

Herbicide Rotation Restrictions in Forage and Cover Cropping Systems





Designing effective herbicide programs while following pesticide label restrictions can be challenging in any cropping system. With rotations that include forage and cover crops, the challenge can be increased—especially when a planned cover crop might be needed as supplemental or emergency forage. In this case, the best approach is to be aware of crop rotation restrictions ahead of time and plan the most effective solution for all possible scenarios.

Herbicide label rotational restrictions

Once a herbicide is used in a cropping system, the restrictions on that label must be followed for the original crop it is used on AND the succeeding crops until all restrictions on that label have been surpassed. These rotational restrictions exist for two reasons:

- 1. To protect humans and animals from herbicide residues that a succeeding crop may accumulate at elevated labels prior to entering the feed or food chain.
- 2. To ensure good establishment for the following crops by avoiding herbicide carryover injury.

An EPA registered pesticide label is a legal document and the instructions must be followed to avoid violating Federal law. Always check the herbicide label for crop rotational restrictions (http://www.cdms.net/LabelsMsds/LMDefault.aspx). Each crop will have a rotational planting interval stated in days or months. If a rotational restriction is not listed for a specific crop, follow the maximum interval. Pay careful attention to any listed exceptions.

What is the difference between a forage crop and a cover crop?

Simply put, a forage crop is planted for animal feed, which can be either grazed by animals or harvested from the field. A cover crop is planted for a variety of reasons—improving soil health, adding nutrients, suppressing weeds—and is not harvested. Typically, the cover crop's biomass stays in the field and may be incorporated into the soil.

In the legal sense, once the biomass of a cover crop is removed from the field for feed (grazed or harvested), it is considered a forage crop or more precisely a crop, according to the EPA registered pesticide label. It is important to note that even in situations where cover crops are allowed to be grazed or harvested within a crop insurance or cost-share program, the label restrictions must still be followed.

Some label examples

The following excerpts are taken directly from registered pesticide labels (http://www.cdms.net/LabelsMsds/LMDefault.aspx). Example products are strictly for illustration purposes and are not an endorsement of the product.

Harness®

ROTATIONAL CROPS:

- 1) If a crop treated with this product is lost, field corn, seed corn, silage corn, popcorn sweet corn or milo (sorghum) may be replanted immediately. When planting milo (sorghum), only use seed properly treated with seed protectant or safener. Do not exceed a total of 3.0 pounds per acre of active ingredient if additional product is applied.
- 2) Nongrass animal feeds such as alfalfa, clover, kudzu, lespedeza, lupin, sanfoin, trefoil, and Vetch spp. may be planted 9 months after application. Wheat may be planted 4 months after application.
- 3) Rotate the next season to the following crops: soybeans, corn (all types), cotton, milo (sorghum), tobacco, sugar beets, sunflowers, potatoes, barley, buckwheat, , millet (pearl and proso), oats, rye, teonsinte triticale, wild rice, dried shelled bean group Lupinus spp. (including grain lupin, sweet lupin and white lupin); Phaseolius spp. (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean, bean); Vigna spp. (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea and urd bean); broad bean (dry) chickpea, guar, lablab bean, lentil, pea (Pisum spp., includes field pea); pigeon pea.

ROTATION TO NON-FOOD WINTER COVER CROPS

Following harvest of food crops treated with Harness herbicide, only non-food or non-feed winter cover crops (with the exception of wheat) may be planted. Do not graze or harvest rotational cover crops for food or animal feed for 18 months following the last application of Harness herbicide. This prohibition does not apply to wheat, which may be planted 4 months following the last application of Harness herbicide, or to non-grass animal feeds, which may be planted 9 months after the last application of Harness herbicide.

Huskie®

CROP ROTATION INTERVALS

Huskie Herbicide breakdown in the soil is due mainly to microbial action. Under adverse conditions such as cold and drought, degradation may be slowed.

