

# HERBICIDE CLASSIFICATION



Repeated use of herbicides with the same site of action can result in the development of herbicide-resistant weed populations.

## by MODE OF ACTION (MOA) (effect on plant growth)

This chart groups herbicides by their modes and sites of action to assist you in selecting herbicides to...  
**1)** maintain greater diversity in herbicide use and  
**2)** rotate among effective herbicides with different **sites of action** to delay the development of herbicide resistance

| SITE-OF-ACTION GROUP <sup>1</sup> | SITE OF ACTION                                                | NUMBER OF RESISTANT WEED SPECIES IN U.S. |                                 |                               |                         |
|-----------------------------------|---------------------------------------------------------------|------------------------------------------|---------------------------------|-------------------------------|-------------------------|
|                                   |                                                               | CHEMICAL FAMILY                          | ACTIVE INGREDIENT               | PRODUCT EXAMPLES (TRADE NAME) |                         |
| LIPID SYNTHESIS INHIBITORS        |                                                               |                                          |                                 |                               |                         |
| 1                                 | ACCASE INHIBITORS (acetyl CoA carboxylase)                    | 14                                       | Aryloxyphenoxypropionate (fops) | clodinafop                    | Discover NG             |
|                                   |                                                               |                                          |                                 | cyhalofop                     | Clincher                |
|                                   |                                                               |                                          |                                 | fenoxaprop                    | Ricestar HT, others     |
|                                   |                                                               |                                          |                                 | fluzalofop                    | Fusilade DX             |
|                                   |                                                               |                                          |                                 | quizalofop                    | Assure II, others       |
| Cyclohexanedione (dime)s          | clathedim                                                     | Select Max, others                       |                                 |                               |                         |
|                                   | sethoxydim                                                    | Poast, Poast Plus                        |                                 |                               |                         |
|                                   | Phenylpyrazoline                                              | pinoxaden                                | Axial XL                        |                               |                         |
| AMINO ACID SYNTHESIS INHIBITORS   |                                                               |                                          |                                 |                               |                         |
| 2                                 | ALS INHIBITORS (acetolactate synthase)                        | 53                                       | Imidazolinone                   | imazamox                      | Raptor, Beyond          |
|                                   |                                                               |                                          |                                 | imazapic                      | Plateau                 |
|                                   |                                                               |                                          |                                 | imazapyr                      | Arsenal                 |
|                                   |                                                               |                                          |                                 | imazaquin                     | Scepter                 |
|                                   |                                                               |                                          |                                 | imazethapyr                   | Pursuit, Newpath        |
| Pyrimidinyl benzoates             | bispyribac                                                    | Regiment                                 |                                 |                               |                         |
|                                   | pyrithiobac                                                   | Staple                                   |                                 |                               |                         |
|                                   | bensulfuron                                                   | Landax                                   |                                 |                               |                         |
| Sulfonyleurea                     | chlorimuron                                                   | Classic                                  |                                 |                               |                         |
|                                   | chlorsulfuron                                                 | Glean                                    |                                 |                               |                         |
|                                   | halosulfuron                                                  | Permit, Sandea                           |                                 |                               |                         |
|                                   | iodosulfuron                                                  | Autumn                                   |                                 |                               |                         |
|                                   | mesosulfuron                                                  | Osprey                                   |                                 |                               |                         |
|                                   | metsulfuron                                                   | Ally                                     |                                 |                               |                         |
|                                   | nicosulfuron                                                  | Accent 0, Zest                           |                                 |                               |                         |
|                                   | orthosulfuron                                                 | Strada                                   |                                 |                               |                         |
|                                   | primisulfuron                                                 | Beacon                                   |                                 |                               |                         |
|                                   | proflumuron                                                   | Peak                                     |                                 |                               |                         |
|                                   | rimisulfuron                                                  | Matrix, Resolve                          |                                 |                               |                         |
|                                   | sulfosulfuron                                                 | Outrider                                 |                                 |                               |                         |
|                                   | thifensulfuron                                                | Harmony                                  |                                 |                               |                         |
|                                   | triasulfuron                                                  | Amber                                    |                                 |                               |                         |
|                                   | tribenuron                                                    | Express                                  |                                 |                               |                         |
| trifloxysulfuron                  | Envoke                                                        |                                          |                                 |                               |                         |
| trifluroxysulfuron                | UpBeet                                                        |                                          |                                 |                               |                         |
| Triazolinones                     | flucarbazone                                                  | Everest, Pre-Pare                        |                                 |                               |                         |
|                                   | propoxycarbazone                                              | Olympus                                  |                                 |                               |                         |
|                                   | thiencarbazone                                                | Varro                                    |                                 |                               |                         |
| Triazolopyrimidine - Type 1       | cloransulam                                                   | FirstRate                                |                                 |                               |                         |
|                                   | florasulam                                                    | component of Orion, Quelex, Starane Flex |                                 |                               |                         |
| Triazolopyrimidine - Type 2       | flumetsulam                                                   | Python                                   |                                 |                               |                         |
|                                   | penoxsulam                                                    | Grasp                                    |                                 |                               |                         |
|                                   | pyrasulam                                                     | PowerFlex HL                             |                                 |                               |                         |
| 9                                 | EPSP SYNTHASE INHIBITOR (5-enolpyruvyl-shikimate-3-phosphate) | 18                                       | Glycine                         | glyphosate                    | Roundup, several others |

