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(54) Title: HERBICIDAL COMBINATION

(57) Abstract: An herbicidal combination including a photosystem II inhibitor, an ALS inhibitor, and a chlorophyll and heme biosynthesis inhibitor, a composition comprising the combination, and methods of using these combinations are described.

HERBICIDAL COMBINATION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Application 62/760,149 filed on November 13, 2018, which is incorporated herein by reference in its entirety.

Technical Field:

[0002] The present disclosure relates to combinations of herbicides for controlling harmful undesirable plants. The present disclosure more specifically relates to a synergistic combination of herbicides.

Background and prior art:

[0003] Weeds are undesirable plants that can severely damage yield in crops. Farmers usually control these plants at the pre-plant stage as well as after sowing. Modern herbicides are used to either control or suppress these undesirable plants so as to allow sown crops a greater share of nutrient.

[0004] Current practices include combining herbicides with varied modes of action, which allows for broader spectrum of control and resistance management. However, the combinations currently known are not sufficient to control the resistant and persistent weeds. Growers increasingly face complex weed situations that may not be controlled with just one herbicide.

[0005] Combinations of herbicides are used to control a broader range of weeds. However, the combination of herbicides may not always result in the desired effect. Combination of herbicides may lead to an additive effect or an antagonistic effect. It may also result in phytotoxicity to the crops making it an undesirable combination. Agronomists must therefore carefully select the herbicides that can be combined to offer a synergistic effect that would control weeds while having no phytotoxic effect on the crop, and reduce the chances of development of herbicide resistant weeds.

[0006] US8785351 discloses a combination comprising bentazon, an acetolactate synthase (ALS) inhibitor and an ACCase inhibitor. Sulfonylureas are indicated as potential long list of ALS inhibitors, while some PPO inhibitors are merely indicated as a possible additional herbicide, amongst an equally large number of herbicides. This disclosure is generic and does not provide guidance towards the present combinations.

[0007] There is therefore a need in the art for combinations that have advantageous properties such as a herbicidal combination that is synergistic, helps in resistance management, reduces dosage of herbicides used thus causing minimal damage to the environment, and a herbicidal combination that has excellent residual effects.

[0008] Embodiments of the present invention may therefore ameliorate one or more of the above-mentioned problems:

Summary

[0009] Therefore, in one aspect, the present invention may provide an herbicidal combination comprises:

(a) at least one photosystem II inhibitor selected from the group consisting of:
  (i) a phenylcarbamate herbicide;
  (ii) a triazine herbicide;
  (iii) a triazinone herbicide;
  (iv) an uracil herbicide;
  (v) a benthiadiazole herbicide;
  (vi) a nitrile herbicide; and
  (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:
  (i) an imidazolinone herbicide;
  (ii) a sulfonylamino-carbonyltriazolinone herbicide;
  (iii) a sulfonylurea herbicide;
  (iv) a pyrazole herbicide;
  (v) a triazolpyramidine herbicide; and
  (vi) a triazolone herbicide;

and

  (c) at least one chlorophyll and heme biosynthesis inhibitor.

[0010] In another aspect, a method of controlling weeds at a locuscomprises applying to the locus an herbicidal combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of:
  (i) a phenylcarbamate herbicide;
  (ii) a triazine herbicide;
  (iii) a triazinone herbicide;

(iv) an uracil herbicide;

(v) a benthiadiazole herbicide;

(vi) a nitrile herbicide; and

(vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:

(i) an imidazolinone herbicide;

(ii) a sulfonylamino-carbonyltriazolinone herbicide;

(iii) a sulfonylurea herbicide;

(iv) a pyrazole herbicide;

(v) a triazolpyramidine herbicide; and

(vi) a triazolone herbicide;

and

(c) at least one chlorophyll and heme biosynthesis inhibitor.

[0011] In an aspect, an herbicidal composition comprises

(a) at least one photosystem II inhibitor selected from the group consisting of:

(i) a phenylcarbamate herbicide;

(ii) a triazine herbicide;

(iii) a triazinone herbicide;

(iv) an uracil herbicide;

(v) a benthiadiazole herbicide;

(vi) a nitrile herbicide; and

(vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:

(i) an imidazolinone herbicide;

(ii) a sulfonylamino-carbonyltriazolinone herbicide;

(iii) a sulfonylurea herbicide;

(iv) a pyrazole herbicide;

(v) a triazolpyramidine herbicide; and

(vi) a triazolone herbicide;

(c) at least one chlorophyll and heme biosynthesis inhibitor; and

(d) at least one agrochemically acceptable excipient.

[0012] Yet another aspect comprises a method of increasing yield in a crop by application of a combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of:

(i) a phenylcarbamate herbicide;

(ii) a triazine herbicide;

(iii) a triazinone herbicide;

(iv) an uracil herbicide;

(v) a benthiadiazole herbicide;

(vi) a nitrile herbicide; and

(vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:

(i) an imidazolinone herbicide;

(ii) a sulfonylamino-carbonyltriazolinone herbicide;

(iii) a sulfonylurea herbicide;

(iv) a pyrazole herbicide;

(v) a triazolpyramidine herbicide; and

(vi) a triazolone herbicide;

and

(c) at least one chlorophyll and heme biosynthesis inhibitor.

[0013] Another aspect provides a method of improving plant health, said method comprising application at the locus of the plant a combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of:

(i) a phenylcarbamate herbicide;

(ii) a triazine herbicide;

(iii) a triazinone herbicide;

(iv) an uracil herbicide;

(v) a benthiadiazole herbicide;

(vi) a nitrile herbicide; and

(vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:

(i) an imidazolinone herbicide;

(ii) a sulfonylamino-carbonyltriazolinone herbicide;

(iii) a sulfonylurea herbicide;

(iv) a pyrazole herbicide;

(v) a triazolpyramidine herbicide; and

(vi) a triazolone herbicide;

and

(c) at least one chlorophyll and heme biosynthesis inhibitor.

Detailed Description:

[0014] The term herbicide, as used herein, shall mean an active ingredient that kills, controls or otherwise adversely modifies the growth of weeds. As used herein, an herbicidally effective or vegetation controlling amount is an amount of active ingredient that causes an "herbicidal effect," i.e., an adversely modifying effect and includes deviations from natural development, killing, regulation, desiccation, retardation. The terms "plants" and "vegetation" include, but are not limited to, germinant seeds, emerging seedlings, plants emerging from vegetative propagules, and established vegetation. The term "locus" as used herein shall denote the vicinity of a desired crop in which weed control, typically selective weed control, of weeds is desired. The locus includes the vicinity of desired crop plants wherein the weed infestation has either emerged or is yet to emerge. The term crop shall include a multitude of desired crop plants or an individual crop plant growing at a locus.

[0015] Surprisingly, it has been found by the present inventors that a combination of a photosystem II inhibitor, an ALS inhibitor, and a chlorophyll and heme biosynthesis inhibitor results in a synergistic control of undesirable plants, at the locus of the desired plant.

[0016] Therefore, in one aspect, the present invention may provide an herbicidal combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of:

(i) a phenylcarbamate herbicide;

(ii) a triazine herbicide;

(iii) a triazinone herbicide;

(iv) an uracil herbicide;

(v) a benthiadiazole herbicide;

(vi) a nitrile herbicide; and

(vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of:

(i) an imidazolinone herbicide;

(ii) a sulfonylamino-carbonyltriazolinone herbicide;

(iii) a sulfonylurea herbicide;

(iv) a pyrazole herbicide;

(v) a triazolpyramidine herbicide; and

(vi) a triazolone herbicide;

and

(c) at least one chlorophyll and heme biosynthesis inhibitor.

[0017] In an embodiment, the herbicidal combinations of the present invention comprise one herbicide from these three classes of herbicides.

[0018] Therefore, in one aspect, the present invention may provide a herbicidal combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0019] In another aspect, the present invention provides a method of controlling weeds at a locus by applying the combination of the present invention to the locus.

[0020] Thus, in this aspect, the present invention may provide a method of controlling weeds at a locus, said method comprising applying to the locus a combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0021] In another aspect, the present invention provides a composition comprising the combinations of the present invention.

[0022] Therefore, in this aspect, the present invention may provide a composition comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide;

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide; and

(d) at least one agrochemically acceptable excipient.

[0023] In another aspect, the present invention provides a method for increasing yield in a crop by using the combinations of the present invention.

[0024] Therefore, in this aspect, the present invention may provide a method of increasing yield in a crop by application to the crop a combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0025] In another aspect, the present invention may provide a method of improving plant health comprising applying to the plant the combinations of the present invention.

[0026] Therefore, in this aspect, the present invention may provide a method of improving the plant health, said method comprising application at the locus of the plant a combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide;

(iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0027] Each of the aspect described above may have one or more embodiments.

[0028] Each of the embodiments described hereinafter may apply to one or all of the aspects described hereinabove. These embodiments are intended to be read as being preferred features of one or all of the aspects described hereinabove. Each of the embodiments described hereinafter applies to each of the aspects described hereinabove individually.

[0029] In an embodiment, the photosystem II inhibitor is a phenylcarbamate herbicide. In an embodiment, the phenylcarbamate herbicide is selected from the group consisting of barban, (RS)-sec-butyl 3-chlorocarbanilate (BCPC), carbasulam, carbetamide, 2-chloroethyl 3-chlorocarbanilate (CEPC), chlorbufam, chlorpropham, (RS)-2-chloro-1-methylethyl 3-chlorocarbanilate (CPPC), desmedipham, phenisopham, phenmedipham, phenmedipham-ethyl, propham and methyl(3,4 dichlorophenyl)carbamate (swep).

[0030] In an embodiment, the phenylcarbamate herbicide is selected from the group consisting of chlorpropham, desmedipham, phenmedipham, and phenmedipham-ethyl. In an embodiment, the phenylcarbamate herbicide is chlorpropham. In an embodiment, the phenylcarbamate herbicide is desmedipham. In an embodiment, the phenylcarbamate herbicide is phenmedipham. In an embodiment, the phenylcarbamate herbicide is phenmedipham-ethyl. In an embodiment, the photosystem II inhibitor is a triazine herbicide.

[0031] In an embodiment, the triazine herbicide is selected from the group consisting of dipropetryn, fucaojing, trihydroxytriazine, atrazine, chlorazine, cyanazine, cyprazine, eglinazine, ipazine, mesoprazine, procyazine, proglinazine, propazine, sebuthylazine, simazine, terbuthylazine, trietazine, indaziflam, triaziflam, atraton, methometon, prometon, secbumeton, simeton, terbumeton, ametryn, aziprotryne, cyanatryn, desmetryn, dimethametryn, methoprotryne, propmetryn, simetryn, and terbutryn.

[0032] In an embodiment, the triazine herbicide is atrazine. In an embodiment, the triazine herbicide is ametryn. In an embodiment, the photosystem II inhibitor is a triazinone herbicide.

[0033] In an embodiment, the triazinone herbicide is selected from the group consisting of ametridione, amibuzin, ethiozin, hexazinone, isomethiozin, metamitron, metribuzin and trifludimoxazin. In an embodiment, the triazinone herbicide is hexazinone. In an embodiment, the triazinone herbicide is metamitron. In an embodiment, the triazinone herbicide is metribuzin. In an embodiment, the photosystem II inhibitor is a uracil herbicide.

[0034] In an embodiment, the uracil herbicide is selected from the group consisting of benzfendizone, bromacil, butafenacil, flupropacil, isocil, lenacil, saflufenacil, terbacil and tiafenacil. In an embodiment, the uracil herbicide is bromacil. In an embodiment, the uracil herbicide is saflufenacil.

[0035] In an embodiment, the photosystem II inhibitor is a benzothiazole herbicide or a benzothiadiazole herbicide. In an embodiment, the benzothiazole herbicide is selected from the group consisting of benazolin, benzthiazuron, fenthiaprop, mefenacet, and methabenzthiazuron. In an embodiment, the photosystem II inhibitor is a benzothiadiazole herbicide. In an embodiment, the benzothiadiazole herbicide is bentazone or bentazone-sodium.

[0036] In an embodiment, the photosystem II inhibitor is a nitrile herbicide. In an embodiment, the nitrile herbicide is selected from the group consisting of bromobonil, bromoxynil, chloroxynil, cyclopyranil, dichlobenil, iodobenil, ioxynil and pyraclonil. In an embodiment, the nitrile herbicide is bromoxynil. In an embodiment, the photosystem II inhibitor is a urea herbicide. In an embodiment, the urea herbicide is a phenylurea herbicide.

