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PURDUE WEED SCIENCE

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Herbicide Rotation Restrictions for Cover Crops and Fall Forages

The current drought conditions in Indiana have either caused complete crop losses or are only a few weeks away from complete loss if significant rainfall is not received. Producers experiencing these complete losses may be looking for an alternative for their fields to try and salvage the last half of the growing season. Alternatives that have been brought to our attention include growing cover crops to help reduce erosion following destruction of crop or a fall forage crop to help alleviate the feed shortage that is likely to occur due to the drought.

When considering planting cover crops or fall-seeded forages, something producers need to keep in mind is the crop rotational restriction of herbicides that were applied in the current crop that was destroyed. A majority of herbicide labels do not specifically list the species that are used for cover crops or fall forages and thus these species often fall under the other crops listed section at the maximum restriction period. As mentioned in a Purdue Weed Science article last year (http://www.btny.purdue.edu/WeedScience/2011/CoverCrops11.pdf), these restrictions are meant to protect the rotation crop, end consumer, and livestock consuming the harvested crop. Cover crops that are not harvested do not particularly fall under this crop category and can be planted after any herbicide, but the grower assumes the risk of crop failure. If in doubt, keep in mind the herbicide label is still a legal document meant to protect the grower from him or herself and protect the company if a cover crop fails to germinate or is injured by herbicide residues. There is still insignificant data available for the appropriate rotational restrictions for many of the popular cover crops and commonly used corn and soybean herbicides. Table 1 summarizes many of the commonly used corn and soybean herbicides and the rotation restriction for species producers may be considering for use following destruction of drought loss crops according to the herbicide labels. Many labels also require a field bioassay following restriction timing if the species is not listed. Always read the label for further details prior to planting of the rotational crop.

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Table 1. Rotation restrictions of several corn and soybean herbicides to cover crops and/or fall forage crops producers may be considering following crop failure due to drought. Crops not listed on label are given Max rotation and typically require a successful bioassay. Always refer to label for more details.

	Annual Ryegrass	Wheat	Clover	Vetch	Radish	Oats	Cowpea	Buckwheat	Alfalfa	Forage Sorghum	Pearl Millet	Max Rotation	Comments
Corn Herbicides	---------- Replant Interval (Months) ----------												
Atrazine	NY	NY	NY	NY	NY	NY	NY	NY	NY	0	NY	30	NY=Next Year. If applied after June 10th, do not plant the following year. Info taken from Aatrex label.
Balance Flexx	18	4	18	18	18	18	18	18	10	6	18	18	15 inches of cumulative precipitation from application to planting of rotational crop required for all except sorghum and wheat
Callisto	N/A	4	18	18	18	0	18	18	10	0	0	18	Grasses grown for seed can be planted immediately, but annual ryegrass is not directly addressed
Capreno	18	4	18	18	18	18	18	18	18	10	18	18	Sorghum rotation should be delayed to 18 months if total seasonal rate of Capreno herbicide exceeds 3 fl oz/A. Sorghum rotation requires at least 15 inches of precipitation, all other rotations excluding wheat require 30 inches of precipitation.
Corvus	17	4	17	17	17	17	17	17	17	17	17	17	For all rotation crops except wheat a minimum of 30 inches of precipitation is required.
Impact	N/A	3	18	18	18	3	18	18	9	9	18	18	Grasses grown for seed can be planted three months after application, but annual ryegrass is not directly addressed
Laudis	18	4	18	18	18	4	10	18	10	10	18	18	Grass grown for seed listed at 4 months, but annual ryegrass not mentioned specifically
Lumax/Lexar	18	4.5/ NS	18	18	18	NS	18	18	18	0	18	18	NS=The next spring following application
Status	4	4	4	4	4	4	4	4	4	4	4	4	Alfalfa, wheat, oats, and forage sorghum can be planted 30 days following last Status application of 5 oz/A or less if at least 1" of rainfall or irrigation is received.
SureStart/TripleFlex	26	4	NS	NS	26	NS	NS	26	NS	12	26	26	NS=The next spring following application.
Verdict	NS	4	NS	NS	NS	4	NS	NS	NS	0	NS	NS	NS=The next spring following application

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Table 1 Cont. Rotation restrictions of several corn and soybean herbicides to cover crops and/or fall forage crops producers may be considering following crop failure due to drought. Crops not listed on label are given Max rotation and typically require a successful bioassay. Always refer to label for more details.

	Annual Ryegrass	Wheat	Clover	Vetch	Radish	Oats	Cowpea	Buckwheat	Alfalfa	Forage Sorghum	Pearl Millet	Max Rotation	Comments
Soybean Herbicides	---------- Replant Interval (Months) ----------												
Authority First/Sonic	30	4	30	30	30	12	12	30	12	12	30	30	
Authority MTZ	18	4	18	18	18	18	18	18	12	18	18	18	Sorghum can be planted after 12 months if Authority MTZ was applied at 20 oz/A or less
Canopy	4	4	12	30	30	30	12	30	10	12	30	30	
Classic	3	3	12	30	30	3	9	30	12	9	30	30	
Extreme	40	3	4	40	40	18	0	40	4	18	40	40	
Firstrate	18	4	18	18	18	9	9	18	9	9	18	18	
Optill PRO	40	4	9	40	40	18	4	40	9	18	40	40	
Valor XLT	4	4	18	30	30	30	12	30	12	10	30	30	
Dual II Magnum	12	4.5	9	0	0	4.5	0	NS	4	0	12	12	To avoid injury in clover, do not apply more than 1.9 lb ai/A (2 lb/A) in previous crop
Warrant	NL	4	9	9	NL	NS	NS	NS	9	0	NS	NL	NS= Next season, NL=Not listed on Label

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PURDUE AGRICULTURE

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