| GROWTH REGULATORS |                                                                   |                                     |                      |                              |                                                                                                   |
|-------------------|-------------------------------------------------------------------|-------------------------------------|----------------------|------------------------------|---------------------------------------------------------------------------------------------------|
| 4                 | SYNTHETIC AUXINS<br>(TIR1, AFB1-5 and unknown<br>auxin receptors) | 11                                  | 6-Arylpicolinates    | florpyrauxifen<br>halauxifen | <i>Loyant</i><br><i>Elevore</i>                                                                   |
|                   |                                                                   |                                     | Benzate              | dicamba                      | <i>Banvel</i> , <i>Clarity</i> , <i>DIFlexx</i> ,<br><i>Engenia</i> *, <i>XtendiMax</i> *, others |
|                   |                                                                   |                                     | Phenoxy carboxylate  | 2,4-D                        | <i>2,4-D</i> , <i>Enlist One</i> , others                                                         |
|                   |                                                                   |                                     |                      | MCPA                         | <i>MCPA</i> , others                                                                              |
|                   |                                                                   |                                     | Pyridine carboxylate | aminopyralid                 | <i>Milestone</i>                                                                                  |
|                   |                                                                   |                                     |                      | clopyralid                   | <i>Stinger</i>                                                                                    |
|                   |                                                                   |                                     |                      | halauxifen                   | <i>Elevore</i>                                                                                    |
|                   |                                                                   |                                     |                      | fluroxypyr                   | <i>Starane Ultra</i>                                                                              |
|                   | triclopyr                                                         | <i>Garlon</i> , <i>Remedy Ultra</i> |                      |                              |                                                                                                   |
|                   | Quinoline carboxylate                                             | quinclorac                          | <i>Facet</i>         |                              |                                                                                                   |
| 19                | AUXIN TRANSPORT INHIBITOR                                         | 0                                   | Aryl carboxylate     | diflufenopyr                 | component of <i>Status</i>                                                                        |