[0037] In an embodiment, the phenylurea herbicide is selected from the group consisting of anisuron, buturon, chlorbromuron, chloreturon, chlorotoluron, chloroxuron, daimuron, difenoxuron, dimefuron, diruon, fenuron, fluometuron, fluothiuron, isoproturon, linuron, methiruon, methyldymuron, metobenzuron, metobromuron, metoxuron, monolinuron, monuron, neburon, parafluron, phenobenzuron, siduron, tetrafluron, and thidiazuron. In an embodiment, the phenylurea herbicide is diruon. In an embodiment, the phenylurea herbicide is linuron.

[0038] In an embodiment, the photosystem II inhibitor is selected from the group consisting of chlorpropham, desmedipham, phenmedipham, phenmedipham-ethyl, atrazine, hexazinone, metamitron, metribuzin, bromacil, saflufenacil, bentazone, bentazone-sodium, bromoxynil, diruon, and linuron.

[0039] In an embodiment, the ALS inhibitor herbicide is an imidazolinone herbicide. In an embodiment, the imidazolinone herbicide is selected from the group consisting of

imazamethabenz, imazamox, imazapic, imazapyr, imazaquin, and imazethapyr. In an embodiment, the imidazolinone herbicide is imazamox. In an embodiment, the imidazolinone herbicide is imazapic. In an embodiment, the imidazolinone herbicide is imazapyr. In an embodiment, the imidazolinone herbicide is imazethapyr. In an embodiment, the ALS inhibitor is a triazolone herbicide.

[0040] In an embodiment, the triazolone herbicide is selected from the group consisting of amicarbazone, bencarbazone, carfentrazone, flucarbazone, ipfencarbazone, propoxycarbazone, sulfentrazone, and thiencarbazone. In an embodiment, the triazolone herbicide is carfentrazone. In an embodiment, the triazolone herbicide is flucarbazone. In an embodiment, the triazolone herbicide is sulfentrazone. In an embodiment, the triazolone herbicide is amicarbazone.

[0041] In an embodiment, the ALS inhibitor herbicide is a sulfonylamino-carbonyltriazolinone herbicide. In an embodiment, the sulfonylamino-carbonyltriazolinone herbicide is flucarbazone. In an embodiment, the sulfonylamino-carbonyltriazolinone herbicide is flucarbazone-sodium.

[0042] In an embodiment, the ALS inhibitor herbicide is a sulfonylurea herbicide. In an embodiment, the sulfonylurea herbicide is selected from the group consisting of amidosulfuron, azimsulfuron, bensulfuron, chlorimuron, cyclosulfamuron, ethoxysulfuron, flazasulfuron, flucetosulfuron, flupyrsulfuron, foramsulfuron, halosulfuron, imazosulfuron, mesosulfuron, metazosulfuron, methiopyrisulfuron, monosulfuron, nicosulfuron, orthosulfamuron, oxasulfuron, primisulfuron, propyrisulfuron, pyrazosulfuron, rimsulfuron, sulfometuron, sulfosulfuron, trifloxysulfuron, zuomihuanglong, chlorsulfuron, cinosulfuron, ethametsulfuron, iodosulfuron, iofensulfuron, metsulfuron, prosulfuron, thifensulfuron, triasulfuron, tribenuron, trflusulfuron, and tritosulfuron. In an embodiment, the sulfonylurea herbicide is bensulfuron. In an embodiment, the sulfonylurea herbicide is halosulfuron. In an embodiment, the sulfonylurea herbicide is pyrazosulfuron. In an embodiment, the sulfonylurea herbicide is sulfosulfuron.

[0043] In an embodiment, the sulfonylurea herbicide is trifloxysulfuron. In an embodiment, the sulfonylurea herbicide is metsulfuron. In an embodiment, the sulfonylurea herbicide is flazasulfuron. In an embodiment, the ALS inhibitor herbicide is a pyrazole herbicide.

[0044] In an embodiment, the pyrazole herbicide is selected from the group consisting of azimsulfuron, cyclopyranil, difenzoquat, halosulfuron, flazasulfuron, metazachlor, metazosulfuron, pyrazosulfuron, pyraclonil, pyroxasulfone, benzofenap, pyrasulfotole,

pyrazolynate, pyrazoxyfen, tolpyralate, topramezone, fluazolate, nipyraclofen, pinoxaden, and pyraflufen. In an embodiment, the pyrazole herbicide is metazachlor. In an embodiment, the pyrazole herbicide is pinoxaden. In an embodiment, the pyrazole herbicide is pyraflufen. In an embodiment, the ALS inhibitor herbicide is a triazolopyrimidine herbicide. In an embodiment, the triazolopyrimidine herbicide is selected from the group consisting of chloransulam, diclosulam, florasulam, flumetsulam, metosulam, penoxsulam, and pyroxsulam. In an embodiment, the triazolopyrimidine herbicide is diclosulam. In an embodiment, the triazolopyrimidine herbicide is penoxsulam.

[0045] In an embodiment, the ALS inhibitor herbicide is selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, flucarbazone, sulfentrazone, flucarbazone, amicarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, flazasulfuron, sulfosulfuron, trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam.

[0046] In an embodiment, the combinations of the present invention comprise a chlorophyll and heme biosynthesis inhibitor. In an embodiment, the chlorophyll and heme biosynthesis inhibitor is a triazolone herbicide. In an embodiment, the triazolone herbicide is selected from the group consisting of amicarbazone, bencarbazone, carfentrazone, flucarbazone, ipfencarbazone, propoxycarbazone, sulfentrazone, and thiencarbazone. In an embodiment, the triazolone herbicide is carfentrazone. In an embodiment, the triazolone herbicide is flucarbazone. In an embodiment, the triazolone herbicide is sulfentrazone. In an embodiment, the triazolone herbicide is amicarbazone.

[0047] In an embodiment, the chlorophyll and heme biosynthesis inhibitor is a uracil herbicide. In an embodiment, the uracil herbicide is selected from the group consisting of benzfendizone, bromacil, butafenacil, flupropacil, isocil, lenacil, saflufenacil, terbacil and tiafenacil. In an embodiment, the uracil herbicide is bromacil. In an embodiment, the uracil herbicide is saflufenacil.

[0048] In an embodiment, the chlorophyll and heme biosynthesis inhibitor is a dicarboximide herbicide. In an embodiment, the dicarboximide herbicide is selected from the group consisting of cinidon-ethyl, flumezin, flumiclorac, flumioxazin, and flumipropyn. In an embodiment, the dicarboximide herebicide is flumioxazin.

[0049] In an embodiment, the chlorophyll and heme biosynthesis inhibitor is a pyrazole herbicide. In an embodiment, the pyrazole herbicide is selected from the group consisting of azimsulfuron, cyclopyranil, difenzoquat, halosulfuron, metazachlor, flazasulfuron,

metazosulfuron, pyrazosulfuron, pyraclonil, pyroxasulfone, benzofenap, pyrasulfotole, pyrazolynate, pyrazoxyfen, tolpyralate, topramezone, fluazolate, nipyraclofen, pinoxaden, and pyraflufen. In an embodiment, the pyrazole herbicide is metazachlor. In an embodiment, the pyrazole herbicide is pinoxaden. In an embodiment, the pyrazole herbicide is pyraflufen.

[0050] In an embodiment, the chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, amicarbazone, pinoxaden, and pyraflufen.

[0051] Thus, in an embodiment, the present invention provides an herbicidal combination comprising:

(a) a photosystem II inhibitor selected from the group consisting of chlorpropham, desmedipham, phenmedipham, phenmedipham-ethyl, atrazine, hexazinone, metamitron, metribuzin, bromacil, saflufenacil, bentazone, bentazone-sodium, bromoxynil, diruon, and linuron;

(b) an ALS inhibitor selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, amicarbazone, flucarbazone, sulfentrazone, flucarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, sulfosulfuron, flazasulfuron, trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam; and

(c) a chlorophyll and heme biosynthesis inhibitor selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0052] In an embodiment, the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynethesis inhibitor herbicides are not the same. In this embodiment, the three herbicides are selected such that the selected herbicides are different from each other.

[0053] In an embodiment, the combinations of the present invention comprise at least three different herbicides.

[0054] In an embodiment, the present invention provides preferred combinations, compositions and methods thereof. The methods of the invention include a method of controlling weeds at a locus by applying to the locus of the weeds the combination or the composition, a method of increasing yield in a crop by application of the combination or composition to the crop, or a method of improving the plant health by application at the locus of the plant the combination or the composition. The embodiments described herein describe

the preferred embodiments of all these possible combinations, compositions and methods of the invention.

[0055] In an embodiment, the preferred photosystem II inhibitor is bentazone or bentazone-sodium.

[0056] Thus, in an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) an ALS inhibitor selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, amicarbazone, flucarbazone, sulfentrazone, flucarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, flazasulfuron, sulfosulfuron, trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0057] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) imazamox; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0058] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) imazapic; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0059] Thus, in an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) imazapyr; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0060] Thus, in an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) imazethapyr; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0061] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) carfentrazone; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0062] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) flucarbazone; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0063] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) sulfentrazone; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, flucarbazone, amicarbazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0064] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) amicarbazone; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, flucarbazone, amicarbazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0065] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) flucarbazone-sodium; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0066] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) bensulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0067] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) halosulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0068] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) flazasulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0069] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) pyrazosulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0070] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) sulfosulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0071] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) trifloxysulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0072] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) metsulfuron; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0073] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) metazachlor; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0074] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) pinoxaden; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

TABLE 1

S No.	Photosystem II inhibitor	ALS inhibitor	Chlorophyll and Heme biosynthesis inhibitor	S No.	Photosystem II inhibitor	ALS inhibitor	Chlorophyll and Heme biosynthesis inhibitor
1	Chlorpropham	Imazamox	Carfentrazone	31	Chlorpropham	Imazethapyr	Bromacil
2	Chlorpropham	Imazamox	Flucarbazone	32	Chlorpropham	Imazethapyr	Saflufenacil
3	Chlorpropham	Imazamox	Sulfentrazone	33	Chlorpropham	Imazethapyr	Flumioxazin
4	Chlorpropham	Imazamox	Bromacil	34	Chlorpropham	Imazethapyr	Metazachlor
5	Chlorpropham	Imazamox	Saflufenacil	35	Chlorpropham	Imazethapyr	Pinoxaden
6	Chlorpropham	Imazamox	Flumioxazin	36	Chlorpropham	Imazethapyr	Pyraflufen
7	Chlorpropham	Imazamox	Metazachlor	37	Chlorpropham	Carfentrazone	Carfentrazone
8	Chlorpropham	Imazamox	Pinoxaden	38	Chlorpropham	Carfentrazone	Flucarbazone
9	Chlorpropham	Imazamox	Pyraflufen	39	Chlorpropham	Carfentrazone	Sulfentrazone
10	Chlorpropham	Imazapic	Carfentrazone	40	Chlorpropham	Carfentrazone	Bromacil
11	Chlorpropham	Imazapic	Flucarbazone	41	Chlorpropham	Carfentrazone	Saflufenacil
12	Chlorpropham	Imazapic	Sulfentrazone	42	Chlorpropham	Carfentrazone	Flumioxazin
13	Chlorpropham	Imazapic	Bromacil	43	Chlorpropham	Carfentrazone	Metazachlor
14	Chlorpropham	Imazapic	Saflufenacil	44	Chlorpropham	Carfentrazone	Pinoxaden
15	Chlorpropham	Imazapic	Flumioxazin	45	Chlorpropham	Carfentrazone	Pyraflufen
16	Chlorpropham	Imazapic	Metazachlor	46	Chlorpropham	Flucarbazone	Carfentrazone
17	Chlorpropham	Imazapic	Pinoxaden	47	Chlorpropham	Flucarbazone	Flucarbazone
18	Chlorpropham	Imazapic	Pyraflufen	48	Chlorpropham	Flucarbazone	Sulfentrazone
19	Chlorpropham	Imazapyr	Carfentrazone	49	Chlorpropham	Flucarbazone	Bromacil
20	Chlorpropham	Imazapyr	Flucarbazone	50	Chlorpropham	Flucarbazone	Saflufenacil
21	Chlorpropham	Imazapyr	Sulfentrazone	51	Chlorpropham	Flucarbazone	Flumioxazin
22	Chlorpropham	Imazapyr	Bromacil	52	Chlorpropham	Flucarbazone	Metazachlor
23	Chlorpropham	Imazapyr	Saflufenacil	53	Chlorpropham	Flucarbazone	Pinoxaden
24	Chlorpropham	Imazapyr	Flumioxazin	54	Chlorpropham	Flucarbazone	Pyraflufen
25	Chlorpropham	Imazapyr	Metazachlor	55	Chlorpropham	Sulfentrazone	Carfentrazone
26	Chlorpropham	Imazapyr	Pinoxaden	56	Chlorpropham	Sulfentrazone	Flucarbazone
27	Chlorpropham	Imazapyr	Pyraflufen	57	Chlorpropham	Sulfentrazone	Amicarbazone
28	Chlorpropham	Imazethapyr	Carfentrazone	58	Chlorpropham	Sulfentrazone	Bromacil
29	Chlorpropham	Imazethapyr	Flucarbazone	59	Chlorpropham	Sulfentrazone	Saflufenacil
30	Chlorpropham	Imazethapyr	Sulfentrazone	60	Chlorpropham	Sulfentrazone	Flumioxazin
61	Chlorpropham	Sulfentrazone	Metazachlor	91	Chlorpropham	Pyrazosulfuron	Carfentrazone
62	Chlorpropham	Sulfentrazone	Pinoxaden	92	Chlorpropham	Pyrazosulfuron	Flucarbazone
63	Chlorpropham	Sulfentrazone	Pyraflufen	93	Chlorpropham	Pyrazosulfuron	Sulfentrazone