- 1 Month: Wheat, Barley, Fine fescue, Tall fescue, Kentucky bluegrass, Oats, Orchardgrass, Perennial ryegrass, Annual ryegrass, Rye, and Triticale
- 4 Months: Alfalfa*, Millet, Grain Sorghum (to include grain and forage) and Soybeans
- 9 Months: Canola, Canaryseed, Chickpeas, Corn, Dry Beans, Flax, Field Peas**, Green Beans, Green Peas, Lentils**, Mustards, Potatoes, Safflower, Sunflowers, Sugarbeets and Timothy.
- *Thorough tillage prior to planting alfalfa and a minimum of 12 inches of rainfall, overhead, or flood irrigation or any combination of these water sources totaling 12 inches is required between the time following a Huskie Herbicide application and the time of alfalfa seeding.
- ** Field peas: 9 months for all states except 18 months in MT.
- *** Lentils: 9 months for all states except 18 months in MN, MT, ND and SD.

Where a crop is not specified, conduct a field bioassay as described in "FIELD BIOASSAY" section of this label.

FIELD BIOASSAY

A field bioassay must be conducted for crops not listed on this label. To conduct a field bioassay, plant strips of the crop you want to grow the season following Huskie Herbicide application. Monitor the crop for response to Huskie Herbicide to determine if the crop can be grown safely in previously treated Huskie Herbicide areas.

Do not plant any rotational crop within 30 days following a Huskie Herbicide application.

Cover crop rotational restrictions

Most commonly used corn, soybean, and small grain herbicides do not restrict the rotational planting interval for cover crops. However, the following herbicides have rotational restrictions: Harness and Harness Xtra (can only be used on non-food winter cover crops), Hornet (10.5 months), Python WDG (9 months). The product information compiled here is intended to be as accurate as possible at the time of printing. Refer to product label for more detailed restriction information. Always follow the product's current label restrictions and instructions.

Forage crop rotational restrictions

The following tables summarize the rotational restriction interval in months along with specific restrictions for forages grown after commonly used herbicide applications in small grains, soybean and corn. Products listed in this publication are strictly for informational purposes; their inclusion is not an endorsement.

Months to plant forage crops after herbicide application on small grains

						NO	N-LEGUME	FORAGE CRO)PS					LEGUN	ME FORAGE	CROPS		
			ANNUAL RYEGRASS	BARLEY	ВИСКИНЕАТ	CEREAL RYE	OATS	PEARL MILLET	SORGHUM	TRITICALE	WHEAT	RADISH	ALFALFA	CLOVER	COWPEA	FIELD PEA	VETCH	MAX ROTATION (a)
	Affinity BroadSpec	B, W	1.5	0	1.5	1.5	1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Dicamba (Clarity)	B, 0, W	(b)	(b)	4	(b)	(b)	(b)	(b)	(b)	4	4	4	4	4	4	4	4
ES	Buctril	ALL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Callisto	0	18	4	4	4	0	0	18	4	18	10	18	18	18	18	18	18
RBIG	Harmony Extra SG	B, 0, W	1.5	0	1.5	1.5	1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
포	Harmony SG	B, 0, W	1.5	0	1.5	1.5	0	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
H	Huskie	B, W	1	1	(c)	1	1	4	4	1	(c)	4 (d)	(c)	9	9	(c)	9	9
Ä.	MCPA amine	ALL	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
ERG	Orion	B, 0, W	0.5	0.5	12	0.5	0.5	0.5	3	0.5	12	9	12	9	9	12	12	12
Ψ	Starane Flex	B, 0, W	0	0	12	0	0	0	3	0	12	9	12	9	9	12	12	12
OST	Starane NXT	B, 0, W	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
٥	Starane Ultra	B, 0, W	0	0	(e)	(e)	0	(e)	0	0	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
	Stinger (f)	ALL	0	0	18	0	0	0	10.5	0	0	10.5	0	18	18	18	18	18
	2,4-D amine	ALL	3 (g)	1	3 (g)	1	1	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)	3 (g)
POSTEMERGENCE HERBICIDES	Buctril Callisto Harmony Extra SG Harmony SG Huskie MCPA amine Orion Starane Flex Starane NXT Starane Ultra Stinger (f)	ALL 0 B, 0, W B, 0, W B, W ALL B, 0, W B, 0, W B, 0, W ALL	1 18 1.5 1.5 1 (e) 0.5 0 4 0	1 4 0 0 1 (e) 0.5 0 4 0	1 4 1.5 1.5 (c) (e) 12 12 4 (e) 18	1 4 1.5 1.5 1 (e) 0.5 0 4 (e)	1 0 1.5 0 1 (e) 0.5 0 4	1 0 1.5 1.5 4 (e) 0.5 0 4 (e)	1 18 1.5 1.5 4 (e) 3 3 4 0	1 4 0 0 1 (e) 0.5 0 4 0	1 18 1.5 1.5 (c) (e) 12 12 4 (e) 0	1 10 1.5 1.5 4 (d) (e) 9 9 4 (e) 10.5	1 18 1.5 1.5 (c) (e) 12 12 4 (e) 0	1 18 1.5 1.5 9 (e) 9 9 4 (e)	1 18 1.5 1.5 9 (e) 9 9 4 (e)	1 18 1.5 1.5 (c) (e) 12 12 4 (e) 18	1 18 1.5 1.5 9 (e) 12 12 4 (e) 18	