|                           |                                                                                 |    |                   |                                                  |
|---------------------------|---------------------------------------------------------------------------------|----|-------------------|--------------------------------------------------|
| PHOTOSYNTHESIS INHIBITORS |                                                                                 |    |                   |                                                  |
| 5                         | PHOTOSYSTEM II INHIBITORS (D1 Serine 264 binders and non-histidine 215 binders) | 28 | Amide             | propanil<br><i>SuperWham</i>                     |
|                           |                                                                                 |    | Triazine          | atrazine<br><i>AAtrex</i> , others               |
|                           |                                                                                 |    | Triazine          | ametryn<br><i>Evik</i>                           |
|                           |                                                                                 |    | Triazine          | prometon<br><i>Pramitol</i>                      |
|                           |                                                                                 |    | Uracil            | simazine<br><i>Caporal</i>                       |
|                           |                                                                                 |    | Urea              | hexazinone<br><i>Valpar</i>                      |
|                           |                                                                                 |    |                   | metribuzin<br><i>Metribuzin</i> , others         |
|                           |                                                                                 |    |                   | amcarbazone<br><i>Xanerate</i>                   |
|                           |                                                                                 |    |                   | terbacil<br><i>Sinbar</i>                        |
|                           |                                                                                 |    |                   | diuron<br><i>Direx</i> , <i>Karmex</i>           |
|                           |                                                                                 |    | Urea              | fluometuron<br><i>Cotoran</i>                    |
|                           |                                                                                 |    |                   | linuron<br><i>Lorox</i> , <i>Linex</i>           |
|                           |                                                                                 |    |                   | tebutiuron<br><i>Spike</i>                       |
|                           |                                                                                 |    |                   | benzothiadiazine<br><i>Basagran</i> , others     |
|                           |                                                                                 |    |                   | nitrate<br><i>Maestro</i> , <i>Moxy</i> , others |
| 6                         | PHOTOSYSTEM II INHIBITORS (D1 Histidine 215 binders)                            | 1  | Phenyl pyridazine | pyridate<br><i>Tough</i>                         |

|                               |                                |   |                 |                                                             |
|-------------------------------|--------------------------------|---|-----------------|-------------------------------------------------------------|
| NITROGEN METABOLISM INHIBITOR |                                |   |                 |                                                             |
| 10                            | GLUTAMINE SYNTHETASE INHIBITOR | 3 | Phosphinic acid | glufosinate<br><i>Liberty Ultra</i> , <i>Relay</i> , others |

|                    |                                                        |   |                      |                                                        |
|--------------------|--------------------------------------------------------|---|----------------------|--------------------------------------------------------|
| PIGMENT INHIBITORS |                                                        |   |                      |                                                        |
| 12                 | PHYTOENE DESATURASE (PDS) INHIBITORS                   | 1 | Diphenyl heterocycle | fluridone<br><i>Brake</i> , <i>Sonar</i>               |
|                    |                                                        |   | N-Phenyl heterocycle | norflurazon<br><i>Solicam</i>                          |
|                    |                                                        |   | Phenyl ether         | diflufenican<br><i>Convinto*</i>                       |
| 13                 | DOXP SYNTHASE INHIBITOR (1-DEOXY-D-XULOSE 5-PHOSPHATE) | 2 | Isoxazolidinone      | clomazone<br><i>Command 3ME</i>                        |
| 27                 | HPPD INHIBITORS                                        | 3 | Isoxazole            | isoxaflutole<br><i>Alite 27</i> , <i>Balance Flexx</i> |
|                    |                                                        |   | Pyrazole             | pyrasulfotole<br>component of <i>Huskie</i>            |
|                    |                                                        |   | Pyrazole             | topramezone<br><i>Armezon</i> , <i>Impact</i>          |
|                    |                                                        |   | Triketone            | tolpyralate<br><i>Shieldex</i>                         |
|                    |                                                        |   | Triketone            | bicyclopyrone<br><i>Optogen</i>                        |
|                    |                                                        |   | Triketone            | mesotrione<br><i>Callisto</i>                          |
|                    |                                                        |   |                      | tembotrione<br><i>Laudis</i>                           |
|                    |                                                        |   |                      |                                                        |
|                    |                                                        |   |                      |                                                        |
|                    |                                                        |   |                      |                                                        |

