated tillage applications, a cover crop, or some combination of these options. The most immediately important point I want to make is that all of these options will cost money and should be factored into the financial equation during the decision process of whether to take a preventative planting payment without establishing a crop.

**Weed control with herbicide:** Why did I say ‘repeated’ herbicide applications? First, there may be several herbicide options to choose from to manage weeds all season, but make certain if you use residual herbicides they are appropriate choices for your rotational crop. Second, don’t expect that a residual herbicide, which provides season-long control in a crop will also provide season-long control on fallow ground. It’s likely that even many expensive residual herbicide programs would need a second application at the end of the season without the help of a competitive crop. Also, realize that striving for fields completely free of vegetation all summer-long may be a tremendous risk to soil erosion. From this perspective, allowing weeds to occupy the field for some vegetative growth may not be a bad thing as long as they are terminated prior to flowering. Unfortunately, if you violate weed size limitations on the labels of non-selective herbicide products, it would not only be accepting tremendous risk of ineffective control, but it would also provide tremendous selection pressure for herbicide resistance. So, to rely on non-selective herbicides that don’t have residual activity will also likely necessitate multiple applications.

**Weed control with tillage:** Perhaps the most straight-forward discussion is of repeated tillage applications with tillage equipment, probably a disc, to keep vegetation from going to seed. The only comment here is that this could, depending on soil type, be a tremendous risk to soil erosion or other soil properties.

**Weed control with a cover crop:** Establishing a crop to aid the suppression of weeds in this scenario is a great idea. However, keep in mind there are different considerations for establishing a ‘cover’ crop and establishing a ‘forage’ crop: [http://host.cals.wisc.edu/wcws/wp-content/uploads/sites/4/2013/03/CoverCrops\\_Article\\_2012\\_Davis.pdf](http://host.cals.wisc.edu/wcws/wp-content/uploads/sites/4/2013/03/CoverCrops_Article_2012_Davis.pdf). A cover crop will be grown the rest of the year but not harvested. In this case, the major consideration is whether there are possibly any herbicide residues in the soil that would inhibit getting the cover crop species established. However, if you have any intentions of harvesting the crop for any kind of grazing or haying later in the year, that crop is a forage crop. Under this scenario, make certain you understand the implications for crop insurance, and secondarily make sure the following crop planted is allowed as a rotational crop on the pesticide labels that have been used in that cropping

system for at least the previous 3 years. There are several herbicides that would prevent a large number of forage crops to be harvested and fed to livestock for as long as 40 months following herbicide application.

Lists of product names mentioned in this article were not meant to be all inclusive or as any product endorsement. As always, read and follow the label directions for all products you are using in a cropping system. Last, good luck and think safety first in this challenging season.  
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