

Herbicide Carryover Concerns in Cover Crops - 2015

As herbicide-resistant waterhemp, and marehail become more widespread, the level of residual and post-applied herbicides has been increasing. This has become a major issue in planting cover crops due to herbicide carryover.

Producers are applying post-applied herbicides in less than 60 days of the optimal cover crop seeding dates as well. The farther north in the Corn Belt the greater this problem becomes due to later spraying dates and earlier cover crop planting dates.

Field observations and bioassay of soils for herbicide residues were conducted during 2015 in August, September and October. Results confirmed residual herbicides can cause stunting, poor growth, stand reduction, and reduced winter survival. Some cover crops are more sensitive to certain herbicides.

The following university Extension publications provide details on corn and soybean herbicides and their potential to damage cover crops.

University References: herbicide carry over and crop rotations

1. Pennsylvania State University, "Common corn and soybean herbicides, estimated half-lives, cash crop restrictions and their potential to injure fall cover crops";
(<http://extension.psu.edu/plants/crops/soil-management/cover-crops/herbicide-persistence>).
2. Purdue University, "Cover Crops and the Corn and Soybean Herbicide Rotational Restrictions";
(https://ag.purdue.edu/btny/weedscience/Documents/Rotation_Restrictions.pdf).
3. U of Wisconsin Extension, "Herbicide Rotation Restrictions in Forage and Cover Cropping Systems";
http://www.mccc.msu.edu/states/Wisconsin/2014_Factsheet_HerbicideRotationRestrictions.pdf