|                          |                                 |   |                      |                                                       |
|--------------------------|---------------------------------|---|----------------------|-------------------------------------------------------|
| CELL MEMBRANE DISRUPTERS |                                 |   |                      |                                                       |
| 14                       | PPO INHIBITORS                  | 7 | Diphenyl ether       | acifluorfen<br><i>Ultra Blazer</i>                    |
|                          |                                 |   |                      | fomesafen<br><i>Flexstar</i> , <i>Reflex</i> , others |
|                          |                                 |   |                      | lactofen<br><i>Cobra</i> , <i>Phoenix</i>             |
|                          |                                 |   |                      | epyriflencil<br><i>Rapidil*</i>                       |
|                          |                                 |   |                      | flumiclorac<br><i>Resource</i>                        |
|                          |                                 |   | N-Phenylimide        | flumioxazin<br><i>Valor</i> , <i>Chateau</i> , others |
|                          |                                 |   |                      | fluthiacet<br><i>Cadet</i>                            |
|                          |                                 |   |                      | saflufenacil<br><i>Sharpen</i>                        |
|                          |                                 |   |                      | tiatfenacil<br><i>Reviton</i> , <i>Gamma</i>          |
|                          |                                 |   |                      | carfentrazone<br><i>Aim</i>                           |
|                          |                                 |   | N-Phenyltriazolinone | sulfentrazone<br><i>Spartan</i>                       |
|                          |                                 |   |                      |                                                       |
|                          |                                 |   |                      |                                                       |
|                          |                                 |   |                      |                                                       |
|                          |                                 |   |                      |                                                       |
| 22                       | PHOTOSYSTEM I ELECTRON DIVERTER | 6 | Pyridinium           | diquat<br><i>Regione</i>                              |
|                          |                                 |   | paraquat             |                                                       |
|                          |                                 |   |                      | <i>Gramoxone SL</i>                                   |

|                                 |                                 |   |                |                                                       |
|---------------------------------|---------------------------------|---|----------------|-------------------------------------------------------|
| SEEDLING ROOT GROWTH INHIBITORS |                                 |   |                |                                                       |
| 3                               | MICROTUBULE ASSEMBLY INHIBITORS | 6 | Benzamide      | pronamide<br><i>Kerb</i>                              |
|                                 |                                 |   | Dinitroaniline | ethalfuralin<br><i>Sanolan</i>                        |
|                                 |                                 |   | Dinitroaniline | pendimethalin<br><i>Prowl H<sub>2</sub>O</i> , others |
|                                 |                                 |   | Pyridine       | trifluralin<br><i>Treflan</i> , others                |
|                                 |                                 |   | Pyridine       | dithiopyr<br><i>Dimension</i>                         |

|                                  |                                                 |   |                   |                                                                |
|----------------------------------|-------------------------------------------------|---|-------------------|----------------------------------------------------------------|
| SEEDLING SHOOT GROWTH INHIBITORS |                                                 |   |                   |                                                                |
| 15                               | VERY LONG-CHAIN FATTY ACID SYNTHESIS INHIBITORS | 8 | Benzofuran        | ethofumesate<br><i>Nortron</i>                                 |
|                                  |                                                 |   | acetochlor        | <i>Harness</i> , <i>Surpass</i> , <i>Warrant</i> , others      |
|                                  |                                                 |   | α-Chloroacetamide | dimethenamid-P<br><i>Outlook</i>                               |
|                                  |                                                 |   | Isoxazoline       | s-metolachlor<br><i>Dual Magnum</i> , others                   |
|                                  |                                                 |   | α-Oxycetamide     | pyrasulfuron<br><i>Zidua</i>                                   |
|                                  |                                                 |   | Thiocarbamate     | flufenacet<br><i>Define</i>                                    |
|                                  |                                                 |   |                   | cycloate<br><i>Ro-Neet</i>                                     |
|                                  |                                                 |   |                   | EPIC<br><i>Eradicane</i> , <i>Eptam</i>                        |
|                                  |                                                 |   |                   | thiobencarb<br><i>Bolero</i>                                   |
|                                  |                                                 |   |                   | triallate<br><i>Far-Go</i>                                     |
| 29                               | CELLULOSE BIOSYNTHESIS INHIBITORS               | 3 | Aylykazine        | indaziflam<br><i>Allon</i> , <i>Esplanade</i> , <i>Rezilon</i> |
|                                  |                                                 |   | Benzamide         | isoxaben<br><i>Gallery</i> , <i>Trellis</i>                    |

|           |         |   |           |                                |
|-----------|---------|---|-----------|--------------------------------|
| UNDEFINED |         |   |           |                                |
| 0         | UNKNOWN | 1 | Amide     | nagropamide<br><i>Devrinal</i> |
|           |         |   | Arsenical |                                |
|           |         |   |           | <i>MSMA</i>                    |



