

## HERBICIDE CLASSIFICATION ACCORDING TO PRIMARY SITE OF ACTION

<b>Resistance Group</b>		
<b>WSSA</b>	<b>Site of Action</b>	<b>Herbicide Families in Group</b>
0	Nucleic acid inhibitors	Organoarsenical
1	ACCase (acetyl CoA carboxylase) inhibitor	Aryloxyphenoxy propionate Cyclohexanedione Phenylpyrazoline
2	ALS (acetolactate synthase) or AHAS (acetohydroxyacid synthase) inhibitor	Imidazolinone Pyrimidinylthio-benzoate Sulfonylamino-carbonyl-triazolinone Sulfonylurea Triazolopyrimidine
3	Inhibitor of microtubule assembly	Benzoic acid Benzamides Dinitroanilines Phosphoramidates Pyridines
4	Synthetic auxins	Arylpicolinate Benzoic acid Phenoxy-carboxylic acid Pyridine-carboxylic acid Quinoline carboxylic acid
5	Inhibitor of photosynthesis at photosystem II site A Serine 264 binders	Amide Phenyl-carbamate Pyridazinone Triazine Triazinone Triazolinone Uracil Urea
6	Inhibitor of photosynthesis at photosystem II site B Histidine 215 binders	Benzothiadiazinone Nitrile Phenyl-pyridazine
9	EPSP synthase inhibitor	Glycine*
10	Glutamine synthetase inhibitor	Phosphinic acids*
11	Carotenoid biosynthesis inhibitor (bleaching)	Triazole

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12	PDS (phytoene desaturase) inhibitor (bleaching)	Pyridazinone Pyridinecarboxamide Other
13	DOXP (1-deoxy-D-xylose 5-phosphate synthetase) inhibitor (bleaching)	Isoxazolidinone
14	Protox (protoporphyrinogen oxidase) inhibitor	Diphenylether N-phenylphthalimide Oxadiazole Oxazolidinedione Phenylpyrazole Pyrimidindione Triazolinone
15	Inhibition of lipid synthesis	Acetamide Benzofuran Chloroacetamide Oxyacetamide Tetrazolinone Thiocarbamate Phosphorodithioate*
18	DHP (7,8-dihydro-pterolate) synthetase inhibitor	Carbamate
19	Inhibitor of indoleacetic acid transport	Phthalamate Semicarbazone
22	Photosystem I electron diverter	Bipyridylum
23	Mitosis inhibitor	Carbamate
24	Membrane disruptor (uncouplers)	Dinitrophenol
27	Inhibitor of 4-HPPD (4-hydroxy-phenyl-pyruvate dioxygenase) (bleaching)	Isoxazole Pyrazole Triketone
29	Inhibition of cellulose synthesis	Alkylazine Benzamide Nitrile

**CROP REPLANT AND ROTATION GUIDE FOR COTTON HERBICIDES\***

Herbicide	Replant/ Crop Rotation	Time Interval	Precautions
Aim 2 EC	C,CT,S,R,GS All	I 30 days	
Anthem Flex	S,C R SG W CT,P,SF	I 10 months 11 months I 4 months	
Assure II	CT,S All	I 4 months	
Brake 16 oz or less	CT S R,P,W,B C,GS All	I 2 months 8 months 10 months 18 months	No restrictions.
Caparol/others	CT SG,GS, as cover crops. All	I I† FY	† Must be plowed and not used for food or feed.
Cotoran	CT All	I 6 months	
Direx	CT† All	I FY	† Do not retreat with second application in same year.
Dual Magnum	S,C,CT,GS† SG Rice All	I 4.5 months Next spring 18 months	† Use Concep-treated grain sorghum seed.
Envoke	C,GS,S,R CT W All	7 months 30 days 3 months 18 months	Cotton rotation increases with higher rates.
Fierce	CT C GS R S W	45 days 30 days 12 months 10 months I 1 month	
Fusilade/Fusion	CT,S All	I 2 months	
Glufosinate	CT,C,S,R W GS	I 70 days 180 days	
Glyphosate	All	I	
Linex	C,GS,S All	I 4 months	Thoroughly rework soil before replanting. Do not retreat with second application. Plant corn at least 1.75 inches deep and grain sorghum at least 1-inch deep.
MSMA, DSMA	All	I	Research has shown arsenical herbicides (MSMA/DSMA) can cause straighthead in rice. Precautions for straight-head should be taken when rice is grown following cotton.

Herbicide	Replant/ Crop Rotation	Time Interval	Precautions
Paraquat			No restrictions.
Poast Plus			No restrictions.
Prowl, Pendimax	CT,S W,B All	I 4 months FY	Do not rework soil deeper than treated zone.
Prowl, Pendimax (2X rate)	CT,S All	I FY	Do not rework soil deeper than treated zone.
Reflex//Flexstar/ Cheetah Max/Sinister	S,CT W,SG C,R,GS SF	I 4 months 10 months 18 months	
Select Max, Tapout	C	30 days	
Staple LX	CT S R GS C	I 10 months 9 months Do not rotate the following season. IMI-resistant corn – 9 months. Any other variety – 10 months if not more than 3.8 oz Staple XL was applied.	
Suprend	W CT,C,GS,R,S	3 months 7 months	
Treflan/others	CT,S W,B All	I Fall FY	
Treflan/others (2X rate)	CT,S Rice All	I FY 2 years	
Valor	C,CT,R,GS, W,SF S All others	30 days I 12 months	Must receive 1-inch of rain.
Zidua (3.25 oz/A)	C,S CT, P R W GS others	I 2 months 12 months 70 days 6 months FY	

\*This table applies to the major field and forage crops. Refer to the herbicide labels for the latest recrop and rotation information for horticultural crops. These are written as best we could interpret the labels. We regret any omissions or errors. Always refer to product labels before using a pesticide or replanting into treated fields.

KEY		
<b>Crop</b>		<b>Timing</b>
C = Corn	S = Soybeans	All = All crops not specified
CT = Cotton	SF = Sunflowers	I = Immediately
B = Barley	SG = Small Grains	FY = Following year (usually spring)
GS = Grain Sorghum	W = Wheat	
R = Rice		