64	Chlorpropham	Flucarbazone-sodium	Carfentrazone	94	Chlorpropham	Pyrazosulfuron	Bromacil
65	Chlorpropham	Flucarbazone-sodium	Flucarbazone	95	Chlorpropham	Pyrazosulfuron	Saflufenacil
66	Chlorpropham	Flucarbazone-sodium	Sulfentrazone	96	Chlorpropham	Pyrazosulfuron	Flumioxazin
67	Chlorpropham	Flucarbazone-sodium	Bromacil	97	Chlorpropham	Pyrazosulfuron	Metazachlor
68	Chlorpropham	Flucarbazone-sodium	Saflufenacil	98	Chlorpropham	Pyrazosulfuron	Pinoxaden
69	Chlorpropham	Flucarbazone-sodium	Flumioxazin	99	Chlorpropham	Pyrazosulfuron	Pyraflufen
70	Chlorpropham	Flucarbazone-sodium	Metazachlor	100	Chlorpropham	Sulfosulfuron	Carfentrazone
71	Chlorpropham	Flucarbazone-sodium	Pinoxaden	101	Chlorpropham	Sulfosulfuron	Flucarbazone
72	Chlorpropham	Flucarbazone-sodium	Pyraflufen	102	Chlorpropham	Sulfosulfuron	Sulfentrazone
73	Chlorpropham	Bensulfuron	Carfentrazone	103	Chlorpropham	Sulfosulfuron	Bromacil
74	Chlorpropham	Bensulfuron	Flucarbazone	104	Chlorpropham	Sulfosulfuron	Saflufenacil
75	Chlorpropham	Bensulfuron	Sulfentrazone	105	Chlorpropham	Sulfosulfuron	Flumioxazin
76	Chlorpropham	Bensulfuron	Bromacil	106	Chlorpropham	Sulfosulfuron	Metazachlor
77	Chlorpropham	Bensulfuron	Saflufenacil	107	Chlorpropham	Sulfosulfuron	Pinoxaden
78	Chlorpropham	Bensulfuron	Flumioxazin	108	Chlorpropham	Sulfosulfuron	Pyraflufen
79	Chlorpropham	Bensulfuron	Metazachlor	109	Chlorpropham	Trifloxysulfuron	Carfentrazone
80	Chlorpropham	Bensulfuron	Pinoxaden	110	Chlorpropham	Trifloxysulfuron	Flucarbazone
81	Chlorpropham	Bensulfuron	Pyraflufen	111	Chlorpropham	Trifloxysulfuron	Sulfentrazone
82	Chlorpropham	Halosulfuron	Carfentrazone	112	Chlorpropham	Trifloxysulfuron	Bromacil
83	Chlorpropham	Halosulfuron	Flucarbazone	113	Chlorpropham	Trifloxysulfuron	Saflufenacil
84	Chlorpropham	Halosulfuron	Sulfentrazone	114	Chlorpropham	Trifloxysulfuron	Flumioxazin
85	Chlorpropham	Halosulfuron	Bromacil	115	Chlorpropham	Trifloxysulfuron	Metazachlor
86	Chlorpropham	Halosulfuron	Saflufenacil	116	Chlorpropham	Trifloxysulfuron	Pinoxaden
87	Chlorpropham	Halosulfuron	Flumioxazin	117	Chlorpropham	Trifloxysulfuron	Pyraflufen
88	Chlorpropham	Halosulfuron	Metazachlor	118	Chlorpropham	Metsulfuron	Carfentrazone
89	Chlorpropham	Halosulfuron	Pinoxaden	119	Chlorpropham	Metsulfuron	Flucarbazone
90	Chlorpropham	Halosulfuron	Pyraflufen	120	Chlorpropham	Metsulfuron	Sulfentrazone
121	Chlorpropham	Metsulfuron	Bromacil	151	Chlorpropham	Pyraflufen	Metazachlor
122	Chlorpropham	Metsulfuron	Saflufenacil	152	Chlorpropham	Pyraflufen	Pinoxaden
123	Chlorpropham	Metsulfuron	Flumioxazin	153	Chlorpropham	Diclosulam	Carfentrazone

124	Chlorpropham	Metsulfuron	Metazachlor	154	Chlorpropham	Diclosulam	Flucarbazone
125	Chlorpropham	Metsulfuron	Pinoxaden	155	Chlorpropham	Diclosulam	Sulfentrazone
126	Chlorpropham	Metsulfuron	Pyraflufen	156	Chlorpropham	Diclosulam	Bromacil
127	Chlorpropham	Metazachlor	Carfentrazone	157	Chlorpropham	Diclosulam	Saflufenacil
128	Chlorpropham	Metazachlor	Flucarbazone	158	Chlorpropham	Diclosulam	Flumioxazin
129	Chlorpropham	Metazachlor	Sulfentrazone	159	Chlorpropham	Diclosulam	Metazachlor
130	Chlorpropham	Metazachlor	Bromacil	160	Chlorpropham	Diclosulam	Pinoxaden
131	Chlorpropham	Metazachlor	Saflufenacil	161	Chlorpropham	Diclosulam	Pyraflufen
132	Chlorpropham	Metazachlor	Flumioxazin	162	Chlorpropham	Penoxsulam	Carfentrazone
133	Chlorpropham	Metazachlor	Metazachlor	163	Chlorpropham	Penoxsulam	Flucarbazone
134	Chlorpropham	Metazachlor	Pinoxaden	164	Chlorpropham	Penoxsulam	Sulfentrazone
135	Chlorpropham	Metazachlor	Pyraflufen	165	Chlorpropham	Penoxsulam	Bromacil
136	Chlorpropham	Pinoxaden	Carfentrazone	166	Chlorpropham	Penoxsulam	Saflufenacil
137	Chlorpropham	Pinoxaden	Flucarbazone	167	Chlorpropham	Penoxsulam	Flumioxazin
138	Chlorpropham	Pinoxaden	Sulfentrazone	168	Chlorpropham	Penoxsulam	Metazachlor
139	Chlorpropham	Pinoxaden	Bromacil	169	Chlorpropham	Penoxsulam	Pinoxaden
140	Chlorpropham	Pinoxaden	Saflufenacil	170	Chlorpropham	Penoxsulam	Pyraflufen
141	Chlorpropham	Pinoxaden	Flumioxazin	171	Desmedipham	Imazamox	Carfentrazone
142	Chlorpropham	Pinoxaden	Metazachlor	172	Desmedipham	Imazamox	Flucarbazone
143	Chlorpropham	Pinoxaden	Pinoxaden	173	Desmedipham	Imazamox	Sulfentrazone
144	Chlorpropham	Pinoxaden	Pyraflufen	174	Desmedipham	Imazamox	Bromacil
145	Chlorpropham	Pyraflufen	Carfentrazone	175	Desmedipham	Imazamox	Saflufenacil
146	Chlorpropham	Pyraflufen	Flucarbazone	176	Desmedipham	Imazamox	Flumioxazin
147	Chlorpropham	Pyraflufen	Sulfentrazone	177	Desmedipham	Imazamox	Metazachlor
148	Chlorpropham	Pyraflufen	Bromacil	178	Desmedipham	Imazamox	Pinoxaden
149	Chlorpropham	Pyraflufen	Saflufenacil	179	Desmedipham	Imazamox	Pyraflufen
150	Chlorpropham	Pyraflufen	Flumioxazin	180	Desmedipham	Imazapic	Carfentrazone
181	Desmedipham	Imazapic	Flucarbazone	211	Desmedipham	Carfentrazone	Saflufenacil
182	Desmedipham	Imazapic	Sulfentrazone	212	Desmedipham	Carfentrazone	Flumioxazin
183	Desmedipham	Imazapic	Bromacil	213	Desmedipham	Carfentrazone	Metazachlor
184	Desmedipham	Imazapic	Saflufenacil	214	Desmedipham	Carfentrazone	Pinoxaden
185	Desmedipham	Imazapic	Flumioxazin	215	Desmedipham	Carfentrazone	Pyraflufen
186	Desmedipham	Imazapic	Metazachlor	216	Desmedipham	Flucarbazone	Carfentrazone
187	Desmedipham	Imazapic	Pinoxaden	217	Desmedipham	Flucarbazone	Flucarbazone
188	Desmedipham	Imazapic	Pyraflufen	218	Desmedipham	Flucarbazone	Sulfentrazone
189	Desmedipham	Imazapyr	Carfentrazone	219	Desmedipham	Flucarbazone	Bromacil
190	Desmedipham	Imazapyr	Flucarbazone	220	Desmedipham	Flucarbazone	Saflufenacil
191	Desmedipham	Imazapyr	Sulfentrazone	221	Desmedipham	Flucarbazone	Flumioxazin

192	Desmedipham	Imazapyr	Bromacil	222	Desmedipham	Flucarbazone	Metazachlor
193	Desmedipham	Imazapyr	Saflufenacil	223	Desmedipham	Flucarbazone	Pinoxaden
194	Desmedipham	Imazapyr	Flumioxazin	224	Desmedipham	Flucarbazone	Pyraflufen
195	Desmedipham	Imazapyr	Metazachlor	225	Desmedipham	Sulfentrazone	Carfentrazone
196	Desmedipham	Imazapyr	Pinoxaden	226	Desmedipham	Sulfentrazone	Flucarbazone
197	Desmedipham	Imazapyr	Pyraflufen	227	Desmedipham	Sulfentrazone	Amicarbazone
198	Desmedipham	Imazethapyr	Carfentrazone	228	Desmedipham	Sulfentrazone	Bromacil
199	Desmedipham	Imazethapyr	Flucarbazone	229	Desmedipham	Sulfentrazone	Saflufenacil
200	Desmedipham	Imazethapyr	Sulfentrazone	230	Desmedipham	Sulfentrazone	Flumioxazin
201	Desmedipham	Imazethapyr	Bromacil	231	Desmedipham	Sulfentrazone	Metazachlor
202	Desmedipham	Imazethapyr	Saflufenacil	232	Desmedipham	Sulfentrazone	Pinoxaden
203	Desmedipham	Imazethapyr	Flumioxazin	233	Desmedipham	Sulfentrazone	Pyraflufen
204	Desmedipham	Imazethapyr	Metazachlor	234	Desmedipham	Flucarbazone-sodium	Carfentrazone
205	Desmedipham	Imazethapyr	Pinoxaden	235	Desmedipham	Flucarbazone-sodium	Flucarbazone
206	Desmedipham	Imazethapyr	Pyraflufen	236	Desmedipham	Flucarbazone-sodium	Sulfentrazone
207	Desmedipham	Carfentrazone	Carfentrazone	237	Desmedipham	Flucarbazone-sodium	Bromacil
208	Desmedipham	Carfentrazone	Flucarbazone	238	Desmedipham	Flucarbazone-sodium	Saflufenacil
209	Desmedipham	Carfentrazone	Sulfentrazone	239	Desmedipham	Flucarbazone-sodium	Flumioxazin
210	Desmedipham	Carfentrazone	Bromacil	240	Desmedipham	Flucarbazone-sodium	Metazachlor
241	Desmedipham	Flucarbazone-sodium	Pinoxaden	271	Desmedipham	Sulfosulfuron	Flucarbazone
242	Desmedipham	Flucarbazone-sodium	Pyraflufen	272	Desmedipham	Sulfosulfuron	Sulfentrazone
243	Desmedipham	Bensulfuron	Carfentrazone	273	Desmedipham	Sulfosulfuron	Bromacil
244	Desmedipham	Bensulfuron	Flucarbazone	274	Desmedipham	Sulfosulfuron	Saflufenacil
245	Desmedipham	Bensulfuron	Sulfentrazone	275	Desmedipham	Sulfosulfuron	Flumioxazin
246	Desmedipham	Bensulfuron	Bromacil	276	Desmedipham	Sulfosulfuron	Metazachlor
247	Desmedipham	Bensulfuron	Saflufenacil	277	Desmedipham	Sulfosulfuron	Pinoxaden
248	Desmedipham	Bensulfuron	Flumioxazin	278	Desmedipham	Sulfosulfuron	Pyraflufen
249	Desmedipham	Bensulfuron	Metazachlor	279	Desmedipham	Trifloxysulfuron	Carfentrazone
250	Desmedipham	Bensulfuron	Pinoxaden	280	Desmedipham	Trifloxysulfuron	Flucarbazone
251	Desmedipham	Bensulfuron	Pyraflufen	281	Desmedipham	Trifloxysulfuron	Sulfentrazone