<sup>1</sup> Site of Action Group numbers follow the revised 2024 Herbicide Resistance Action Committee (HRAC) classification.  
\*Indicates product is not registered for use at the time of printing.  
Check for a label and Material Safety Data Sheet at [www.cdms.net](http://www.cdms.net) to confirm status. This chart contains some restricted use pesticides. Always consult label prior to use.  
Technical editing for this publication was led by Christy Sprague, Ph.D., Michigan State University, in partnership with other universities in the soybean-growing regions of the United States.  
The United Soybean Board and all Take Action partners neither recommend nor discourage the implementation of any advice contained herein, and are not liable for the use or misuse of the information provided.  
PRINTED WITH SOY INK © 2025 United Soybean Board

## by PREMIX

This chart lists premix herbicides alphabetically by their trade names so you can identify the premix's component herbicides and their respective site-of-action groups. Refer to the **Site of Action** chart on the left for more information.

| PREMIX                                 | COMPONENT         |                | SITE-OF-ACTION GROUP |
|----------------------------------------|-------------------|----------------|----------------------|
|                                        | ACTIVE INGREDIENT | TRADE NAME     |                      |
| ACURON                                 | bicyclopyrone     | Optogen        | 27                   |
|                                        | mesotrione        | Callisto       | 27                   |
|                                        | atrazine          | AAtrex         | 5                    |
|                                        | s-metolachlor     | Dual II Magnum | 27                   |
| ACURON FLEXI                           | bicyclopyrone     | Optogen        | 27                   |
|                                        | mesotrione        | Callisto       | 27                   |
|                                        | s-metolachlor     | Dual II Magnum | 15                   |
|                                        | bicyclopyrone     | Optogen        | 27                   |
| ACURON GT                              | mesotrione        | Callisto       | 27                   |
|                                        | s-metolachlor     | Dual Magnum    | 15                   |
|                                        | glyphosate        | glyphosate     | 9                    |
|                                        | thifensulfuron    | Harmony        | 2                    |
| AFFINITY BROADSPEC (Affinity TankMix)  | tribenuron        | Express        | 2                    |
|                                        | thifensulfuron    | Harmony        | 2                    |
| AFFORIA                                | tribenuron        | Express        | 2                    |
|                                        | flumioxazin       | Valor          | 14                   |
| ALLY EXTRA                             | thifensulfuron    | Harmony        | 2                    |
|                                        | tribenuron        | Express        | 2                    |
| ANTHEM FLEX                            | metsulfuron       | Ally           | 5                    |
|                                        | pyrasulfuron      | Zidua          | 15                   |
| ANTHEM MAXX                            | carfentrazone     | Aim            | 14                   |
|                                        | pyrasulfuron      | Zidua          | 15                   |
| ARMEZON PRO                            | fluthiacet        | Cadet          | 14                   |
|                                        | topramezone       | Armezon        | 27                   |
| AUTHORITY ASSIST                       | dimethenamid-P    | Outlook        | 15                   |
|                                        | sulfentrazone     | Spartan        | 14                   |
| AUTHORITY EDGE                         | imagethapyr       | Pursuit        | 2                    |
|                                        | sulfentrazone     | Spartan        | 14                   |
| AUTHORITY FIRST                        | pyrasulfuron      | Zidua          | 15                   |
|                                        | sulfentrazone     | Spartan        | 14                   |
| AUTHORITY SUPREME                      | sulfentrazone     | Spartan        | 14                   |
|                                        | pyrasulfuron      | Zidua          | 15                   |
| AUTHORITY XL                           | sulfentrazone     | Spartan        | 14                   |
|                                        | chlorimuron       | Classic        | 2                    |
| AUTUMN SUPER                           | iodosulfuron      | Autumn         | 2                    |
|                                        | thiencarbazone    | Varro          | 2                    |
| AXIAL BOLD                             | pinoxaden         | Axial XL       | 1                    |
|                                        | fenoxaprop        | Ricestar       | 1                    |
| AXIAL STAR                             | pinoxaden         | Axial XL       | 1                    |
