

## Herbicide Carryover

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As we near the end of August, we are getting to the time of year when many producers begin to plant cover crops on their farms. Cover crops can prevent soil erosion, supply nutrients to the following crop, suppress weeds and reduce soil compaction at a time when most fields are fallow. If you are going to plant cover crops on your farm, be aware that some herbicides used during the previous crop cycle may still be present in the field and may prevent your cover crops from becoming established.

During normal years, many of the residual herbicides that are used in corn and soybean production have been degraded to levels that will not harm cover crops. Herbicides are broken down by chemical and microbial processes in the soil. As temperature and soil moisture increases, the rate of breakdown is also increased. While we have had adequately high temperatures this summer, the lack of moisture means that many herbicides are likely still present in crop fields, which may cause issues in cover crop establishment.

Some herbicides that may cause problems include atrazine, products containing fomesafen such as Flexstar or Prefix, HPPD herbicides such as Callisto, and ALS herbicides such as Capreno. Research from the University of Missouri has shown that cover crop species vary greatly in their sensitivity to herbicide carryover. Broadleaves such as tillage radish and crimson clover are generally more sensitive while grasses such as cereal rye are able to withstand greater rates of herbicide carryover.

If you are concerned about carryover on your farm, plant a small area within your field to your desired cover crop. Water in the seeds and check for damage on the emerging cover crop one to two weeks later. This will give you an idea on whether you can expect injury from the herbicides when the entire field is planted.