REGISTERED CEREALS
B=BARLEY, O=OATS, W=WHEAT
ALL=B,O,W, RED CLOVER AND ALFALFA

The product information compiled here is intended to be as accurate as possible at the time of printing. Refer to product label for more detailed restriction information.

Always follow the product's current label restrictions and instructions.

- (a) the maximum amount of time required before planting the next crop if it is not listed on the label
- (b) 15 days per 8 fl oz/acre east of Mississippi River, only count days when the ground is not frozen, maximum amount per season is 24 fl oz/acre
- (c) field bioassay required
- (d) requires tillage and at least 12 inches of rainfall before planting the next crop

- (e) no crop rotation restrictions specified
- (f) rotational interval for soils with greater than 2% organic matter and annual precipitation exceeding 15 in per year
- (g) soil temperatures must exceed freezing for the entire time period

Months to plant forage crops after herbicide application on soybean

			,	P 3-1 ·	NO		LEGUN	ME FORAGE	CROPS								
		ANNUAL RYEGRASS	BARLEY	ВИСКИНЕАТ	CEREAL RYE	OATS	PEARL MILLET	SORGHUM	TRITICALE	WHEAT	RADISH	ALFALFA	CLOVER	COWPEA	FIELD PEA	VETCH	MAX ROTATION (a)
PREPLANT- INCORPORATED	Prowl H20	10, 12 (m)	4 (q)	12	12	12	12	10, 12 (m)	12	4 (q)	12	12	12	0	12	12	12 (f)
PREPI	Trifluralin (Treflan TR-10)	12, 14 (m)(q)	12, 14 (m)(q)	5	5	12, 14 (m)(q)	12, 14 (m)(q)	12, 14 (m)(q)	5	5	5	5	5	5	5	5	12, 14 (m)(q)
	Authority Assist	30 (b)	9.5	30 (b)	4	18	30 (b)	18	30 (b)	4	30 (b)	12	30 (b)	30 (b)	30 (b)	30 (b)	30 (b)
	Authority MTZ	18	4	18	18	18	18	12, 18 (c)	18	4	18	12	18	18	18	18	18
	Boundary 6.5 EC	12	4.5, 8 (d)	12	12	12	12	12	12	4.5, 8 (d)	18	4.5	12	12	12	12	18
	Dual II magnum	12	4.5	(e)	4.5	4.5	12	12	12	4.5	2 (f)	4	9	12	12	12	12
	Enlite (g)	4	4	30	4	12	30	9	30	4	30	12	12	9	9	30	30
	Envive (f)(h)(i)	4	4	30	4	30	30	10	30	4	30	12	18	12	12	30	30
	Fierce	(j)	(j)	(j)	(j)	(j)	(j)	(j)	(j)	(j)	12	(j)	(j)	(j)	(j)	(j)	12
	FirstRate (f)	18	12	18	18	9	18	9	18	4	18	9	18	18	9	18	18
10	Gangster	(b)	(b)	(b)	(b)	9	(b)	9	(b)	3	(b)	(b)	(b)	(b)	9	(b)	30
HERBICIDES	INTRRO	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
BICI	Lorox DF	4	4	12	4	4	12	0 (f)(l)	12	4	4	4	4	4	4	4	12
E	Metribuzin 75	18	4	18	18	18	18	18	18	4	18	4	18	18	8	18	18
	Metribuzin 75DF	18	4	18	18	18	4	18	18	4	18	4	18	18	8	18	18
N	OpTill (k)	40 (b)	9.5	40 (b)	4	18	40 (b)	18	40 (b)	3	40 (b)	4	4	1	4	40 (b)	40 (b)
PREEMERGENCE	OpTill PRO (k)	40 (b)	9.5	40 (b)	4	18	40 (b)	18	40 (b)	4	40 (b)	9	9	9	4	40 (b)	40 (b)