|                                        | fluroxypyr        | Starane        | 4                    |
| BASIS BLEND                            | rimisulfuron      | Resolve        | 2                    |
|                                        | thifensulfuron    | Harmony        | 2                    |
| BICEP II MAGNUM (Bicep Lite II Magnum) | s-metolachlor     | Dual II Magnum | 15                   |
|                                        | atrazine          | AAtrex         | 5                    |
| BOUNDARY                               | s-metolachlor     | Dual Magnum    | 15                   |
|                                        | metribuzin        | Metribuzin     | 5                    |
| BROADAXE XC                            | s-metolachlor     | Dual Magnum    | 15                   |
|                                        | sulfentrazone     | Spartan 4F     | 14                   |
| BRONATE ADVANCED                       | bramoxynil        | Maestro        | 6                    |
|                                        | MCPA              | MCPA           | 4                    |
| CALBRA                                 | s-metolachlor     | Dual II Magnum | 15                   |
|                                        | mesotrione        | Callisto       | 27                   |
| CALLISTO GT                            | mesotrione        | Callisto       | 27                   |
|                                        | atrazine          | AAtrex         | 5                    |
| CALLISTO XTRA                          | thiencarbazone    | Varro          | 2                    |
|                                        | glyphosate        | glyphosate     | 9                    |
| CAPRENO                                | mesotrione        | Callisto       | 27                   |
|                                        | tembotrione       | Laudis         | 27                   |
| CARNIVORE                              | MCPA              | MCPA           | 4                    |
|                                        | fluroxypyr        | Starane        | 4                    |
| CLEARPATH                              | bramoxynil        | Maestro        | 6                    |
|                                        | quinclorac        | Facet          | 4                    |
| COLT AS                                | imagethapyr       | Newpath        | 2                    |
|                                        | clopyralid        | Stinger        | 4                    |
| COLT + SALVO                           | fluroxypyr        | Starane        | 4                    |
|                                        | 2,4-D             | 2,4-D          | 4                    |
| COLT + SWORD                           | fluroxypyr        | Starane        | 4                    |
|                                        | MCPA              | MCPA           | 4                    |
| CORVUS                                 | fluroxypyr        | Starane        | 4                    |
|                                        | thiencarbazone    | Varro          | 2                    |
| COYOTE                                 | isoxaflutole      | Balance Flexx  | 27                   |
|                                        | s-metolachlor     | Dual II Magnum | 27                   |
| CURTAIL                                | mesotrione        | Callisto       | 15                   |
|                                        | clopyralid        | Stinger        | 4                    |
| CURTAIL M                              | 2,4-D             | 2,4-D          | 4                    |
|                                        | clopyralid        | Stinger        | 4                    |
| DEGREE XTRA                            | MCPA              | MCPA           | 4                    |
|                                        | acetochlor        | Degree         | 15                   |
| DIFLEX DUO                             | atrazine          | AAtrex         | 5                    |
|                                        | dicamba           | Diflexx        | 4                    |
| DIMETRIC CHARGED                       | tembotrione       | Laudis         | 27                   |
|                                        | metribuzin        | Metribuzin     | 5                    |
| ENLIST DUO                             | flumioxazin       | Valor          | 14                   |
|                                        | 2,4-D             | 2,4-D          | 4                    |
| ENLITE                                 | glyphosate        | glyphosate     | 9                    |
|                                        | chlorimuron       | Classic        | 2                    |
| ENLITE                                 | thifensulfuron    | Harmony        | 2                    |
|                                        | flumioxazin       | Valor          | 14                   |
| FIERCE EZ                              | flumioxazin       | Valor          | 14                   |
|                                        | pyrasulfuron      | Zidua          | 15                   |
| FIERCE MTZ                             | flumioxazin       | Valor          | 14                   |
|                                        | pyrasulfuron      | Zidua          | 15                   |
| FIERCE XLT                             | metribuzin        | Metribuzin     | 5                    |