252	Desmedipham	Halosulfuron	Carfentrazone	282	Desmedipham	Trifloxysulfuron	Bromacil
253	Desmedipham	Halosulfuron	Flucarbazone	283	Desmedipham	Trifloxysulfuron	Saflufenacil
254	Desmedipham	Halosulfuron	Sulfentrazone	284	Desmedipham	Trifloxysulfuron	Flumioxazin
255	Desmedipham	Halosulfuron	Bromacil	285	Desmedipham	Trifloxysulfuron	Metazachlor
256	Desmedipham	Halosulfuron	Saflufenacil	286	Desmedipham	Trifloxysulfuron	Pinoxaden
257	Desmedipham	Halosulfuron	Flumioxazin	287	Desmedipham	Trifloxysulfuron	Pyraflufen
258	Desmedipham	Halosulfuron	Metazachlor	288	Desmedipham	Metsulfuron	Carfentrazone
259	Desmedipham	Halosulfuron	Pinoxaden	289	Desmedipham	Metsulfuron	Flucarbazone
260	Desmedipham	Halosulfuron	Pyraflufen	290	Desmedipham	Metsulfuron	Sulfentrazone
261	Desmedipham	Pyrazosulfuron	Carfentrazone	291	Desmedipham	Metsulfuron	Bromacil
262	Desmedipham	Pyrazosulfuron	Flucarbazone	292	Desmedipham	Metsulfuron	Saflufenacil
263	Desmedipham	Pyrazosulfuron	Sulfentrazone	293	Desmedipham	Metsulfuron	Flumioxazin
264	Desmedipham	Pyrazosulfuron	Bromacil	294	Desmedipham	Metsulfuron	Metazachlor
265	Desmedipham	Pyrazosulfuron	Saflufenacil	295	Desmedipham	Metsulfuron	Pinoxaden
266	Desmedipham	Pyrazosulfuron	Flumioxazin	296	Desmedipham	Metsulfuron	Pyraflufen
267	Desmedipham	Pyrazosulfuron	Metazachlor	297	Desmedipham	Metazachlor	Carfentrazone
268	Desmedipham	Pyrazosulfuron	Pinoxaden	298	Desmedipham	Metazachlor	Flucarbazone
269	Desmedipham	Pyrazosulfuron	Pyraflufen	299	Desmedipham	Metazachlor	Sulfentrazone
270	Desmedipham	Sulfosulfuron	Carfentrazone	300	Desmedipham	Metazachlor	Bromacil
301	Desmedipham	Metazachlor	Saflufenacil	331	Desmedipham	Diclosulam	Pyraflufen
302	Desmedipham	Metazachlor	Flumioxazin	332	Desmedipham	Penoxsulam	Carfentrazone
303	Desmedipham	Metazachlor	Metazachlor	333	Desmedipham	Penoxsulam	Flucarbazone
304	Desmedipham	Metazachlor	Pinoxaden	334	Desmedipham	Penoxsulam	Sulfentrazone
305	Desmedipham	Metazachlor	Pyraflufen	335	Desmedipham	Penoxsulam	Bromacil
306	Desmedipham	Pinoxaden	Carfentrazone	336	Desmedipham	Penoxsulam	Saflufenacil
307	Desmedipham	Pinoxaden	Flucarbazone	337	Desmedipham	Penoxsulam	Flumioxazin
308	Desmedipham	Pinoxaden	Sulfentrazone	338	Desmedipham	Penoxsulam	Metazachlor
309	Desmedipham	Pinoxaden	Bromacil	339	Desmedipham	Penoxsulam	Pinoxaden
310	Desmedipham	Pinoxaden	Saflufenacil	340	Desmedipham	Penoxsulam	Pyraflufen
311	Desmedipham	Pinoxaden	Flumioxazin	341	Phenmedipham	Imazamox	Carfentrazone
312	Desmedipham	Pinoxaden	Metazachlor	342	Phenmedipham	Imazamox	Flucarbazone
313	Desmedipham	Pinoxaden	Pinoxaden	343	Phenmedipham	Imazamox	Sulfentrazone
314	Desmedipham	Pinoxaden	Pyraflufen	344	Phenmedipham	Imazamox	Bromacil
315	Desmedipham	Pyraflufen	Carfentrazone	345	Phenmedipham	Imazamox	Saflufenacil
316	Desmedipham	Pyraflufen	Flucarbazone	346	Phenmedipham	Imazamox	Flumioxazin
317	Desmedipham	Pyraflufen	Sulfentrazone	347	Phenmedipham	Imazamox	Metazachlor
318	Desmedipham	Pyraflufen	Bromacil	348	Phenmedipham	Imazamox	Pinoxaden
319	Desmedipham	Pyraflufen	Saflufenacil	349	Phenmedipham	Imazamox	Pyraflufen

320	Desmedipham	Pyraflufen	Flumioxazin	350	Phenmedipham	Imazapic	Carfentrazone
321	Desmedipham	Pyraflufen	Metazachlor	351	Phenmedipham	Imazapic	Flucarbazone
322	Desmedipham	Pyraflufen	Pinoxaden	352	Phenmedipham	Imazapic	Sulfentrazone
323	Desmedipham	Diclosulam	Carfentrazone	353	Phenmedipham	Imazapic	Bromacil
324	Desmedipham	Diclosulam	Flucarbazone	354	Phenmedipham	Imazapic	Saflufenacil
325	Desmedipham	Diclosulam	Sulfentrazone	355	Phenmedipham	Imazapic	Flumioxazin
326	Desmedipham	Diclosulam	Bromacil	356	Phenmedipham	Imazapic	Metazachlor
327	Desmedipham	Diclosulam	Saflufenacil	357	Phenmedipham	Imazapic	Pinoxaden
328	Desmedipham	Diclosulam	Flumioxazin	358	Phenmedipham	Imazapic	Pyraflufen
329	Desmedipham	Diclosulam	Metazachlor	359	Phenmedipham	Imazapyr	Carfentrazone
330	Desmedipham	Diclosulam	Pinoxaden	360	Phenmedipham	Imazapyr	Flucarbazone
361	Phenmedipham	Imazapyr	Sulfentrazone	391	Phenmedipham	Flucarbazone	Flumioxazin
362	Phenmedipham	Imazapyr	Bromacil	392	Phenmedipham	Flucarbazone	Metazachlor
363	Phenmedipham	Imazapyr	Saflufenacil	393	Phenmedipham	Flucarbazone	Pinoxaden
364	Phenmedipham	Imazapyr	Flumioxazin	394	Phenmedipham	Flucarbazone	Pyraflufen
365	Phenmedipham	Imazapyr	Metazachlor	395	Phenmedipham	Sulfentrazone	Carfentrazone
366	Phenmedipham	Imazapyr	Pinoxaden	396	Phenmedipham	Sulfentrazone	Flucarbazone
367	Phenmedipham	Imazapyr	Pyraflufen	397	Phenmedipham	Sulfentrazone	Amicarbazone
368	Phenmedipham	Imazethapyr	Carfentrazone	398	Phenmedipham	Sulfentrazone	Bromacil
369	Phenmedipham	Imazethapyr	Flucarbazone	399	Phenmedipham	Sulfentrazone	Saflufenacil
370	Phenmedipham	Imazethapyr	Sulfentrazone	400	Phenmedipham	Sulfentrazone	Flumioxazin
371	Phenmedipham	Imazethapyr	Bromacil	401	Phenmedipham	Sulfentrazone	Metazachlor
372	Phenmedipham	Imazethapyr	Saflufenacil	402	Phenmedipham	Sulfentrazone	Pinoxaden
373	Phenmedipham	Imazethapyr	Flumioxazin	403	Phenmedipham	Sulfentrazone	Pyraflufen
374	Phenmedipham	Imazethapyr	Metazachlor	404	Phenmedipham	Flucarbazone-sodium	Carfentrazone
375	Desmedipham	Imazethapyr	Pinoxaden	405	Phenmedipham	Flucarbazone-sodium	Flucarbazone
376	Phenmedipham	Imazethapyr	Pyraflufen	406	Phenmedipham	Flucarbazone-sodium	Sulfentrazone
377	Phenmedipham	Carfentrazone	Carfentrazone	407	Phenmedipham	Flucarbazone-sodium	Bromacil
378	Phenmedipham	Carfentrazone	Flucarbazone	408	Phenmedipham	Flucarbazone-sodium	Saflufenacil
379	Phenmedipham	Carfentrazone	Sulfentrazone	409	Phenmedipham	Flucarbazone-sodium	Flumioxazin
380	Phenmedipham	Carfentrazone	Bromacil	410	Phenmedipham	Flucarbazone-sodium	Metazachlor

381	Phenmedipham	Carfentrazone	Saflufenacil	411	Phenmedipham	Flucarbazone-sodium	Pinoxaden
382	Phenmedipham	Carfentrazone	Flumioxazin	412	Phenmedipham	Flucarbazone-sodium	Pyraflufen
383	Phenmedipham	Carfentrazone	Metazachlor	413	Phenmedipham	Bensulfuron	Carfentrazone
384	Phenmedipham	Carfentrazone	Pinoxaden	414	Phenmedipham	Bensulfuron	Flucarbazone
385	Phenmedipham	Carfentrazone	Pyraflufen	415	Phenmedipham	Bensulfuron	Sulfentrazone
386	Phenmedipham	Flucarbazone	Carfentrazone	416	Phenmedipham	Bensulfuron	Bromacil
387	Phenmedipham	Flucarbazone	Flucarbazone	417	Phenmedipham	Bensulfuron	Saflufenacil
388	Phenmedipham	Flucarbazone	Sulfentrazone	418	Phenmedipham	Bensulfuron	Flumioxazin
389	Phenmedipham	Flucarbazone	Bromacil	419	Phenmedipham	Bensulfuron	Metazachlor
390	Phenmedipham	Flucarbazone	Saflufenacil	420	Phenmedipham	Bensulfuron	Pinoxaden
421	Phenmedipham	Bensulfuron	Pyraflufen	451	Phenmedipham	Trifloxysulfuron	Sulfentrazone
422	Phenmedipham	Halosulfuron	Carfentrazone	452	Phenmedipham	Trifloxysulfuron	Bromacil
423	Phenmedipham	Halosulfuron	Flucarbazone	453	Phenmedipham	Trifloxysulfuron	Saflufenacil
424	Phenmedipham	Halosulfuron	Sulfentrazone	454	Phenmedipham	Trifloxysulfuron	Flumioxazin
425	Phenmedipham	Halosulfuron	Bromacil	455	Phenmedipham	Trifloxysulfuron	Metazachlor
426	Phenmedipham	Halosulfuron	Saflufenacil	456	Phenmedipham	Trifloxysulfuron	Pinoxaden
427	Phenmedipham	Halosulfuron	Flumioxazin	457	Phenmedipham	Trifloxysulfuron	Pyraflufen
428	Phenmedipham	Halosulfuron	Metazachlor	458	Phenmedipham	Metsulfuron	Carfentrazone
429	Phenmedipham	Halosulfuron	Pinoxaden	459	Phenmedipham	Metsulfuron	Flucarbazone
430	Phenmedipham	Halosulfuron	Pyraflufen	460	Phenmedipham	Metsulfuron	Sulfentrazone
431	Phenmedipham	Pyrazosulfuron	Carfentrazone	461	Phenmedipham	Metsulfuron	Bromacil
432	Phenmedipham	Pyrazosulfuron	Flucarbazone	462	Phenmedipham	Metsulfuron	Saflufenacil
433	Phenmedipham	Pyrazosulfuron	Sulfentrazone	463	Phenmedipham	Metsulfuron	Flumioxazin
434	Phenmedipham	Pyrazosulfuron	Bromacil	464	Phenmedipham	Metsulfuron	Metazachlor
435	Phenmedipham	Pyrazosulfuron	Saflufenacil	465	Phenmedipham	Metsulfuron	Pinoxaden
436	Phenmedipham	Pyrazosulfuron	Flumioxazin	466	Phenmedipham	Metsulfuron	Pyraflufen
437	Phenmedipham	Pyrazosulfuron	Metazachlor	467	Phenmedipham	Metazachlor	Carfentrazone
438	Phenmedipham	Pyrazosulfuron	Pinoxaden	468	Phenmedipham	Metazachlor	Flucarbazone
439	Phenmedipham	Pyrazosulfuron	Pyraflufen	469	Phenmedipham	Metazachlor	Sulfentrazone
440	Phenmedipham	Sulfosulfuron	Carfentrazone	470	Phenmedipham	Metazachlor	Bromacil
441	Phenmedipham	Sulfosulfuron	Flucarbazone	471	Phenmedipham	Metazachlor	Saflufenacil
442	Phenmedipham	Sulfosulfuron	Sulfentrazone	472	Phenmedipham	Metazachlor	Flumioxazin
443	Phenmedipham	Sulfosulfuron	Bromacil	473	Phenmedipham	Metazachlor	Metazachlor
444	Phenmedipham	Sulfosulfuron	Saflufenacil	474	Phenmedipham	Metazachlor	Pinoxaden
445	Phenmedipham	Sulfosulfuron	Flumioxazin	475	Phenmedipham	Metazachlor	Pyraflufen
446	Phenmedipham	Sulfosulfuron	Metazachlor	476	Phenmedipham	Pinoxaden	Carfentrazone
447	Phenmedipham	Sulfosulfuron	Pinoxaden	477	Phenmedipham	Pinoxaden	Flucarbazone