ME	Outlook	(e)	4	(e)	4	4	(e)	(e)	(e)	4	(e)	(e)	(e)	(e)	(e)	(e)	(e)
삁	Prefix	(I)	(I)	(I)	(I)	(I)	(I)	(I)	(I)	(I)	18	18	18	18	10	18	18
Δ.	Pursuit	40 (b)	9.5	40 (b)	4	18	40 (b)	18	40 (b)	4	40 (b)	4	4	0	0	40 (b)	40 (b)
	Python WDG	9	4	9	4	4	9	9	9	4	26	4	26	26	4	26	26
	Sharpen (f)(r)	6	0	6	0	0	0	0	0	0	6	6	6	6	3	6	6
	Sulfentrazone+cloransulam (Authority First DF)	30 (b)	12	30 (b)	12	12	30 (b)	12	30 (b)	4	30 (b)	12	30 (b)	12	12	30 (b)	30 (b)
	Valor (f)	6, 12 (q)(s)	4	6, 12 (q)(s)	4	5, 10 (s)	6, 12 (q)(s)	1 (q)	6, 12 (q)(s)	2 (q)	6, 12 (q)(s)	5, 10 (s)	5, 10 (s)	6, 12 (q)(s)	4	6, 12 (q)(s)	6, 12 (q)(s)
	Valor XLT (h)	4	4	30	4	30	30	10	30	4	30	12	18	12	12	30	30
	Warrant	(e)	(e)	(e)	(e)	(e)	(e)	(e)(x)	(e)	4	(k)	9	9	(e)	(e)	9	(e)
	Zidua	(j)	(j)	(j)	(j)	(j)	(j)	(j)	(j)	(j)	12	(j)	(j)	(j)	(j)	(j)	12

	Assure II	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Basagran	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)
	Cadet	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)	(y)
	Basagran	3	3	30	3	3	30	15	30	3	30	9	9	9	9	30	30
	Extreme (g)	40	9.5	40	4	18	40	18	40	3	40	4	4	0	0	40	40
	FirstRate (f)	18	12	18	18	9	18	9	18	4	18	9	18	18	9	18	18
S	Flexstar	(I)	(I)	(I)	(I)	(I)	(1)	(I)	(I)	(I)	18	18	18	10	10	18	18
DE	Flexstar GT 3.5	18	4	18	4	18	18	18	18	4	18	18	18	10	10	18	18
BIC	Fusilade DX	(k)	2	(k)	2	2	2	2	2	2	(k)	(k)	(k)	(k)	(k)	(k)	2
	7.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
N	Harmony SG	1.5	0	1.5	1.5	0	1.5	1.5	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
3GE	Lactofen (Cobra/Phoenix)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)	(k)
ME	Liberty 280 SL	6	2.3	2.3	2.3	2.3	6	6	2.3	2.3	2.3	6	6	6	6	6	6
STE	Poast Plus	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1
P0	Pursuit	40 (b)	9.5	40 (b)	4	18	40 (b)	18	40 (b)	4	40 (b)	4	4	0	0	40 (b)	40 (b)
	Raptor	18	9,18 (q)(s)(i)	18	4	9	9	18	18	3,15 (q)(s)(i)	18	3	18	0	0	18	18
	Resource	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Select Max	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1
	Sequence	(e)	4.5	(e)	4.5	4.5	(e)	0	(e)	4.5	(e)	4	9	(e)	(e)	(e)	(e)
	$\textbf{Synchrony XP} \ (f)(g)(i)$	3	3	30	3	3	3	9,15 (f)	3	3	30	9	9	9	9	30	30
	Ultra Blazer	3.3	1.3	1.3	1.3	1.3	1.3	3.3	1.3	1.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

The product information compiled here is intended to be as accurate as possible at the time of printing. Refer to product label for more detailed restriction information.