|                                        | flumioxazin       | Valor          | 14                   |
| FINESSE                                | pyrasulfuron      | Zidua          | 15                   |
|                                        | chlorimuron       | Classic        | 2                    |
| FIRSTSHOT                              | chlorsulfuron     | Glean          | 2                    |
|                                        | metsulfuron       | Ally           | 2                    |
| FLEXSTAR GT                            | thifensulfuron    | Harmony        | 2                    |
|                                        | tribenuron        | Express        | 2                    |
| FULTIME NXT                            | fomesafen         | Flexstar       | 14                   |
|                                        | glyphosate        | glyphosate     | 9                    |
| FUSION                                 | acetochlor        | TopNotch       | 15                   |
|                                        | atrazine          | AAtrex         | 5                    |
| GOLDSKY                                | fluzafop          | Fusilade DX    | 1                    |
|                                        | fenoxaprop        | Puma           | 1                    |
| GRAZONNEXT HL                          | pyrasulfuron      | PowerFlex HL   | 2                    |
|                                        | florasulam        | -----          | 2                    |
| HALEX GT                               | fluroxypyr        | Starane        | 4                    |
|                                        | aminopyralid      | Milestone      | 4                    |
| HARMONY EXTRA                          | 2,4-D             | 2,4-D          | 4                    |
|                                        | s-metolachlor     | Dual Magnum    | 15                   |
| HARNESS MAX                            | mesotrione        | Callisto       | 27                   |
|                                        | glyphosate        | glyphosate     | 9                    |
| HARNESS XTRA                           | thifensulfuron    | Harmony        | 2                    |
|                                        | tribenuron        | Express        | 2                    |
| HORNET                                 | acetochlor        | Harness        | 15                   |
|                                        | mesotrione        | Callisto       | 27                   |
| HUSKIE                                 | acetochlor        | Harness        | 15                   |
|                                        | atrazine          | AAtrex         | 5                    |
| HUSKIE COMPLETE                        | clopyralid        | Stinger        | 4                    |
|                                        | flumetsulam       | Python         | 4                    |
| HUSKIE FX                              | pyrasulfotole     | -----          | 27                   |
|                                        | bramoxynil        | Maestro        | 6                    |
| IMPACT CORE                            | pyrasulfotole     | -----          | 27                   |
|                                        | bramoxynil        | Maestro        | 6                    |
| IMPACT2                                | thiencarbazone    | Varro          | 2                    |
|                                        | pyrasulfotole     | -----          | 27                   |
| INTERMOC                               | bramoxynil        | Maestro        | 6                    |
|                                        | fluroxypyr        | Starane Ultra  | 15                   |
| INTRAVA DX                             | acetochlor        | Harness        | 15                   |
|                                        | topramezone       | Impact         | 27                   |
| KATAGON                                | atrazine          | AAtrex         | 5                    |
|                                        | topramezone       | Impact         | 27                   |
| KEYSTONE NXT (Keystone LA NXT)         | glufosinate       | Liberty        | 10                   |
|                                        | s-metolachlor     | Dual Magnum    | 15                   |
| KOCHAVORE                              | amicarbazone      | Xonerate       | 5                    |
|                                        | metribuzin        | Metribuzin     | 5                    |
| KEYSTONE NXT (Keystone LA NXT)         | nicosulfuron      | Accent Q       | 2                    |
|                                        | tolpyralate       | Shieldex       | 27                   |
| KUCHAVORE                              | acetochlor        | Surpass NXT    | 15                   |
|                                        | chlorsulfuron     | Glean          | 2                    |
| KUCHAVORE                              | 2,4-D             | 2,4-D, others  | 4                    |
|                                        | fluroxypyr        | Starane        | 4                    |
| KUCHAVORE                              | bramoxynil        | Maestro        | 6                    |
|                                        | bramoxynil        | Maestro        | 6                    |