

Mode of Action	Site of Action Group	Site of Action	Chemical Family	Active Ingredient	Product Examples	Resistant Weed Species
Lipid Synthesis Inhibitors	1	ACCase Inhibitors (acetyl CoA carboxylase)	Aryloxyphenoxy propionate	fenoxaprop	component of Fusion Fusilade DX Assure II, Targa	14
			Cyclohexanedione	fluazifop quizalofop clethodim sethoxydim		
Amino Acid Synthesis Inhibitors	2	ALS Inhibitors (acetolactate synthase)	Sulfonylurea	chlorimuron foramsulfuron halosulfuron iodosulfuron nicosulfuron primisulfuron prosulfuron rimsulfuron thifensulfuron tribenuron	Classic Option Permit Autumn Accent Q Beacon Peak Resolve Harmony Express	43
			Imidazolinone	imazamox imazaquin imazethapyr		
			Triazolopyrimidine	flumetsulam cloransulam		
			Sulfonylamino-carbonyltriazolinones	thien carbazole-methyl	component in Capreno	12
			None accepted	glyphosate		
			Microtubule Inhibitors	ethalfluralin pendimethalin trifluralin	Sonalan Prowl, others Treflan, others	6
Seedling Root Growth Inhibitors	3					

Mode of Action	Site of Action Group	Site of Action	Chemical Family	Active Ingredient	Product Examples	Resistant Weed Species
Growth Regulators (Synthetic auxins)	4	Specific site unknown	Phenoxy	2,4-D	Weedone, others	8
			Benzoic acid	dicamba	Banvel, Clarity	
	19	Auxin Transport Inhibitor	Carboxylic acid	clopyralid	Stinger	
			fluroxypyr	Starane		
			Semicarbazone	diflufenzopyr	component of Status	0
Photosynthesis Inhibitors	5	Photosystem II Inhibitors (different binding than 6 & 7)	Triazine	atrazine	AAtrex, others	23
			simazine	Princep		
	6	Photosystem II Inhibitors (different binding than 5 & 7)	Triazinone	metribuzin	Sencor, Dimetric	
	7	Photosystem II Inhibitors (different binding than 5 & 6)	Nitrile	bromoxynil	Buctril, Moxy	1
			Benzothiadiazole	bentazon	Basagran	
			Ureas	linuron	Lorox, Linex	7
Seedling Shoot Growth Inhibitors	8	Lipid Synthesis Inhibitors (not ACCase)	Thiocarbamate	butylate	Sutan +	5
			EPTC	Eradicane		
	15	Long-chain fatty acid Inhibitor	Chloroacetamide	acetochlor	Harness, Warrant,	1
			alachlor	Degree, TopNotch,	others	
			metolachlor	Intrro, Micro-Tech	Dual II Magnum,	
			dimethenamid	others	Outlook	
			oxyacetamide	flufenacet	Define	
			Isoxazoline	pyroxasulfone	Zidua	
Nitrogen Metabolism Inhibitor	10	Glutamine Synthetase Inhibitor	None accepted	glufosinate	Ignite	0
Pigment Inhibitors	13	Diterpene Synthesis Inhibitor	Isoxazolidinone	clomazone	Command	0
			Isoxazole	isoxaflutole	Balance Flexx	
	27	HPPD Inhibitors	Triketone	mesotrione	Callisto	1
			tembotriione	Laudis		
			Pyrazolone	topramezone	Impact	
Cell Membrane Disrupters	14	PPO Inhibitors	Diphenylether	acifluorfen	Ultra Blazer	2
			fomesafen	Flexstar, Reflex		
			lactofen	Cobra, Phoenix		
			N-phenylphthalimide	flumiclorac	Resource	
			flumioxazin	Valor		
			Aryl triazinone	sulfentrazone	Spartan	
			carfentrazone	Aim		
			fluthiacet-methyl	Cadet		
			Pyrimidinedione	saflufenacil	Sharpen	
	22	Photosystem I Electron Diverter	Bipyridilium	paraquat	Gramoxone Inteon	5