Always follow the product's current label restrictions and instructions.

- (a) the maximum amount of time required before planting the next crop if it is not listed on the label
- (b) requires a field bioassay
- (c) 12 months for 20 oz per acre or less
- (d) 4.5 for winter or 8.5 for spring
- (e) the next crop may be planted the following spring
- (f) rate restriction
- (g) region specific
- (h) fields south of I-90 between Lacrosse and Madison, fields south of I-94 between Madison and Milwaukee, see label for other locations
- (i) soil pH restriction

- (j) only labeled crops may be planted in rotation
- (k) no crop rotation restrictions specified
- (I) harvest restriction
- (m) rotational crops used for feed must be harvested at maturity
- (n) no grazing or harvest for forage allowed for the next crop
- (p) application timing specific
- (q) precipitation requirement
- (r) rotation interval does not include days when the ground is frozen
- (s) tillage specific
- (x) crop injury could result if a rotation crop is planted immediately
- (y) after normal harvest, planting of the next crop is allowed

Months to plant forage crops after herbicide application on corn

			,	P 5 4.		N-LEGUME							LEGUN	ME FORAGE	CROPS		
		ANNUAL RYEGRASS	BARLEY	BUCKWHEAT	CEREAL RYE	OATS	PEARL MILLET	SORGHUM	TRITICALE	WHEAT	RADISH	ALFALFA	CLOVER	COWPEA	FIELD PEA	VETCH	MAX ROTATION (a)
, <u>a</u>	Acetochlor (Harness)	18	18	18	18	18	18	18	18	4	18	9	9	9	9	9	18
PREPLANT- INCORPORATED	Dual II magnum	12	4.5	(b)	4.5	4.5	12	12	12	4.5	2 (c)	4 (c)	9 (c)	12	12	12	12
PRE	Outlook	(b)	4	(b)	4	4	(b)	(b)	(b)	4	(b)	(b)	(b)	(b)	(b)	(b)	(b)
	Zidua	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	12	(e)	(e)	(e)	(e)	(e)	12
	Acetanilide+atrazine premix (Harness Xtra)	18	18	18	18	18	18	18	18	4	9	9	9	9	9	9	18
	Acetochlor (Surpass EC)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	4	(d)	(b)	(b)	(b)	(b)	(b)	(b)
	Atrazine	(f)	(f)(g)(h)	(f)	(f)(g)(h)	(f)(g)(h)	(f)	(b)	(f)	(f)(g)(h)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
	Anthem (c)	18	18	18	18	18	18	18	18	6	18	10	18	11	11	18	18
	Callisto (i)	18	4	4	4	0	0	0	4	4	18	10	18	18	18	18	18
	Dicamba (Clarity) (c) (j)	(k)	(k)	4	(k)	(k)	(k)	(k)	(k)	(k)	4	4	4	4	4	4	4
	Dual II magnum	12	4.5	(b)	4.5	4.5	12	12	12	4.5	2 (c)	4	9	12	12	12	12
	Fierce	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	12	(e)	(e)	(e)	(e)	(e)	12
HERBICIDES	Hornet WDG	10.5	4	26	4	4	26	26	26	4	26	10.5 (l)(m)	26	26	10.5,18 (c)	26	26
ERB	Instigate	18	4,9 (g)	4,9 (g)	4,9 (g)	4,9 (g)	4,9 (g)	10 (I)	4,9 (g)	4,9 (g)	18	10 (I)	18	18	18	18	18
	Lumax (h)	18	4.5	(b)	4.5	(b)	(b)	18	18	4.5	18	18	18	18	18	18	18
N N	Outlook	(b)	4	(b)	4	4	(b)	(b)	(b)	4	(b)	(b)	(b)	(b)	(b)	(b)	(b)
GE	Princep 4L	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
PREEMERGENCE	Prowl H20	10, 12 (h)	4 (I)	12	12	12	12	10, 12 (h)	12	4 (I)	12	12	12	0	12	12	12 (c)
RE	Python WDG	9	4	9	4	4	9	9	9	4	26	4	26	26	4	26	26
础	Resolve Q (c)	18	9	9	9	9	9	10,18 (I)	9	3,9 (g)	18	10,18 (I)	10,18 (I)	18	10	18	18
	Sharpen (c) (j)	6	0	6	0	0	0	0	0	0	6	6	6	6	3	6	6
	Surestart	26 (n)	(b)	26 (n)	(b)	(b)	26 (n)	12	26 (n)	4	26 (n)	18 (b)(l)(m)	18 (b)(l)(m)	(b)	(b)	18 (b)(l)(m)	26 (n)
	Valor (c)	6, 12 (I) (p)	4	6, 12 (l) (p)	4	5,10 (p)	6, 12 (l) (p)	1 (I)	6, 12 (l) (p)	2 (I)	6, 12 (l) (p)	5,10 (p)	5,10 (p)	6, 12 (I) (p)	4	6, 12 (I) (p)	6, 12 (l) (p)
	Verdict	(b)	4 (g)	(b)	4 (g)	4 (g)	(b)	(b)	(b)	4 (g)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
	Zemax	18	4.5	18	4.5	4.5	18	18	18	4.5	18	18	18	18	18	18	18
	Zidua	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	12	(e)	(e)	(e)	(e)	(e)	12