448	Phenmedipham	Sulfosulfuron	Pyraflufen	478	Phenmedipham	Pinoxaden	Sulfentrazone
449	Phenmedipham	Trifloxysulfuron	Carfentrazone	479	Phenmedipham	Pinoxaden	Bromacil
450	Phenmedipham	Trifloxysulfuron	Flucarbazone	480	Phenmedipham	Pinoxaden	Saflufenacil
481	Phenmedipham	Pinoxaden	Flumioxazin	511	Phenmedipham-ethyl	Imazamox	Carfentrazone
482	Phenmedipham	Pinoxaden	Metazachlor	512	Phenmedipham-ethyl	Imazamox	Flucarbazone
483	Phenmedipham	Pinoxaden	Pinoxaden	513	Phenmedipham-ethyl	Imazamox	Sulfentrazone
484	Phenmedipham	Pinoxaden	Pyraflufen	514	Phenmedipham-ethyl	Imazamox	Bromacil
485	Phenmedipham	Pyraflufen	Carfentrazone	515	Phenmedipham-ethyl	Imazamox	Saflufenacil
486	Phenmedipham	Pyraflufen	Flucarbazone	516	Phenmedipham-ethyl	Imazamox	Flumioxazin
487	Phenmedipham	Pyraflufen	Sulfentrazone	517	Phenmedipham-ethyl	Imazamox	Metazachlor
488	Phenmedipham	Pyraflufen	Bromacil	518	Phenmedipham-ethyl	Imazamox	Pinoxaden
489	Phenmedipham	Pyraflufen	Saflufenacil	519	Phenmedipham-ethyl	Imazamox	Pyraflufen
490	Phenmedipham	Pyraflufen	Flumioxazin	520	Phenmedipham-ethyl	Imazapic	Carfentrazone
491	Phenmedipham	Pyraflufen	Metazachlor	521	Phenmedipham-ethyl	Imazapic	Flucarbazone
492	Phenmedipham	Pyraflufen	Pinoxaden	522	Phenmedipham-ethyl	Imazapic	Sulfentrazone
493	Phenmedipham	Diclosulam	Carfentrazone	523	Phenmedipham-ethyl	Imazapic	Bromacil
494	Phenmedipham	Diclosulam	Flucarbazone	524	Phenmedipham-ethyl	Imazapic	Saflufenacil
495	Phenmedipham	Diclosulam	Sulfentrazone	525	Phenmedipham-ethyl	Imazapic	Flumioxazin
496	Phenmedipham	Diclosulam	Bromacil	526	Phenmedipham-ethyl	Imazapic	Metazachlor
497	Phenmedipham	Diclosulam	Saflufenacil	527	Phenmedipham-ethyl	Imazapic	Pinoxaden
498	Phenmedipham	Diclosulam	Flumioxazin	528	Phenmedipham-ethyl	Imazapic	Pyraflufen

499	Phenmedipham	Diclosulam	Metazachlor	529	Phenmedipham-ethyl	Imazapyr	Carfentrazone
500	Phenmedipham	Diclosulam	Pinoxaden	530	Phenmedipham-ethyl	Imazapyr	Flucarbazone
501	Phenmedipham	Diclosulam	Pyraflufen	531	Phenmedipham-ethyl	Imazapyr	Sulfentrazone
502	Phenmedipham	Penoxsulam	Carfentrazone	532	Phenmedipham-ethyl	Imazapyr	Bromacil
503	Phenmedipham	Penoxsulam	Flucarbazone	533	Phenmedipham-ethyl	Imazapyr	Saflufenacil
504	Phenmedipham	Penoxsulam	Sulfentrazone	534	Phenmedipham-ethyl	Imazapyr	Flumioxazin
505	Phenmedipham	Penoxsulam	Bromacil	535	Phenmedipham-ethyl	Imazapyr	Metazachlor
506	Phenmedipham	Penoxsulam	Saflufenacil	536	Phenmedipham-ethyl	Imazapyr	Pinoxaden
507	Phenmedipham	Penoxsulam	Flumioxazin	537	Phenmedipham-ethyl	Imazapyr	Pyraflufen
508	Phenmedipham	Penoxsulam	Metazachlor	538	Phenmedipham-ethyl	Imazethapyr	Carfentrazone
509	Phenmedipham	Penoxsulam	Pinoxaden	539	Phenmedipham-ethyl	Imazethapyr	Flucarbazone
510	Phenmedipham	Penoxsulam	Pyraflufen	540	Phenmedipham-ethyl	Imazethapyr	Sulfentrazone
541	Phenmedipham-ethyl	Imazethapyr	Bromacil	571	Phenmedipham-ethyl	Sulfentrazone	Metazachlor
542	Phenmedipham-ethyl	Imazethapyr	Saflufenacil	572	Phenmedipham-ethyl	Sulfentrazone	Pinoxaden
543	Phenmedipham-ethyl	Imazethapyr	Flumioxazin	573	Phenmedipham-ethyl	Sulfentrazone	Pyraflufen
544	Phenmedipham-ethyl	Imazethapyr	Metazachlor	574	Phenmedipham-ethyl	Flucarbazone-sodium	Carfentrazone
545	Phenmedipham-ethyl	Imazethapyr	Pinoxaden	575	Phenmedipham-ethyl	Flucarbazone-sodium	Flucarbazone
546	Phenmedipham-ethyl	Imazethapyr	Pyraflufen	576	Phenmedipham-ethyl	Flucarbazone-sodium	Sulfentrazone
547	Phenmedipham-ethyl	Carfentrazone	Carfentrazone	577	Phenmedipham-ethyl	Flucarbazone-sodium	Bromacil

548	Phenmedipham-ethyl	Carfentrazone	Flucarbazone	578	Phenmedipham-ethyl	Flucarbazone-sodium	Saflufenacil
549	Phenmedipham-ethyl	Carfentrazone	Sulfentrazone	579	Phenmedipham-ethyl	Flucarbazone-sodium	Flumioxazin
550	Phenmedipham-ethyl	Carfentrazone	Bromacil	580	Phenmedipham-ethyl	Flucarbazone-sodium	Metazachlor
551	Phenmedipham-ethyl	Carfentrazone	Saflufenacil	581	Phenmedipham-ethyl	Flucarbazone-sodium	Pinoxaden
552	Phenmedipham-ethyl	Carfentrazone	Flumioxazin	582	Phenmedipham-ethyl	Flucarbazone-sodium	Pyraflufen
553	Phenmedipham-ethyl	Carfentrazone	Metazachlor	583	Phenmedipham-ethyl	Bensulfuron	Carfentrazone
554	Phenmedipham-ethyl	Carfentrazone	Pinoxaden	584	Phenmedipham-ethyl	Bensulfuron	Flucarbazone
555	Phenmedipham-ethyl	Carfentrazone	Pyraflufen	585	Phenmedipham-ethyl	Bensulfuron	Sulfentrazone
556	Phenmedipham-ethyl	Flucarbazone	Carfentrazone	586	Phenmedipham-ethyl	Bensulfuron	Bromacil
557	Phenmedipham-ethyl	Flucarbazone	Flucarbazone	587	Phenmedipham-ethyl	Bensulfuron	Saflufenacil
558	Phenmedipham-ethyl	Flucarbazone	Sulfentrazone	588	Phenmedipham-ethyl	Bensulfuron	Flumioxazin
559	Phenmedipham-ethyl	Flucarbazone	Bromacil	589	Phenmedipham-ethyl	Bensulfuron	Metazachlor
560	Phenmedipham-ethyl	Flucarbazone	Saflufenacil	590	Phenmedipham-ethyl	Bensulfuron	Pinoxaden
561	Phenmedipham-ethyl	Flucarbazone	Flumioxazin	591	Phenmedipham-ethyl	Bensulfuron	Pyraflufen
562	Phenmedipham-ethyl	Flucarbazone	Metazachlor	592	Phenmedipham-ethyl	Halosulfuron	Carfentrazone
563	Phenmedipham-ethyl	Flucarbazone	Pinoxaden	593	Phenmedipham-ethyl	Halosulfuron	Flucarbazone
564	Phenmedipham-ethyl	Flucarbazone	Pyraflufen	594	Phenmedipham-ethyl	Halosulfuron	Sulfentrazone
565	Phenmedipham-ethyl	Sulfentrazone	Carfentrazone	595	Phenmedipham-ethyl	Halosulfuron	Bromacil
566	Phenmedipham-ethyl	Sulfentrazone	Flucarbazone	596	Phenmedipham-ethyl	Halosulfuron	Saflufenacil

567	Phenmedipham-ethyl	Sulfentrazone	Amicarbazone	597	Phenmedipham-ethyl	Halosulfuron	Flumioxazin
568	Phenmedipham-ethyl	Sulfentrazone	Bromacil	598	Phenmedipham-ethyl	Halosulfuron	Metazachlor
569	Phenmedipham-ethyl	Sulfentrazone	Saflufenacil	599	Phenmedipham-ethyl	Halosulfuron	Pinoxaden
570	Phenmedipham-ethyl	Sulfentrazone	Flumioxazin	600	Phenmedipham-ethyl	Halosulfuron	Pyraflufen
601	Phenmedipham-ethyl	Pyrazosulfuron	Carfentrazone	631	Phenmedipham-ethyl	Metsulfuron	Bromacil
602	Phenmedipham-ethyl	Pyrazosulfuron	Flucarbazone	632	Phenmedipham-ethyl	Metsulfuron	Saflufenacil
603	Phenmedipham-ethyl	Pyrazosulfuron	Sulfentrazone	633	Phenmedipham-ethyl	Metsulfuron	Flumioxazin
604	Phenmedipham-ethyl	Pyrazosulfuron	Bromacil	634	Phenmedipham-ethyl	Metsulfuron	Metazachlor
605	Phenmedipham-ethyl	Pyrazosulfuron	Saflufenacil	635	Phenmedipham-ethyl	Metsulfuron	Pinoxaden
606	Phenmedipham-ethyl	Pyrazosulfuron	Flumioxazin	636	Phenmedipham-ethyl	Metsulfuron	Pyraflufen
607	Phenmedipham-ethyl	Pyrazosulfuron	Metazachlor	637	Phenmedipham-ethyl	Metazachlor	Carfentrazone
608	Phenmedipham-ethyl	Pyrazosulfuron	Pinoxaden	638	Phenmedipham-ethyl	Metazachlor	Flucarbazone
609	Phenmedipham-ethyl	Pyrazosulfuron	Pyraflufen	639	Phenmedipham-ethyl	Metazachlor	Sulfentrazone
610	Phenmedipham-ethyl	Sulfosulfuron	Carfentrazone	640	Phenmedipham-ethyl	Metazachlor	Bromacil
611	Phenmedipham-ethyl	Sulfosulfuron	Flucarbazone	641	Phenmedipham-ethyl	Metazachlor	Saflufenacil
612	Phenmedipham-ethyl	Sulfosulfuron	Sulfentrazone	642	Phenmedipham-ethyl	Metazachlor	Flumioxazin
613	Phenmedipham-ethyl	Sulfosulfuron	Bromacil	643	Phenmedipham-ethyl	Metazachlor	Metazachlor
614	Phenmedipham-ethyl	Sulfosulfuron	Saflufenacil	644	Phenmedipham-ethyl	Metazachlor	Pinoxaden
615	Phenmedipham-ethyl	Sulfosulfuron	Flumioxazin	645	Phenmedipham-ethyl	Metazachlor	Pyraflufen

