2021 Cover Crop Termination

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Termination methods and timing can be some of the most critical and frustrating decisions you can face in cover crop management. Soon, covers will be shifting to spring growth. Management practices, based on the specie(s) you planted, intended purposes and the successive crop, need to be finalized to maximize the benefits from the covers and allow a smooth transition to your following crop.

As we begin this new year, it is important that you continually monitor your cover crop growth. We can expect sporadic periods of warm weather and rainfall during January and February, causing some covers to switch from fall/winter to spring growth. During these events, rapid growth can be expected in most covers, especially early spring legumes such as clovers, winter peas and vetches. Until now, most of these probably have provided only minimal ground cover since most of their vegetative growth occurs in the spring. The cereals can produce abundant biomass and groundcover in the fall, due to tillering, but will continue considerable vegetative growth during this time. Once past jointing, moisture intake by cereals can increase rapidly, which is necessary for progressing to the reproductive stage. This rapid uptake before termination can affect the soil moisture availability for the next crop and should be considered in your management plan. The Brassicas, such as tillage radish, should have produced most of their vegetative growth and ground cover in the fall. Once they enter the reproductive stage, chemical termination may not be effective, so termination by chemicals at the onset of this stage is advised. Based on which cover crop or mix you planted, the rapid growth can benefit or cause adverse results to your expected cover crop intentions, as well as your future crop.

If planting corn, covers generally will be terminated in February, allowing four to six weeks before planting for best IPM practices. This period can provide needed time to break the green bridge between crops, reducing insect issues. Also, this allows time for the covers to breakdown, potentially maximizing benefits and minimizing nutrient losses which may be utilized by the corn. Generally, as covers decompose, nutrients are released within four to six weeks post termination.

For crops with later planting dates, such as cotton or soybean, there are several issues to be considered in termination of some covers. Brassicas will soon be transitioning to the reproductive stage as the temperature warms. Both Brassicas and legumes should be terminated early in reproductive stages. If terminated later, chemicals may not be effective. Even after termination, Brassicas can cause possible green bridge issues due to their fleshy roots. Easily terminated cereals and legumes still in the vegetative stage can be terminated similarly but allowing a minimum of two to four weeks of non-actively growing covers crops before planting the successive crop. If Brassicas are planted in a mix with a cereal, termination of the Brassicas early in the year can significantly reduce the biomass produced by the cereal.

Recommended chemicals and rates. Remember to consult the label prior to use.

Species	Chemical	Rate of Active Ingredient
Cereals/grasses	Glyphosate	1 #
Wheat	Glyphosate + Clethodim	1 # + .188 -.25 #
Legumes (exc. Clovers)	2-4 D	.5-1 #
Clovers	Dicamba (approved labels only)	.5 #
Tillage Radish	2-4 D or LeadOff	.5-1# or .5 Oz
Cereals + Legumes Mixes (exc. Clovers)	Glyphosate + 2-4 D	1 # + .5-1 #
Cereal + Clover Mixes	Glyphosate + Dicamba (approved labels only)	1# + .5 #
Example: *Rye + Hairy Vetch + Crimson Clover*	*Glyphosate + 2-4 D + Dicamba (approved labels only)*	*1 # + .5-1 # + .5 #*

If you have specific issues related to termination: Contact Dr. Daniel Stephenson (Dean Lee RS) or Dr. Donnie Miller (Northeast RS)