



# Prevent Cover Crops From Becoming Your Next Weed Problem



Prior to establishing a cover crop, you should have a plan in place to terminate the cover crop in order to prevent any negative effects the cover might have on subsequent crops in your rotation. Termination can occur through methods such as winterkill, crimping, mowing, tillage or herbicide application and is dependent on both the species of cover crop and the subsequent crops to be grown.

## Cover Crop Species

The species of cover crop will greatly influence the type of termination needed and the potential for seed production.

- ☑ Annual ryegrass (also known as Italian Ryegrass) has shown herbicide resistance in the U.S., and this should be considered in the management plan.
- ☑ Seeds produced from cover crops can cause future weed problems; cover crops should be closely monitored and terminated prior to seed production.
- ☑ Vetch species should be used with caution due to hard seed characteristics, ability to produce seed quickly and planting difficulties in no-till production.
- ☑ Crimson clover and annual ryegrass can sometimes overwinter so don't rely on winterkill as the only termination plan.

## Wisconsin guidelines for successful termination of commonly used cover crop species

\*Always follow the product's current label restrictions and instructions. **The label is the law.**



	Termination Methods				
	Winterkill	Crimping	Mowing	Tillage <sup>1</sup>	Herbicide*
<b>SMALL GRAIN/GRASS SPECIES</b>					
Annual Ryegrass	Maybe	No	No	Yes	Glyphosate <sup>2</sup> 16-32 fl oz per acre
Oat	Yes	Yes	Yes	Yes	
Sorghum-sudangrass	Yes	No	No	Yes	
Spring Barley	Yes	No	Yes	Yes	
Winter Triticale	No	Yes	Yes	Yes	
Winter Barley	Maybe	Yes	Yes	Yes	
Winter Rye	No	Yes	Yes	Yes	
Winter Wheat	No	Yes	Yes	Yes	
<b>BRASSICAS</b>					
Mustards	Yes	No	No	Yes	Glyphosate <sup>2</sup> 16-32 fl oz per acre
Radish	Yes	No	No	Yes	
Rapeseed	Maybe	No	No	Yes	
Turnip	Yes	No	No	Yes	
<b>LEGUMES</b>					
Berseem Clover	Yes	No	No	Yes	Glyphosate <sup>2</sup> 16-32 fl oz per acre + Growth Regulator 8-16 fl oz per acre
Cowpeas	Yes	No	Maybe	Yes	
Crimson Clover	Maybe	No	No	Yes	
Field Pea	Yes	No	Yes	Yes	
Hairy Vetch	No	Yes	No	Yes	
Red Clover	No	No	No	Yes	
Sunflower	Yes	Yes	Yes	Yes	

<sup>1</sup>Tillage is not a recommended termination practice unless the cropping system has limited termination options. Frequent tillage can degrade soil health. Note that tillage may require multiple passes to fully terminate the cover crop.

<sup>2</sup> Glyphosate formulation- 4.5 lb acid equivalent per gallon. Always read and follow the herbicide label. The label is the law.



### Cover Crops vs. Forage Crops

Keep in mind that cover crops and forage crops are not interchangeable and may require different management considerations. Quickly defined, a cover crop is established for benefits to the soil, cropping system and environment; no biomass is harvested. A forage crop is grown for feed, and the biomass is harvested either by grazing or mechanical means.

### Cover Crops and Other Weeds

The cover crop species and weed species present at the time of termination should be used as a guide for determining the herbicide product. The size of the cover crop and weed species should be also considered to insure both will be controlled by the herbicide application. Spray nozzles and application volume should be selected for good coverage and must follow label guidelines.

### Herbicides and Weather

Weather conditions prior to, during and following herbicide application can impact the efficacy of the herbicide. When terminating cover crops with a herbicide (and in particular glyphosate), the cover crop should be actively growing. The day time minimum temperature should be 55°F and a minimum night time low temperature of 40°F. Applications should occur during daylight hours and at least four hours prior to sunset.

### Herbicide Rotational Restrictions

Herbicides have crop rotational restrictions that will vary in length and should be examined for all herbicides and crops used in a rotation. If the potential for using a cover crop for forage exists, then you must consider the herbicides used previously in the rotation. For example, following an application of herbicide XYZ that has a 90 day rotational restriction for winter rye indicates that *winter rye cannot be planted for at least 90 days after herbicide application if forage harvest is intended.*

### Winter Rye Termination in a Forage System

Winter rye is often harvested as forage, and questions arise when the rye should be terminated prior to the subsequent crop. Keep in mind:

- Pre-harvest termination treatment is not allowed (consult label).
- Harvesting winter rye will not terminate the crop; it is effective at reducing biomass and slowing regrowth. A second termination method is often necessary.
- Post-harvest glyphosate treatment is an effective method for terminating winter rye. Application can occur immediately following harvest with no reduction in efficacy.
- Herbicides applied to the winter rye must accommodate the rotational restrictions for the next crop.

### Cover Crop Termination and Crop Insurance

Consult with your crop insurance agent before establishing any cover crops to confirm termination requirements.

### Additional resources

#### Cover Crops in Wisconsin

<https://fyi.extension.wisc.edu/covercrop/>

#### Termination of Winter Rye and Annual Ryegrass Using Glyphosate

[http://ipcm.wisc.edu/download/pubsPM/AnnualRye\\_WinterRye\\_Glyphosate.pdf](http://ipcm.wisc.edu/download/pubsPM/AnnualRye_WinterRye_Glyphosate.pdf)



Daniel H. Smith, Southwest Regional Specialist, Kevin Shelley, South Central Regional Specialist and Mimi Broeske, Senior Editor

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