

## Herbicide use may restrict grazing options for cover crops

Interest in cover crops has dramatically increased due to their many potential benefits. In addition to conservation purposes, cover crops can provide forage for livestock producers. It is important for livestock producers to consider restrictions on labels of herbicides used earlier in the growing season if they intend to use the cover crop as a forage source.

The two primary reasons for label restrictions related to cover crops are: 1) herbicide residues may prevent successful establishment of the cover crop, or 2) residue tolerances have not been established for the presence of the herbicide within the cover crop. Regardless of the reason for the restriction, failing to follow the restrictions is a violation of the label and therefore a punishable offense.

The following tables list herbicide products that allow the establishment of cover crops for the purpose of grazing or forage harvest during the same cropping season as application. Herbicides are divided into three categories based on the minimum interval between application and planting of cover crops intended for forage purposes. The first group of herbicides allows planting of the indicated cover crops within four months of application; the herbicide label will list the specific time interval. The second group of products requires a minimum of four months between application and planting of cover crops, whereas a 4.5 month interval is required for the third group. The intent of this bulletin is to assist livestock producers in identifying herbicides that are compatible in cropping systems that use cover crops for forage. It is not intended to eliminate the need to read the label and determine specific use restrictions.

Due to the large number of generic and private brand products, not all products are included in these tables. Inclusion of a product in this bulletin does not imply endorsement of that particular brand, nor does exclusion imply non-approval.



**Table 1. Corn herbicides allowing establishment of cover crops for grazing/forage during the season of application.**

<b>Cover crop options that can be planted within 4 months of application.</b>						
<b>Tradenames</b>	<b>Active ingredients</b>	<b>Cereal rye</b>	<b>Wheat</b>	<b>Oats</b>	<b>Barley</b>	<b>Others*</b>
Armezon/Impact	topramezone	X	X	X	X	
Basagran	bentazon	X	X	X	X	X
Buctril	bromoxynil	X	X	X	X	X
Callisto	mesotrione			X		
Clarity	dicamba	X	X	X	X	
Fierce	flumioxazin, pyroxasulfone		X			
glyphosate	glyphosate	X	X	X	X	X
Harmony	thifensulfuron	X	X	X	X	X
Liberty	glufosinate	X	X	X	X	X
Option	foramsulfuron	X	X	X	X	X
Northstar	primisulfuron, dicamba	X	X		X	
Resolve	rimsulfuron		X			
Sharpen	saflufenacil	X	X	X	X	
Status	dicamba, diflufenzopyr	X	X	X	X	
Valor (≤ 2 oz)	flumioxazin	X	X		X	
Zidua (≤2 oz)	pyroxasulfone		X			
Stinger	clopyralid		X	X	X	X
Resource	flumiclorac	X	X	X	X	X
Yukon	halosulfuron, dicamba	X	X	X	X	X
2,4-D	2,4-D	X	X	X	X	
<b>Cover crop options that can be planted a minimum of 4 months after application.</b>						
Accent Q	nicosulfuron	X	X	X	X	
Anthem Maxx (≤4.9 oz)	fluthiacet, pryoxasulfone		X			
Balance Flexx	isoxaflutole	X	X	X	X	
Callisto	mesotrione	X	X	X	X	
Corvus	isoxaflutole, thiencazuron-methyl	X	X			
Clarity	dicamba	X	X	X	X	X
Halex GT	glyphosate, s-metolachlor,	X	X	X	X	
Hornet	clopyralid, flumetsulam	X	X	X	X	
Instigate	rimsulfuron, mesotrione	X	X	X	X	
Laudis	tembotrione	X	X	X	X	
Optill	imazethapyr, saflufenacil	X	X			
Outlook	dimethenamid	X	X	X	X	
Prequel	rimsulfuron, isoxaflutole	X	X	X	X	
Prowl H20 (<4 pts/A)	pendimethalin		X		X	
Python	flumetsulam	X	X	X	X	
Realm Q	rimsulfuron, mesotrione	X	X	X	X	
Steadfast Q	nicosulfuron, rimsulfuron	X	X	X	X	
Surestart	acetochlor, flumetsulam, clopyralid		X			
Surpass	acetochlor		X			
Verdict	saflufenacil, dimethenamid	X	X	X	X	
Zidua (≤3 oz)	pyroxasulfone		X			
<b>Cover crop options that can be planted a minimum of 4.5 months after application.</b>						
Dual II Magnum	metolachlor	X	X	X	X	
Lumax	metolachlor, atrazine, mesotrione	X	X		X	
Sequence	glyphosate, metolachlor	X	X	X	X	
Zemax	metolachlor, mesotrione	X	X	X	X	
Cadet**	fluthiacet-methyl	X	X	X	X	X

\* Refer to label to determine specific cover crops that are allowed.