616	Phenmedipham-ethyl	Sulfosulfuron	Metazachlor	646	Phenmedipham-ethyl	Pinoxaden	Carfentrazone
617	Phenmedipham-ethyl	Sulfosulfuron	Pinoxaden	647	Phenmedipham-ethyl	Pinoxaden	Flucarbazone
618	Phenmedipham-ethyl	Sulfosulfuron	Pyraflufen	648	Phenmedipham-ethyl	Pinoxaden	Sulfentrazone
619	Phenmedipham-ethyl	Trifloxysulfuron	Carfentrazone	649	Phenmedipham-ethyl	Pinoxaden	Bromacil
620	Phenmedipham-ethyl	Trifloxysulfuron	Flucarbazone	650	Phenmedipham-ethyl	Pinoxaden	Saflufenacil
621	Phenmedipham-ethyl	Trifloxysulfuron	Sulfentrazone	651	Phenmedipham-ethyl	Pinoxaden	Flumioxazin
622	Phenmedipham-ethyl	Trifloxysulfuron	Bromacil	652	Phenmedipham-ethyl	Pinoxaden	Metazachlor
623	Phenmedipham-ethyl	Trifloxysulfuron	Saflufenacil	653	Phenmedipham-ethyl	Pinoxaden	Pinoxaden
624	Phenmedipham-ethyl	Trifloxysulfuron	Flumioxazin	654	Phenmedipham-ethyl	Pinoxaden	Pyraflufen
625	Phenmedipham-ethyl	Trifloxysulfuron	Metazachlor	655	Phenmedipham-ethyl	Pyraflufen	Carfentrazone
626	Phenmedipham-ethyl	Trifloxysulfuron	Pinoxaden	656	Phenmedipham-ethyl	Pyraflufen	Flucarbazone
627	Phenmedipham-ethyl	Trifloxysulfuron	Pyraflufen	657	Phenmedipham-ethyl	Pyraflufen	Sulfentrazone
628	Phenmedipham-ethyl	Metsulfuron	Carfentrazone	658	Phenmedipham-ethyl	Pyraflufen	Bromacil
629	Phenmedipham-ethyl	Metsulfuron	Flucarbazone	659	Phenmedipham-ethyl	Pyraflufen	Saflufenacil
630	Phenmedipham-ethyl	Metsulfuron	Sulfentrazone	660	Phenmedipham-ethyl	Pyraflufen	Flumioxazin
661	Phenmedipham-ethyl	Pyraflufen	Metazachlor	691	Atrazine	Imazapic	Flucarbazone
662	Phenmedipham-ethyl	Pyraflufen	Pinoxaden	692	Atrazine	Imazapic	Sulfentrazone
663	Phenmedipham-ethyl	Diclosulam	Carfentrazone	693	Atrazine	Imazapic	Bromacil
664	Phenmedipham-ethyl	Diclosulam	Flucarbazone	694	Atrazine	Imazapic	Saflufenacil

665	Phenmedipham-ethyl	Diclosulam	Sulfentrazone	695	Atrazine	Imazapic	Flumioxazin
666	Phenmedipham-ethyl	Diclosulam	Bromacil	696	Atrazine	Imazapic	Metazachlor
667	Phenmedipham-ethyl	Diclosulam	Saflufenacil	697	Atrazine	Imazapic	Pinoxaden
668	Phenmedipham-ethyl	Diclosulam	Flumioxazin	698	Atrazine	Imazapic	Pyraflufen
669	Phenmedipham-ethyl	Diclosulam	Metazachlor	699	Atrazine	Imazapyr	Carfentrazone
670	Phenmedipham-ethyl	Diclosulam	Pinoxaden	700	Atrazine	Imazapyr	Flucarbazone
671	Phenmedipham-ethyl	Diclosulam	Pyraflufen	701	Atrazine	Imazapyr	Sulfentrazone
672	Phenmedipham-ethyl	Penoxsulam	Carfentrazone	702	Atrazine	Imazapyr	Bromacil
673	Phenmedipham-ethyl	Penoxsulam	Flucarbazone	703	Atrazine	Imazapyr	Saflufenacil
674	Phenmedipham-ethyl	Penoxsulam	Sulfentrazone	704	Atrazine	Imazapyr	Flumioxazin
675	Phenmedipham-ethyl	Penoxsulam	Bromacil	705	Atrazine	Imazapyr	Metazachlor
676	Phenmedipham-ethyl	Penoxsulam	Saflufenacil	706	Atrazine	Imazapyr	Pinoxaden
677	Phenmedipham-ethyl	Penoxsulam	Flumioxazin	707	Atrazine	Imazapyr	Pyraflufen
678	Phenmedipham-ethyl	Penoxsulam	Metazachlor	708	Atrazine	Imazethapyr	Carfentrazone
679	Phenmedipham-ethyl	Penoxsulam	Pinoxaden	709	Atrazine	Imazethapyr	Flucarbazone
680	Phenmedipham-ethyl	Penoxsulam	Pyraflufen	710	Atrazine	Imazethapyr	Sulfentrazone
681	Atrazine	Imazamox	Carfentrazone	711	Atrazine	Imazethapyr	Bromacil
682	Atrazine	Imazamox	Flucarbazone	712	Atrazine	Imazethapyr	Saflufenacil
683	Atrazine	Imazamox	Sulfentrazone	713	Atrazine	Imazethapyr	Flumioxazin
684	Atrazine	Imazamox	Bromacil	714	Atrazine	Imazethapyr	Metazachlor
685	Atrazine	Imazamox	Saflufenacil	715	Atrazine	Imazethapyr	Pinoxaden
686	Atrazine	Imazamox	Flumioxazin	716	Atrazine	Imazethapyr	Pyraflufen
687	Atrazine	Imazamox	Metazachlor	717	Atrazine	Carfentrazone	Carfentrazone

688	Atrazine	Imazamox	Pinoxaden	718	Atrazine	Carfentrazone	Flucarbazone
689	Atrazine	Imazamox	Pyraflufen	719	Atrazine	Carfentrazone	Sulfentrazone
690	Atrazine	Imazapic	Carfentrazone	720	Atrazine	Carfentrazone	Bromacil
721	Atrazine	Carfentrazone	Saflufenacil	751	Atrazine	Flucarbazone-sodium	Pinoxaden
722	Atrazine	Carfentrazone	Flumioxazin	752	Atrazine	Flucarbazone-sodium	Pyraflufen
723	Atrazine	Carfentrazone	Metazachlor	753	Atrazine	Bensulfuron	Carfentrazone
724	Atrazine	Carfentrazone	Pinoxaden	754	Atrazine	Bensulfuron	Flucarbazone
725	Atrazine	Carfentrazone	Pyraflufen	755	Atrazine	Bensulfuron	Sulfentrazone
726	Atrazine	Flucarbazone	Carfentrazone	756	Atrazine	Bensulfuron	Bromacil
727	Atrazine	Flucarbazone	Flucarbazone	757	Atrazine	Bensulfuron	Saflufenacil
728	Atrazine	Flucarbazone	Sulfentrazone	758	Atrazine	Bensulfuron	Flumioxazin
729	Atrazine	Flucarbazone	Bromacil	759	Atrazine	Bensulfuron	Metazachlor
730	Atrazine	Flucarbazone	Saflufenacil	760	Atrazine	Bensulfuron	Pinoxaden
731	Atrazine	Flucarbazone	Flumioxazin	761	Atrazine	Bensulfuron	Pyraflufen
732	Atrazine	Flucarbazone	Metazachlor	762	Atrazine	Halosulfuron	Carfentrazone
733	Atrazine	Flucarbazone	Pinoxaden	763	Atrazine	Halosulfuron	Flucarbazone
734	Atrazine	Flucarbazone	Pyraflufen	764	Atrazine	Halosulfuron	Sulfentrazone
735	Atrazine	Sulfentrazone	Carfentrazone	765	Atrazine	Halosulfuron	Bromacil
736	Atrazine	Sulfentrazone	Flucarbazone	766	Atrazine	Halosulfuron	Saflufenacil
737	Atrazine	Sulfentrazone	Amicarbazone	767	Atrazine	Halosulfuron	Flumioxazin
738	Atrazine	Sulfentrazone	Bromacil	768	Atrazine	Halosulfuron	Metazachlor
739	Atrazine	Sulfentrazone	Saflufenacil	769	Atrazine	Halosulfuron	Pinoxaden
740	Atrazine	Sulfentrazone	Flumioxazin	770	Atrazine	Halosulfuron	Pyraflufen
741	Atrazine	Sulfentrazone	Metazachlor	771	Atrazine	Pyrazosulfuron	Carfentrazone
742	Atrazine	Sulfentrazone	Pinoxaden	772	Atrazine	Pyrazosulfuron	Flucarbazone
743	Atrazine	Sulfentrazone	Pyraflufen	773	Atrazine	Pyrazosulfuron	Sulfentrazone
744	Atrazine	Flucarbazone-sodium	Carfentrazone	774	Atrazine	Pyrazosulfuron	Bromacil
745	Atrazine	Flucarbazone-sodium	Flucarbazone	775	Atrazine	Pyrazosulfuron	Saflufenacil
746	Atrazine	Flucarbazone-sodium	Sulfentrazone	776	Atrazine	Pyrazosulfuron	Flumioxazin
747	Atrazine	Flucarbazone-sodium	Bromacil	777	Atrazine	Pyrazosulfuron	Metazachlor
748	Atrazine	Flucarbazone-sodium	Saflufenacil	778	Atrazine	Pyrazosulfuron	Pinoxaden