t	1
ì	1
(
į	ı
Ē	Ŧ
Ŀ	Ÿ
C	Y
ī	ı
E	ī
	Ī
ı	ı
Ū	
¢	Ħ
H	_ X
ì	Ė
١	۲
Ŀ	Ÿ
L	4
S	2
H	ñ
ī	
H	,
1	2
(_
6	1

2,4-D LO-V 6E	1,3 (j)(q)	1,3 (j)(q)	1,3 (j)(q)	1,3 (j)(q)	1,3 (j)(q)	3 (j)										
Accent Q	10,18 (r)	4,8 (g)	10,18 (r)	4,8 (g)	4,8 (g)	10,18 (r)	10,18 (r)	4,8 (g)	4,8 (g)	10,18 (r)	12	12	10,18 (r)	10,18 (r)	10,18 (r)	10,18 (r)
Atrazine	(f)	(f)(g)(h)	(f)	(f)(g)(h)	(f)(g)(h)	(f)	(b)	(f)	(f)(g)(h)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Basagran	(d)	(d)	(d)	(d)	(d)	(d)										
Basis Blend (c)	18	3,9 (g)	9	3,9 (g)	3,9 (g)	3,9 (g)	18	3,9 (g)	3,9 (g)	18	18	18	18	18	18	18
Buctril	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cadet	(s)	(s)	(s)	(s)	(s)	(s)										
Callisto (i)	18	4	4	4	0	0	0	4	4	18	10	18	18	18	18	18
Callisto Xtra	18	(b)	18	18	18	18	18	18	(b)	18	(b)	18	18	18	18	18
Capreno (c)(g)(l)(r)	18	10	18	18	10,18	18	10	4	4	18	10,18	18	18	18	18	18
Glyphosate (Roundup WeatherMax)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Halex GT	18	4	18	4	4	18	18	18	4	18	10	18	18	18	18	18
Harmony SG	1.5	0	1.5	1.5	0	1.5	1.5	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Hornet WDG	10.5	4	26	4	4	26	26	26	4	26	10.5 (l)(m)	26	26	10.5,18 (c)	26	26
Impact (c)	18	3	18	3	3	18	9	18	3	18	9	18	18	9	18	18
Laudis	18	4	18	4	4	18	10	18	4	18	10	18	18	10	18	18
Liberty 280 SL	6	2.3	2.3	2.3	2.3	6	6	2.3	2.3	2.3	6	6	6	6	6	6
NorthStar	18	3,8 (g)	8	3,8 (g)	8	8	8	8	3,8 (g)	18	8	18	18	8	18	18
Option	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Realm Q (c)	18	4,9 (g)	18	4	4,9 (g)	18	10,18 (I)	18	4,9 (g)	18	10,18 (I)	18	18	18	18	18
Resolve Q (c)	18	9	9	9	9	9	10,18 (I)	9	3,9 (g)	18	10,18 (I)	10,18 (I)	18	10	18	18
Resource	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Status	4	1,4 (I)	4	1,4 (I)	1,4 (I)	4	4	4	1,4 (I)	4	1,4 (I)	4	4	4	4	4
Steadfast Q	10,18 (r)	4,8 (g)	10,18 (r)	4,8 (g)	4,8 (g)	10,18 (r)	10,18 (r)	10,18 (r)	4,8 (g)	10,18 (r)	10, 18 (I)	10, 18 (I)	10,18 (r)	10	10,18 (r)	10,18 (r)
Stinger (l)(m)	0	0	18	18	0	18	18	18	0	0	10.5	18	18	18	18	18
Yukon	2	2 (g)	36	2 (g)	2 (g)	36	2	2	2	12	9	9	36	9	36	36