\*\* Any cover crop may be planted following harvest of corn treated with Cadet.

**Table 2. Soybean herbicides allowing establishment of cover crops for grazing/forage during the season of application.**

<b>Cover crop options that can be planted within 4 months of application.</b>						
<b>Tradenames</b>	<b>Active ingredients</b>	<b>Cereal rye</b>	<b>Wheat</b>	<b>Oats</b>	<b>Barley</b>	<b>Others*</b>
Basagran	bentazon	X	X	X	X	X
Classic	chlorimuron	X	X	X	X	
Cobra	lactofen	X	X	X	X	X
Enlite (pH ≤7.5; ≤4.25 oz)	chlorimuron, thifensulfuron, flumioxazin		X			
Extreme (East of I-35)	glyphosate, imazethapyr		X			
Fierce	flumioxazin, pyroxasulfone		X			
Fusilade	fluazifop	X	X	X	X	X
glyphosate	glyphosate	X	X	X	X	X
Liberty	glufosinate	X	X	X	X	X
Poast Plus	sethoxydim	X	X	X	X	X
Raptor	imazamox		X			
Resource	flumiclorac	X	X	X	X	X
Select Max	clethodim	X	X	X	X	X
Sharpen	saflufenacil	X	X	X	X	
UltraBlazer	aciflorfen	X	X	X	X	X
Valor ≤2 oz	flumioxazin	X	X		X	
Zidua (≤2 oz)	pyroxasulfone		X			
<b>Cover crop options that can be planted a minimum of 4 months after application.</b>						
Assure II	quizalofop	X	X	X	X	X
Authority Assist	sulfentrazone, imazethapyr	X	X			
Authority First	sulfentrazone, cloransulam		X			
Authority Maxx	sulfentrazone, chlorimuron	X	X		X	
Authority MTZ	sulfentrazone, metribuzin		X		X	
Authority XL	sulfentrazone, chlorimuron	X	X		X	
Enlite (pH ≤7.5; ≤4.25 oz)	chlorimuron, thifensulfuron, flumioxazin	X	X		X	
Envive	chlorimuron, thifensulfuron, flumioxazin	X	X		X	
Extreme	glyphosate, imazethapyr	X	X			
FirstRate	chloransulam		X			
Flexstar GT	fomesafen, glyphosate	X	X		X	
metribuzin	metribuzin		X		X	
Optill	imazethapyr, saflufenacil	X	X			
Optill PRO	imazethapyr, saflufenacil, dimethenamid	X	X			
Outlook	dimethenamid	X	X	X	X	
Prowl H20 (≤4 pt/A)	pendimethalin		X		X	
Pursuit	imazethapyr	X	X			
Python	flumetsulam	X	X	X	X	
Raptor	imazamox	X	X			
Sharpen (≤1 oz)	saflufenacil					X
Valor ≤ 3 oz	flumioxazin	X	X		X	
Valor XLT	flumioxazin, chlorimuron	X	X		X	
Zidua (≤3 oz)	pyroxasulfone		X			
<b>Cover crop options that can be planted a minimum of 4.5 months after application.</b>						
Authority Elite	sulfentrazone, s-metolachlor	X	X		X	X
Dual II Magnum	s-metolachlor	X	X	X	X	
Prefix	fomesafen, s-metolachlor	X	X	X	X	
Boundary	metolachlor, metribuzin		X		X	
Cadet**	fluthiacet-methyl	X	X	X	X	X

\* Refer to label to determine specific cover crops that are allowed.

\*\* Any cover crop may be planted following harvest of soybean treated with Cadet.



*No endorsement is intended by Iowa State University Extension and Outreach of companies or their products mentioned nor is criticism implied of similar companies or their products not mentioned.*

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