HRAC Group	Site of Action	Chemical Family	Active Ingredient	WSSA Group
A	Inhibition of acetyl CoA carboxylase (ACCase)	Aryloxyphenoxy-propionate 'FOPs'	clodinafop-propargyl cyhalofop-butyl diclofop-methyl fenoxaprop-P-ethyl fluazifop-P-butyl haloxyfop-R-methyl propaquizafop quizalofop-P-ethyl	**1**
		Cyclohexanedione 'DIMs'	alloxydim butroxydim clethodim cycloxydim *profoxydim* sethoxydim *tepraloxydin* tralkoxydim	
		Phenylpyrazoline 'DEN'	pinoxaden	
B	Inhibition of acetolactate synthase ALS (acetohydroxyacid synthase AHAS)	Sulfonylurea	amidosulfuron azimsulfuron bensulfuron-methyl chlorimuron-ethyl chlorsulfuron cinosulfuron cyclosulfamuron ethametsulfuron-methyl ethoxysulfuron flazasulfuron flupyrsulfuron-methyl-Na foramsulfuron halosulfuron-methyl *imazosulfuron* iodosulfuron mesosulfuron	**2**

			metsulfuron-methyl nicosulfuron *oxasulfuron* primisulfuron-methyl prosulfuron pyrazosulfuron-ethyl rimsulfuron sulfometuron-methyl sulfosulfuron thifensulfuron-methyl triasulfuron tribenuron-methyl trifloxysulfuron triflusulfuron-methyl *tritosulfuron*	
		Imidazolinone	imazapic imazamethabenz-methyl imazamox imazapyr imazaquin imazethapyr	
		Triazolopyrimidine	cloransulam-methyl diclosulam florasulam flumetsulam *metosulam* *penoxsulam*	
		Pyrimidinyl(thio)benzoate	bispyribac-Na pyribenzoxim *pyriftalid* pyrithiobac-Na *pyriminobac-methyl*	
		Sulfonylaminocarbonyl-triazolinone	flucarbazone-Na propoxycarbazone-Na	
HRAC Group	**Site of Action**	**Chemical Family**	**Active Ingredient**	**WSSA Group**

C1	Inhibition of photosynthesis at photosystem II	Triazine	ametryne atrazine cyanazine desmetryne *dimethametryne* prometon prometryne propazine simazine simetryne terbumeton terbuthylazine *terbutryne* trietazine	**5**
		Triazinone	hexazinone metamitron metribuzin	
		Triazolinone	amicarbazone	
		Uracil	bromacil *lenacil* terbacil	
		Pyridazinone	pyrazon = chloridazon	
		Phenyl-carbamate	desmedipham phenmedipham	
C2	Inhibition of photosynthesis at photosystem II	Urea	*chlorobromuron* chlorotoluron *chloroxuron* dimefuron diuron *ethidimuron* *fenuron* fluometuron (see F3) isoproturon *isouron* linuron methabenzthiazuron *metobromuron* metoxuron monolinuron *neburon*	**7**

			siduron tebuthiuron	
		Amide	propanil *pentanochlor*	
C3	Inhibition of photosynthesis at photosystem II	Nitrile	*bromofenoxim* bromoxynil ioxynil	**6**
		Benzothiadiazinone	bentazon	
		Phenyl-pyridazine	pyridate *pyridafol*	
D	Photosystem-I-electron diversion	Bipyridylium	diquat paraquat	**22**
HRAC Group	**Site of Action**	**Chemical Family**	**Active Ingredient**	**WSSA Group**
E	Inhibition of protoporphyrinogen oxidase (PPO)	Diphenylether	acifluorfen-Na bifenox *chlomethoxyfen* *fluoroglycofen-ethyl* fomesafen *halosafen* lactofen oxyfluorfen	**14**
		Phenylpyrazole	*fluazolate* pyraflufen-ethyl	
		N-phenylphthalimide	cinidon-ethyl flumioxazin flumiclorac-pentyl	
		Thiadiazole	fluthiacet-methyl *thidiazimin*	
		Oxadiazole	oxadiazon oxadiargyl	
		Triazolinone	azafenidin *carfentrazone-ethyl* *sulfentrazone*	
		Oxazolidinedione	*pentoxazone*	
		Pyrimidindione	*benzfendizone* butafenacil	