749	Atrazine	Flucarbazone-sodium	Flumioxazin	779	Atrazine	Pyrazosulfuron	Pyraflufen
750	Atrazine	Flucarbazone-sodium	Metazachlor	780	Atrazine	Sulfosulfuron	Carfentrazone
781	Atrazine	Sulfosulfuron	Flucarbazone	811	Atrazine	Metazachlor	Saflufenacil
782	Atrazine	Sulfosulfuron	Sulfentrazone	812	Atrazine	Metazachlor	Flumioxazin
783	Atrazine	Sulfosulfuron	Bromacil	813	Atrazine	Metazachlor	Metazachlor
784	Atrazine	Sulfosulfuron	Saflufenacil	814	Atrazine	Metazachlor	Pinoxaden
785	Atrazine	Sulfosulfuron	Flumioxazin	815	Atrazine	Metazachlor	Pyraflufen
786	Atrazine	Sulfosulfuron	Metazachlor	816	Atrazine	Pinoxaden	Carfentrazone
787	Atrazine	Sulfosulfuron	Pinoxaden	817	Atrazine	Pinoxaden	Flucarbazone
788	Atrazine	Sulfosulfuron	Pyraflufen	818	Atrazine	Pinoxaden	Sulfentrazone
789	Atrazine	Trifloxysulfuron	Carfentrazone	819	Atrazine	Pinoxaden	Bromacil
790	Atrazine	Trifloxysulfuron	Flucarbazone	820	Atrazine	Pinoxaden	Saflufenacil
791	Atrazine	Trifloxysulfuron	Sulfentrazone	821	Atrazine	Pinoxaden	Flumioxazin
792	Atrazine	Trifloxysulfuron	Bromacil	822	Atrazine	Pinoxaden	Metazachlor
793	Atrazine	Trifloxysulfuron	Saflufenacil	823	Atrazine	Pinoxaden	Pinoxaden
794	Atrazine	Trifloxysulfuron	Flumioxazin	824	Atrazine	Pinoxaden	Pyraflufen
795	Atrazine	Trifloxysulfuron	Metazachlor	825	Atrazine	Pyraflufen	Carfentrazone
796	Atrazine	Trifloxysulfuron	Pinoxaden	826	Atrazine	Pyraflufen	Flucarbazone
797	Atrazine	Trifloxysulfuron	Pyraflufen	827	Atrazine	Pyraflufen	Sulfentrazone
798	Atrazine	Metsulfuron	Carfentrazone	828	Atrazine	Pyraflufen	Bromacil
799	Atrazine	Metsulfuron	Flucarbazone	829	Atrazine	Pyraflufen	Saflufenacil
800	Atrazine	Metsulfuron	Sulfentrazone	830	Atrazine	Pyraflufen	Flumioxazin
801	Atrazine	Metsulfuron	Bromacil	831	Atrazine	Pyraflufen	Metazachlor
802	Atrazine	Metsulfuron	Saflufenacil	832	Atrazine	Pyraflufen	Pinoxaden
803	Atrazine	Metsulfuron	Flumioxazin	833	Atrazine	Diclosulam	Carfentrazone
804	Atrazine	Metsulfuron	Metazachlor	834	Atrazine	Diclosulam	Flucarbazone
805	Atrazine	Metsulfuron	Pinoxaden	835	Atrazine	Diclosulam	Sulfentrazone
806	Atrazine	Metsulfuron	Pyraflufen	836	Atrazine	Diclosulam	Bromacil
807	Atrazine	Metazachlor	Carfentrazone	837	Atrazine	Diclosulam	Saflufenacil
808	Atrazine	Metazachlor	Flucarbazone	838	Atrazine	Diclosulam	Flumioxazin
809	Atrazine	Metazachlor	Sulfentrazone	839	Atrazine	Diclosulam	Metazachlor
810	Atrazine	Metazachlor	Bromacil	840	Atrazine	Diclosulam	Pinoxaden
841	Atrazine	Diclosulam	Pyraflufen	871	Hexazinone	Imazapyr	Sulfentrazone
842	Atrazine	Penoxsulam	Carfentrazone	872	Hexazinone	Imazapyr	Bromacil
843	Atrazine	Penoxsulam	Flucarbazone	873	Hexazinone	Imazapyr	Saflufenacil
844	Atrazine	Penoxsulam	Sulfentrazone	874	Hexazinone	Imazapyr	Flumioxazin
845	Atrazine	Penoxsulam	Bromacil	875	Hexazinone	Imazapyr	Metazachlor

846	Atrazine	Penoxsulam	Saflufenacil	876	Hexazinone	Imazapyr	Pinoxaden
847	Atrazine	Penoxsulam	Flumioxazin	877	Hexazinone	Imazapyr	Pyraflufen
848	Atrazine	Penoxsulam	Metazachlor	878	Hexazinone	Imazethapyr	Carfentrazone
849	Atrazine	Penoxsulam	Pinoxaden	879	Hexazinone	Imazethapyr	Flucarbazone
850	Atrazine	Penoxsulam	Pyraflufen	880	Hexazinone	Imazethapyr	Sulfentrazone
851	Hexazinone	Imazamox	Carfentrazone	881	Hexazinone	Imazethapyr	Bromacil
852	Hexazinone	Imazamox	Flucarbazone	882	Hexazinone	Imazethapyr	Saflufenacil
853	Hexazinone	Imazamox	Sulfentrazone	883	Hexazinone	Imazethapyr	Flumioxazin
854	Hexazinone	Imazamox	Bromacil	884	Hexazinone	Imazethapyr	Metazachlor
855	Hexazinone	Imazamox	Saflufenacil	885	Hexazinone	Imazethapyr	Pinoxaden
856	Hexazinone	Imazamox	Flumioxazin	886	Hexazinone	Imazethapyr	Pyraflufen
857	Hexazinone	Imazamox	Metazachlor	887	Hexazinone	Carfentrazone	Carfentrazone
858	Hexazinone	Imazamox	Pinoxaden	888	Hexazinone	Carfentrazone	Flucarbazone
859	Hexazinone	Imazamox	Pyraflufen	889	Hexazinone	Carfentrazone	Sulfentrazone
860	Hexazinone	Imazapic	Carfentrazone	890	Hexazinone	Carfentrazone	Bromacil
861	Hexazinone	Imazapic	Flucarbazone	891	Hexazinone	Carfentrazone	Saflufenacil
862	Hexazinone	Imazapic	Sulfentrazone	892	Hexazinone	Carfentrazone	Flumioxazin
863	Hexazinone	Imazapic	Bromacil	893	Hexazinone	Carfentrazone	Metazachlor
864	Hexazinone	Imazapic	Saflufenacil	894	Hexazinone	Carfentrazone	Pinoxaden
865	Hexazinone	Imazapic	Flumioxazin	895	Hexazinone	Carfentrazone	Pyraflufen
866	Hexazinone	Imazapic	Metazachlor	896	Hexazinone	Flucarbazone	Carfentrazone
867	Hexazinone	Imazapic	Pinoxaden	897	Hexazinone	Flucarbazone	Flucarbazone
868	Hexazinone	Imazapic	Pyraflufen	898	Hexazinone	Flucarbazone	Sulfentrazone
869	Hexazinone	Imazapyr	Carfentrazone	899	Hexazinone	Flucarbazone	Bromacil
870	Hexazinone	Imazapyr	Flucarbazone	900	Hexazinone	Flucarbazone	Saflufenacil
901	Hexazinone	Flucarbazone	Flumioxazin	931	Hexazinone	Bensulfuron	Pyraflufen
902	Hexazinone	Flucarbazone	Metazachlor	932	Hexazinone	Halosulfuron	Carfentrazone
903	Hexazinone	Flucarbazone	Pinoxaden	933	Hexazinone	Halosulfuron	Flucarbazone
904	Hexazinone	Flucarbazone	Pyraflufen	934	Hexazinone	Halosulfuron	Sulfentrazone
905	Hexazinone	Sulfentrazone	Carfentrazone	935	Hexazinone	Halosulfuron	Bromacil
906	Hexazinone	Sulfentrazone	Flucarbazone	936	Hexazinone	Halosulfuron	Saflufenacil
907	Hexazinone	Sulfentrazone	Amicarbazone	937	Hexazinone	Halosulfuron	Flumioxazin
908	Hexazinone	Sulfentrazone	Bromacil	938	Hexazinone	Halosulfuron	Metazachlor
909	Hexazinone	Sulfentrazone	Saflufenacil	939	Hexazinone	Halosulfuron	Pinoxaden
910	Hexazinone	Sulfentrazone	Flumioxazin	940	Hexazinone	Halosulfuron	Pyraflufen
911	Hexazinone	Sulfentrazone	Metazachlor	941	Hexazinone	Pyrazosulfuron	Carfentrazone
912	Hexazinone	Sulfentrazone	Pinoxaden	942	Hexazinone	Pyrazosulfuron	Flucarbazone
913	Hexazinone	Sulfentrazone	Pyraflufen	943	Hexazinone	Pyrazosulfuron	Sulfentrazone

914	Hexazinone	Flucarbazone-sodium	Carfentrazone	944	Hexazinone	Pyrazosulfuron	Bromacil
915	Hexazinone	Flucarbazone-sodium	Flucarbazone	945	Hexazinone	Pyrazosulfuron	Saflufenacil
916	Hexazinone	Flucarbazone-sodium	Sulfentrazone	946	Hexazinone	Pyrazosulfuron	Flumioxazin
917	Hexazinone	Flucarbazone-sodium	Bromacil	947	Hexazinone	Pyrazosulfuron	Metazachlor
918	Hexazinone	Flucarbazone-sodium	Saflufenacil	948	Hexazinone	Pyrazosulfuron	Pinoxaden
919	Hexazinone	Flucarbazone-sodium	Flumioxazin	949	Hexazinone	Pyrazosulfuron	Pyraflufen
920	Hexazinone	Flucarbazone-sodium	Metazachlor	950	Hexazinone	Sulfosulfuron	Carfentrazone
921	Hexazinone	Flucarbazone-sodium	Pinoxaden	951	Hexazinone	Sulfosulfuron	Flucarbazone
922	Hexazinone	Flucarbazone-sodium	Pyraflufen	952	Hexazinone	Sulfosulfuron	Sulfentrazone
923	Hexazinone	Bensulfuron	Carfentrazone	953	Hexazinone	Sulfosulfuron	Bromacil
924	Hexazinone	Bensulfuron	Flucarbazone	954	Hexazinone	Sulfosulfuron	Saflufenacil
925	Hexazinone	Bensulfuron	Sulfentrazone	955	Hexazinone	Sulfosulfuron	Flumioxazin
926	Hexazinone	Bensulfuron	Bromacil	956	Hexazinone	Sulfosulfuron	Metazachlor
927	Hexazinone	Bensulfuron	Saflufenacil	957	Hexazinone	Sulfosulfuron	Pinoxaden
928	Hexazinone	Bensulfuron	Flumioxazin	958	Hexazinone	Sulfosulfuron	Pyraflufen
929	Hexazinone	Bensulfuron	Metazachlor	959	Hexazinone	Trifloxysulfuron	Carfentrazone
930	Hexazinone	Bensulfuron	Pinoxaden	960	Hexazinone	Trifloxysulfuron	Flucarbazone
961	Hexazinone	Trifloxysulfuron	Sulfentrazone	991	Hexazinone	Pinoxaden	Flumioxazin
962	Hexazinone	Trifloxysulfuron	Bromacil	992	Hexazinone	Pinoxaden	Metazachlor
963	Hexazinone	Trifloxysulfuron	Saflufenacil	993	Hexazinone	Pinoxaden	Pinoxaden
964	Hexazinone	Trifloxysulfuron	Flumioxazin	994	Hexazinone	Pinoxaden	Pyraflufen
965	Hexazinone	Trifloxysulfuron	Metazachlor	995	Hexazinone	Pyraflufen	Carfentrazone
966	Hexazinone	Trifloxysulfuron	Pinoxaden	996	Hexazinone	Pyraflufen	Flucarbazone
967	Hexazinone	Trifloxysulfuron	Pyraflufen	997	Hexazinone	Pyraflufen	Sulfentrazone
968	Hexazinone	Metsulfuron	Carfentrazone	998	Hexazinone	Pyraflufen	Bromacil
969	Hexazinone	Metsulfuron	Flucarbazone	999	Hexazinone	Pyraflufen	Saflufenacil
970	Hexazinone	Metsulfuron	Sulfentrazone	1000	Hexazinone	Pyraflufen	Flumioxazin
971	Hexazinone	Metsulfuron	Bromacil	1001	Hexazinone	Pyraflufen	Metazachlor
972	Hexazinone	Metsulfuron	Saflufenacil	1002	Hexazinone	Pyraflufen	Pinoxaden
973	Hexazinone	Metsulfuron	Flumioxazin	1003	Hexazinone	Diclosulam	Carfentrazone

