

May 10, 2019

INDIANA BULLETIN NO. 180-19-02

SUBJECT: CPA – Planting Commodity Crops into Green Cover Crops

Purpose: To give Field Offices instructions to assist farmers who may plant green

Expiration Date: September 30, 2019

“Planting Green” is planting commodity crops directly into living cover crops (whether they are actively growing or in the early stages of termination). With Indiana’s wet weather so far this year, some farmers will be faced with planting green decisions as a last resort, whereas others with more cover crop experience may choose to purposefully plant green.

Research is underway on the best methods to minimize risks associated with planting green, and additional information has been learned directly from farmers’ experiences.

For farmers newer to cover crops, NRCS will recommend that cover crops be planned to be terminated 10 to 14 days prior to planting. However, for farmers seeking NRCS advice when planting green as a last resort, follow these guidelines:

Indiana NRCS Standards:

USDA-NRCS Indiana standards do not specifically promote nor prohibit planting green.

Federal Crop Insurance:

The current *USDA NRCS Cover Crop Termination Guidelines* are in the Field Office Technical Guide (<https://efotg.sc.egov.usda.gov/#/> -> Indiana -> Section IV -> Old Section IV -> Indiana Standards -> Cover Crop (340) -> [NRCS - RMA Cover Crop Termination Guidelines \(September 2014\)](#)). National efforts are underway to update these based on the 2018 Farm Bill, but until further notice, Indiana growers may plant into green cover crops as long as they terminate the cover crop within five days of planting and before the cash crop emerges.

Planting Green as a Last Resort

Below is technical advice for farmers planting green as a last resort:

- **Scout** - - for insects, slugs, voles, disease and weeds.
 - Scout each field adequately at least every week;
 - Pay particular attention to insect pests such as: armyworms, black cutworms and stink bugs;
 - Properly identify and consider all beneficial species;
 - Take appropriate Integrated Pest Management actions when economic thresholds are exceeded;

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- Slugs can be an issue if cool, cloudy and damp conditions prevail. Insecticidal seed treatments do not control slugs, and beneficial insects feeding on slugs can be inadvertently killed;
- While cover crops have potential to assist in some weed management scenarios, be sure to include current weed management plans with cover crop termination plans.
- If possible, plant soybeans instead of corn;
 - If planting corn, be sure to add 40-60 lbs/acre of starter nitrogen followed by early side-dress nitrogen.
- Planting and Planter Set Up
 - Consider the weather trend for the next one to two weeks. Will letting cover crops grow help to dry out the soil to enable planting and other field operations? If the soil is already dry, and the trend is for dry weather, letting the cover crop grow longer will only dry the soil more;
 - Use a no-till drill capable of planting into heavy residue with seed depth control that includes sharp coulters, aggressive row cleaners, adequate down pressure, and closing wheels;
 - Check for proper seed slot closure frequently during planting and adjust down pressure and use closing wheels accordingly;
 - Avoid “hairpinning” into the seed trench by keeping coulters sharp and/or planting deeper;
 - Cover crops may “wrap” on some planters and attachments. Use smooth closing wheels or a deflector on spiked closing wheels to avoid wrapping;
 - Check and clean air filters and radiator covers frequently;
- Termination by herbicides:
 - Whether planting your crop first or terminating your cover crop first, make sure that these activities take place immediately following each other to minimize adverse weather impacting either operation.
 - Ensure the timing of termination coincides with the genetics of the crop (i.e. – herbicide-resistant varieties compared to non-GMO);
 - Ensure that the cover crop is actively growing and not damaged. Herbicide uptake will be decreased if the cover crop is damaged by equipment or other factors;
 - Provide clients with copies of published herbicide recommendations such as Purdue’s *Indiana Cover Crop Recipe - Post Corn, Going to Soybean: Use Cereal Rye (Purdue University CES Publication, AY-356-W)* and others.
 - Recognize that larger plants, plants that have grown past the boot stage, or plants sprayed during cooler weather can be more difficult to kill or will die more slowly;
 - Be careful of herbicide formulations that may be antagonistic if weather is cool and cloudy near the application date;
 - Follow Herbicide Best Management Practices:
 - Use the full labeled rate;
 - Address spray tank water quality (hardness, pH) issues;
 - Pay attention to different product formulations;
 - Determine the application rate and correctly measure the amount of product;
 - Calibrate the sprayer;
 - Match the appropriate carrier volume and nozzle size with the planned spray solution for adequate coverage;

- If applicable, select proper spray additives (AMS, surfactant);
- Identify and follow the proper mixing order of products. Beware of potential antagonism between pesticide products and additives;
- Only spray during the warming time of day in sunny conditions, when day and nighttime temperatures are consistently above 50 F;
- Use of a roller/crimper:
 - Roll/crimp the cover crop in the same direction the crop will be planted;
 - If crimping for termination, be sure that the cover crop is in full flower for at least 50% of the field;
 - Be ready with a follow-up herbicide pass (where applicable) if termination by a crimper does not achieve sufficient control or if cover crops were crimped at an earlier growth stage.
 - A roller will put the cover crop in closer proximity to the soil and increase biological breakdown. This will also decrease shading of the commodity crop;
- Consult with farmers in the area who have planted green successfully.
- Consider harvesting for baylage, and if not in conflict with a program that would prevent harvest.

Below are items that a farmer should attempt to avoid if they will be planting green as a last resort:

- Planting green is not recommended for the beginning no-tiller or cover cropper;
- Avoid mowing the cover crop. It is very unlikely that mowing will terminate the cover crop and it will create a mat of residue; also, a mowed plant is a stressed plant - in addition to reduced surface area, it will not be controlled well with herbicides;
- Avoid using a conventional planter or drill. The planter/drill must be able to plant into a no-till environment.
- Do not ignore these fields. Give these fields the additional attention they'll need through scouting and other observations to avoid potential risks, and to learn as much as possible during these early experiences.

Plans are being made this spring for NRCS field visits with farmers across the state who are planting green to observe and learn. These field visits and learning experiences will be coordinated with very short notice.

Please direct questions related to this bulletin to Stephanie McLain, State Soil Health Specialist at 317-295-5824 or Shannon Zezula, State Resource Conservationist at 317-295-5888.

/s/ GERALD ROACH Acting For

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State Conservationist

References: [Indiana Cover Crop Recipe - Post Corn, Going to Soybean: Use Cereal Rye \(Purdue University CES Publication, AY-356-W\)](#)
[Managing Cover Crops: An Introduction to Integrating Cover Crops into a Corn-](#)

[Soybean Rotation \(Purdue University CES Publication, AY-353-W\)](#)
[Planting Green 101: Penn State University Research Summary](#)
[Planting into Green Living Cover Crops Handout](#) (PA No-Till Alliance)

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Purdue Planting Green discussion group