		Other	*pyraclonil* *profluazol* flufenpyr-ethyl	
F1	Bleaching: Inhibition of carotenoid biosynthesis at the phytoene desaturase step (PDS)	Pyridazinone	norflurazon	**12**
		Pyridinecarboxamide	diflufenican picolinafen	
		Other	beflubutamid fluridone flurochloridone flurtamone	
F2	Bleaching: Inhibition of 4-hydroxyphenyl-pyruvate-dioxygenase (4-HPPD)	Triketone	mesotrione sulcotrione	**27**
		Isoxazole	*isoxachlortole* isoxaflutole	
		Pyrazole	benzofenap pyrazolynate pyrazoxyfen	
		Other	*benzobicyclon*	
F3	Bleaching: Inhibition of carotenoid biosynthesis (unknown target)	Triazole	amitrole (in vivo inhibition of lycopene cyclase)	**11**
		Isoxazolidinone	clomazone	**13**
		Urea	fluometuron (see C2)	
		Diphenylether	aclonifen	
G	Inhibition of EPSP synthase	Glycine	glyphosate *sulfosate*	**9**
H	Inhibition of glutamine synthetase	Phosphinic acid	glufosinate-ammonium	**10**

			bialaphos = bilanaphos	
HRAC Group	**Site of Action**	**Chemical Family**	**Active Ingredient**	**WSSA Group**
I	Inhibition of DHP (dihydropteroate) synthase	Carbamate	asulam	**18**
K1	Microtubule assembly inhibition	Dinitroaniline	benefin = benfluralin *butralin* *dinitramine* ethalfluralin oryzalin pendimethalin trifluralin	**3**
		Phosphoroamidate	*amiprophos-methyl* *butamiphos*	
		Pyridine	dithiopyr thiazopyr	
		Benzamide	propyzamide = pronamide *tebutam*	
		Benzoic acid	DCPA = chlorthal-dimethyl	**3**
K2	Inhibition of mitosis / microtubule organisation	Carbamate	*chlorpropham* *propham* carbetamide	**23**
K3	Inhibition of VLCFAs (see Remarks) (Inhibition of cell division)	Chloroacetamide	acetochlor alachlor butachlor	**15**
			dimethachlor dimethanamid metazachlor metolachlor *pethoxamid*	
			pretilachlor propachlor *propisochlor* thenylchlor	

		Acetamide	*diphenamid* napropamide *naproanilide*	
		Oxyacetamide	flufenacet mefenacet	
		Tetrazolinone	fentrazamide	
		Other	anilofos *cafenstrole* *piperophos*	
L	Inhibition of cell wall (cellulose) synthesis	Nitrile	dichlobenil *chlorthiamid*	**20**
		Benzamide	isoxaben	**21**
		Triazolocarboxamide	*flupoxam*	
		Quinoline carboxylic acid	quinclorac (for monocots) (also group O)	**26**
HRAC Group	**Site of Action**	**Chemical Family**	**Active Ingredient**	**WSSA Group**
M	Uncoupling (Membrane disruption)	Dinitrophenol	*DNOC* *dinoseb* dinoterb	**24**
N	Inhibition of lipid synthesis - not ACCase inhibition	Thiocarbamate	butylate cycloate *dimepiperate* EPTC esprocarb molinate *orbencarb* pebulate prosulfocarb thiobencarb = benthiocarb *tiocarbazil* triallate vernolate	**8**
		Phosphorodithioate	bensulide	
		Benzofuran	*benfuresate* ethofumesate	

		Chloro-Carbonic-acid	*TCA* *dalapon* *flupropanate*	**26**
O	Action like indole acetic acid (synthetic auxins)	Phenoxy-carboxylic-acid	clomeprop 2,4-D 2,4-DB dichlorprop = 2,4-DP MCPA MCPB mecoprop = MCPP = CMPP	**4**
		Benzoic acid	chloramben dicamba TBA	
		Pyridine carboxylic acid	clopyralid fluroxypyr picloram triclopyr	
		Quinoline carboxylic acid	quinclorac (also group L) quinmerac	
		Other	benazolin-ethyl	
P	Inhibition of auxin transport	Phthalamate Semicarbazone	naptalam diflufenzopyr-Na	**19**
HRAC Group	**Site of Action**	**Chemical Family**	**Active Ingredient**	**WSSA Group**
R	....	...	...	
S	...	...	...	
.	...	...	...	
Z	Unknown Note: While the site of action of herbicides in Group Z is unknown it is likely that they differ in site of action between themselves and from other groups.	Arylaminopropionic acid	Flamprop-M-methyl /-isopropyl	**25**
		Pyrazolium	difenzoquat	**26**

		Organoarsenical	DSMA MSMA	**17**
		Other	*bromobutide* *(chloro)-flurenol*	
			cinmethylin	
			cumyluron	
			dazomet	
			dymron = *daimuron* *methyl-dimuron=* *methyl-dymron* *etobenzanid* fosamine *indanofan* metam *oxaziclomefone* *oleic acid*	
			pelargonic acid pyributicarb	