Herbicide Mode of Action Reference Table

Understanding how herbicides work is useful for selecting the correct products, understanding herbicide injury symptoms, and preventing herbicide resistance problems. The following reference table lists commonly used herbicides and their chemical mode of action. Some products that contain more than one active ingredient may have more than one mode of action.

Groups indicated by \otimes are herbicide modes of action with documented occurrences of weed resistance in lowa. Avoid continuous use of products from these groups and utilize a herbicide program that includes multiple modes of action.

Product	Growth regulator	ALS/AHAS inhibitors ⊗	Amino acid derivatives	Lipid Inhibitors ⊗	Root inhibitors	Shoot inhibitors	Mobile PS inhibitor ⊗	Non-mobile PS inhibitor	Cell Memb. disruptor	Pigment Inhibitors
2,4-D										
Aatrex (atrazine)										
Accent										
Accent Gold										
Aim										
Ally										
Amber										
Asset										
Assure II										
Authority										
Avenge										
Axiom, Axiom AT										
Backdraft										
Balan										
Balance, Balance Pro										
Banvel										
Basagran										
Basis										
Basis Gold										
Battalion										
Beacon										
Bicep (various formulation)										
Bicep MAGNUM TR										
Bladex										
Blazer, Ultra Blazer										
Boundary										
Broadstrike + Dual										
Broadstrike + Treflan										
Bronate										
Bronco										
Buctril										
Buctril/Atrazine										
Bullet										
Butoxone, Butyrac										

Product	Growth regulator	ALS/AHAS	inhibitors⊗ Amino acid derivatives	Lipid Inhibitors (>>	Root inhibitors	Shoot inhibitors	Mobile PS inhibitor⊗	Non-mobile PS inhibitor	Cell Memb. disruptor	Pigment Inhibitors	
Canopy											
Canopy XL											
Celebrity											
Celebrity Plus											
Clarity											
Classic											
Cobra											
Command											
Command Xtra											
Commence											
Connect											
Contain											
Cover	+										
CropStar Crossbow											
CyPro											
Dactril											
Define											
Degree											
Degree Xtra											
Detail											
Digest											
Distinct											
Domain											
Doubleplay											
Dual II MAGNUM											
Epic											
Eptam											
Eradicane											
Evik											
Exceed											
Express											
	-										
Extrazine II											
Extreme	-										
FieldMaster			_								
Finesse											
FirstRate											
Flexstar											
Freedom											
Frontier											
FrontRow											
FulTime											
Fusilade											
Fusion											
Galaxy											
Garlon											
Gauntlet											
Glean											

Product	Growth regulator	ALS/AHAS inhibitors⊗	Amino acid derivatives	Lipid Inhibitors⊗	Root inhibitors	Shoot inhibitors	Mobile PS inhibitor⊗	Non-mobile PS inhibitor	Cell Memb. disruptor	Pigment Inhibitors
Guardsman										
glyphosate (various)										
Harmony Extra										
Harness										
Harness Xtra										
Headline B&G										
Hoelon										
Hornet, Hornet WDG										
Hyvar XL										
Karmex										
Laddok S-12										
Landmaster										
Lariat										
Lasso										
LeadOff										
Lexone DF										
Liberty										
Liberty ATZ										
Lightning										
Lorox DF										
Manifest										
Marksman										
MCPA										
MCPP										
NorthStar										
Optill										
Option II										
Outlook										
Partner										
Passport										
Peak										
Pendimax										
Pentagon										
Permit										
Pinnacle										
Plateau										
Poast										
Poast Plus										
Pramitol	-									
Princep Prowl										
Pursuit										
Pursuit Plus										
Python										
Ramrod										
Raptor										
Reflex										
Remedy										

Product	Growth regulator	ALS/AHAS inhibitors	Amino acid	Lipid Inhibitors⊗	Root inhibitors	Shoot inhibitors	Mobile PS inhibitor⊗	Non-mobile PS inhibitor	Cell Memb. disruptor	Pigment Inhibitors
Resource										
Reward										
Rezult B & G										
Ro-Neet										
Roundup formulations										
Salvo										
Scepter										
Scepter OT										
Scorpion III										
Select										
Sencor										
Shotgun										
Simazine										
Sonalan										
Spike										
Spirit										
Squadron										
Steadfast										
Steel										
Stellar										
Stinger										
Storm										
Surflan										
Surpass										
Surpass 100										
Sutan+										
Synchrony STS										
TopNotch										
Tordon										
Tornado										
Touchdown										
Tough										
Treflan										
Tri-scept										
UpBeet										
Velpar										
Whip										

Common chemical and trade names are used in this publication. The use of trade names is for clarity by the reader. Inclusion of a trade name does not imply endorsement of that particular brand of herbicide and exclusion does not imply nonapproval.

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