The product information compiled here is intended to be as accurate as possible at the time of printing. Refer to product label for more detailed restriction information.

Always follow the product's current label restrictions and instructions.

- (a) the maximum amount of time required before planting the next crop if it is not listed on the label
- (b) the next crop may be planted the following spring
- (c) rate restriction
- (d) no crop rotation restrictions specified
- (e) only crops listed on the label may be planted in rotation
- (f) the next crop may be planted the second following spring

- (g) planting date restriction
- (h) application timing restriction
- (i) see label for the mesotrione exception- only corn and grain sorghum can be planted as the next rotational crop
- (j) rotation interval does not include days when the ground is frozen
- (k) 15 days per 8 fl oz/acre east of Mississippi River
- (I) precipitation requirement

- $\ \, \text{(m)}\ \, \text{soil organic matter requirement}$
- (n) requires a field bioassay
- (p) tillage specific
- (q) risk of crop injury with the shorter time interval
- (r) soil pH restriction
- (s) after normal harvest, planting of the next crop is allowed



Additional resources:

For weed control efficacy ratings consult University of Wisconsin Extension publication A3646 *Pest Management in Wisconsin Field Crops*, available at http://learningstore.uwex.edu/

Pesticide labels and material safety data sheets (MSDS) can be viewed at http://www.cdms.net/LabelsMsds/LMDefault.aspx

Focus on Forage fact sheets, University of Wisconsin Extension, http://www.uwex.edu/ces/crops/uwforage/focusonforage.htm

Planting winter rye after corn silage: Managing for forage, http://ipcm.wisc.edu/download/pubsNM/Rye 090507 final.pdf

Growing double crop forage after small grains http://www.uwex.edu/ces/crops/uwforage/DoubleCrop-FOF.pdf

Is it legal to use a cover crop as a forage crop? Maybe not ... http://ipcm.wisc.edu/download/pubsPM/9-19-12-Cover-crops-used-for-forages.pdf

Wisconsin Crop Weed Science Research Report http://wcws.cals.wisc.edu/documents/

Take Action Herbicide Classification chart http://wcws.cals. wisc.edu/documents/

Take Action on Weeds website, sponsored by the United Soybean Board, http://takeactiononweeds.com/

Authors

Elizabeth Bosak, Outreach Specialist and **Vince Davis**, UWEX Weed Scientist Department of Agronomy, University of Wisconsin-Madison

This publication is available from the Nutrient and Pest Management (NPM) Program. For more copies, please contact us at:

email (npm@hort.wisc.edu)
phone (608) 265-2660
website (ipcm.wisc.edu)



University of Wisconsin-Extension, College of Agricultural and Life Sciences. An equal opportunity action employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX requirements.