974	Hexazinone	Metsulfuron	Metazachlor	1004	Hexazinone	Diclosulam	Flucarbazone
975	Hexazinone	Metsulfuron	Pinoxaden	1005	Hexazinone	Diclosulam	Sulfentrazone
976	Hexazinone	Metsulfuron	Pyraflufen	1006	Hexazinone	Diclosulam	Bromacil
977	Hexazinone	Metazachlor	Carfentrazone	1007	Hexazinone	Diclosulam	Saflufenacil
978	Hexazinone	Metazachlor	Flucarbazone	1008	Hexazinone	Diclosulam	Flumioxazin
979	Hexazinone	Metazachlor	Sulfentrazone	1009	Hexazinone	Diclosulam	Metazachlor
980	Hexazinone	Metazachlor	Bromacil	1010	Hexazinone	Diclosulam	Pinoxaden
981	Hexazinone	Metazachlor	Saflufenacil	1011	Hexazinone	Diclosulam	Pyraflufen
982	Hexazinone	Metazachlor	Flumioxazin	1012	Hexazinone	Penoxsulam	Carfentrazone
983	Hexazinone	Metazachlor	Metazachlor	1013	Hexazinone	Penoxsulam	Flucarbazone
984	Hexazinone	Metazachlor	Pinoxaden	1014	Hexazinone	Penoxsulam	Sulfentrazone
985	Hexazinone	Metazachlor	Pyraflufen	1015	Hexazinone	Penoxsulam	Bromacil
986	Hexazinone	Pinoxaden	Carfentrazone	1016	Hexazinone	Penoxsulam	Saflufenacil
987	Hexazinone	Pinoxaden	Flucarbazone	1017	Hexazinone	Penoxsulam	Flumioxazin
988	Hexazinone	Pinoxaden	Sulfentrazone	1018	Hexazinone	Penoxsulam	Metazachlor
989	Hexazinone	Pinoxaden	Bromacil	1019	Hexazinone	Penoxsulam	Pinoxaden
990	Hexazinone	Pinoxaden	Saflufenacil	1020	Hexazinone	Penoxsulam	Pyraflufen
1021	Metamitron	Imazamox	Carfentrazone	1051	Metamitron	Imazethapyr	Bromacil
1022	Metamitron	Imazamox	Flucarbazone	1052	Metamitron	Imazethapyr	Saflufenacil
1023	Metamitron	Imazamox	Sulfentrazone	1053	Metamitron	Imazethapyr	Flumioxazin
1024	Metamitron	Imazamox	Bromacil	1054	Metamitron	Imazethapyr	Metazachlor
1025	Metamitron	Imazamox	Saflufenacil	1055	Metamitron	Imazethapyr	Pinoxaden
1026	Metamitron	Imazamox	Flumioxazin	1056	Metamitron	Imazethapyr	Pyraflufen
1027	Metamitron	Imazamox	Metazachlor	1057	Metamitron	Carfentrazone	Carfentrazone
1028	Metamitron	Imazamox	Pinoxaden	1058	Metamitron	Carfentrazone	Flucarbazone
1029	Metamitron	Imazamox	Pyraflufen	1059	Metamitron	Carfentrazone	Sulfentrazone
1030	Metamitron	Imazapic	Carfentrazone	1060	Metamitron	Carfentrazone	Bromacil
1031	Metamitron	Imazapic	Flucarbazone	1061	Metamitron	Carfentrazone	Saflufenacil
1032	Metamitron	Imazapic	Sulfentrazone	1062	Metamitron	Carfentrazone	Flumioxazin
1033	Metamitron	Imazapic	Bromacil	1063	Metamitron	Carfentrazone	Metazachlor
1034	Metamitron	Imazapic	Saflufenacil	1064	Metamitron	Carfentrazone	Pinoxaden
1035	Metamitron	Imazapic	Flumioxazin	1065	Metamitron	Carfentrazone	Pyraflufen
1036	Metamitron	Imazapic	Metazachlor	1066	Metamitron	Flucarbazone	Carfentrazone
1037	Metamitron	Imazapic	Pinoxaden	1067	Metamitron	Flucarbazone	Flucarbazone
1038	Metamitron	Imazapic	Pyraflufen	1068	Metamitron	Flucarbazone	Sulfentrazone
1039	Metamitron	Imazapyr	Carfentrazone	1069	Metamitron	Flucarbazone	Bromacil
1040	Metamitron	Imazapyr	Flucarbazone	1070	Metamitron	Flucarbazone	Saflufenacil
1041	Metamitron	Imazapyr	Sulfentrazone	1071	Metamitron	Flucarbazone	Flumioxazin

1042	Metamitron	Imazapyr	Bromacil	1072	Metamitron	Flucarbazone	Metazachlor
1043	Metamitron	Imazapyr	Saflufenacil	1073	Metamitron	Flucarbazone	Pinoxaden
1044	Metamitron	Imazapyr	Flumioxazin	1074	Metamitron	Flucarbazone	Pyraflufen
1045	Metamitron	Imazapyr	Metazachlor	1075	Metamitron	Sulfentrazone	Carfentrazone
1046	Metamitron	Imazapyr	Pinoxaden	1076	Metamitron	Sulfentrazone	Flucarbazone
1047	Metamitron	Imazapyr	Pyraflufen	1077	Metamitron	Sulfentrazone	Amicarbazone
1048	Metamitron	Imazethapyr	Carfentrazone	1078	Metamitron	Sulfentrazone	Bromacil
1049	Metamitron	Imazethapyr	Flucarbazone	1079	Metamitron	Sulfentrazone	Saflufenacil
1050	Metamitron	Imazethapyr	Sulfentrazone	1080	Metamitron	Sulfentrazone	Flumioxazin
1081	Metamitron	Sulfentrazone	Metazachlor	1111	Metamitron	Pyrazosulfuron	Carfentrazone
1082	Metamitron	Sulfentrazone	Pinoxaden	1112	Metamitron	Pyrazosulfuron	Flucarbazone
1083	Metamitron	Sulfentrazone	Pyraflufen	1113	Metamitron	Pyrazosulfuron	Sulfentrazone
1084	Metamitron	Flucarbazone-sodium	Carfentrazone	1114	Metamitron	Pyrazosulfuron	Bromacil
1085	Metamitron	Flucarbazone-sodium	Flucarbazone	1115	Metamitron	Pyrazosulfuron	Saflufenacil
1086	Metamitron	Flucarbazone-sodium	Sulfentrazone	1116	Metamitron	Pyrazosulfuron	Flumioxazin
1087	Metamitron	Flucarbazone-sodium	Bromacil	1117	Metamitron	Pyrazosulfuron	Metazachlor
1088	Metamitron	Flucarbazone-sodium	Saflufenacil	1118	Metamitron	Pyrazosulfuron	Pinoxaden
1089	Metamitron	Flucarbazone-sodium	Flumioxazin	1119	Metamitron	Pyrazosulfuron	Pyraflufen
1090	Metamitron	Flucarbazone-sodium	Metazachlor	1120	Metamitron	Sulfosulfuron	Carfentrazone
1091	Metamitron	Flucarbazone-sodium	Pinoxaden	1121	Metamitron	Sulfosulfuron	Flucarbazone
1092	Metamitron	Flucarbazone-sodium	Pyraflufen	1122	Metamitron	Sulfosulfuron	Sulfentrazone
1093	Metamitron	Bensulfuron	Carfentrazone	1123	Metamitron	Sulfosulfuron	Bromacil
1094	Metamitron	Bensulfuron	Flucarbazone	1124	Metamitron	Sulfosulfuron	Saflufenacil
1095	Metamitron	Bensulfuron	Sulfentrazone	1125	Metamitron	Sulfosulfuron	Flumioxazin
1096	Metamitron	Bensulfuron	Bromacil	1126	Metamitron	Sulfosulfuron	Metazachlor
1097	Metamitron	Bensulfuron	Saflufenacil	1127	Metamitron	Sulfosulfuron	Pinoxaden
1098	Metamitron	Bensulfuron	Flumioxazin	1128	Metamitron	Sulfosulfuron	Pyraflufen
1099	Metamitron	Bensulfuron	Metazachlor	1129	Metamitron	Trifloxysulfuron	Carfentrazone
1100	Metamitron	Bensulfuron	Pinoxaden	1130	Metamitron	Trifloxysulfuron	Flucarbazone
1101	Metamitron	Bensulfuron	Pyraflufen	1131	Metamitron	Trifloxysulfuron	Sulfentrazone

1102	Metamitron	Halosulfuron	Carfentrazone	1132	Metamitron	Trifloxysulfuron	Bromacil
1103	Metamitron	Halosulfuron	Flucarbazone	1133	Metamitron	Trifloxysulfuron	Saflufenacil
1104	Metamitron	Halosulfuron	Sulfentrazone	1134	Metamitron	Trifloxysulfuron	Flumioxazin
1105	Metamitron	Halosulfuron	Bromacil	1135	Metamitron	Trifloxysulfuron	Metazachlor
1106	Metamitron	Halosulfuron	Saflufenacil	1136	Metamitron	Trifloxysulfuron	Pinoxaden
1107	Metamitron	Halosulfuron	Flumioxazin	1137	Metamitron	Trifloxysulfuron	Pyraflufen
1108	Metamitron	Halosulfuron	Metazachlor	1138	Metamitron	Metsulfuron	Carfentrazone
1109	Metamitron	Halosulfuron	Pinoxaden	1139	Metamitron	Metsulfuron	Flucarbazone
1110	Metamitron	Halosulfuron	Pyraflufen	1140	Metamitron	Metsulfuron	Sulfentrazone
1141	Metamitron	Metsulfuron	Bromacil	1171	Metamitron	Pyraflufen	Metazachlor
1142	Metamitron	Metsulfuron	Saflufenacil	1172	Metamitron	Pyraflufen	Pinoxaden
1143	Metamitron	Metsulfuron	Flumioxazin	1173	Metamitron	Diclosulam	Carfentrazone
1144	Metamitron	Metsulfuron	Metazachlor	1174	Metamitron	Diclosulam	Flucarbazone
1145	Metamitron	Metsulfuron	Pinoxaden	1175	Metamitron	Diclosulam	Sulfentrazone
1146	Metamitron	Metsulfuron	Pyraflufen	1176	Metamitron	Diclosulam	Bromacil
1147	Metamitron	Metazachlor	Carfentrazone	1177	Metamitron	Diclosulam	Saflufenacil
1148	Metamitron	Metazachlor	Flucarbazone	1178	Metamitron	Diclosulam	Flumioxazin
1149	Metamitron	Metazachlor	Sulfentrazone	1179	Metamitron	Diclosulam	Metazachlor
1150	Metamitron	Metazachlor	Bromacil	1180	Metamitron	Diclosulam	Pinoxaden
1151	Metamitron	Metazachlor	Saflufenacil	1181	Metamitron	Diclosulam	Pyraflufen
1152	Metamitron	Metazachlor	Flumioxazin	1182	Metamitron	Penoxsulam	Carfentrazone
1153	Metamitron	Metazachlor	Metazachlor	1183	Metamitron	Penoxsulam	Flucarbazone
1154	Metamitron	Metazachlor	Pinoxaden	1184	Metamitron	Penoxsulam	Sulfentrazone
1155	Metamitron	Metazachlor	Pyraflufen	1185	Metamitron	Penoxsulam	Bromacil
1156	Metamitron	Pinoxaden	Carfentrazone	1186	Metamitron	Penoxsulam	Saflufenacil
1157	Metamitron	Pinoxaden	Flucarbazone	1187	Metamitron	Penoxsulam	Flumioxazin
1158	Metamitron	Pinoxaden	Sulfentrazone	1188	Metamitron	Penoxsulam	Metazachlor
1159	Metamitron	Pinoxaden	Bromacil	1189	Metamitron	Penoxsulam	Pinoxaden
1160	Metamitron	Pinoxaden	Saflufenacil	1190	Metamitron	Penoxsulam	Pyraflufen
1161	Metamitron	Pinoxaden	Flumioxazin	1191	Metribuzin	Imazamox	Carfentrazone
1162	Metamitron	Pinoxaden	Metazachlor	1192	Metribuzin	Imazamox	Flucarbazone
1163	Metamitron	Pinoxaden	Pinoxaden	1193	Metribuzin	Imazamox	Sulfentrazone
1164	Metamitron	Pinoxaden	Pyraflufen	1194	Metribuzin	Imazamox	Bromacil
1165	Metamitron	Pyraflufen	Carfentrazone	1195	Metribuzin	Imazamox	Saflufenacil
1166	Metamitron	Pyraflufen	Flucarbazone	1196	Metribuzin	Imazamox	Flumioxazin
1167	Metamitron	Pyraflufen	Sulfentrazone	1197	Metribuzin	Imazamox	Metazachlor
1168	Metamitron	Pyraflufen	Bromacil	1198	Metribuzin	Imazamox	Pinoxaden
1169	Metamitron	Pyraflufen	Saflufenacil	1199	Metribuzin	Imazamox	Pyraflufen

1170	Metamitron	Pyraflufen	Flumioxazin	1200	Metribuzin	Imazapic	Carfentrazone
1201	Metribuzin	Imazapic	Flucarbazone	1231	Metribuzin	Carfentrazone	Saflufenacil
1202	Metribuzin	Imazapic	Sulfentrazone	1232	Metribuzin	Carfentrazone	Flumioxazin
1203	Metribuzin	Imazapic	Bromacil	1233	Metribuzin	Carfentrazone	Metazachlor
1204	Metribuzin	Imazapic	Saflufenacil	1234	Metribuzin	Carfentrazone	Pinoxaden
1205	Metribuzin	Imazapic	Flumioxazin	1235	Metribuzin	Carfentrazone	Pyraflufen
1206	Metribuzin	Imazapic	Metazachlor	1236	Metribuzin	Flucarbazone	Carfentrazone
1207	Metribuzin	Imazapic	Pinoxaden	1237	Metribuzin	Flucarbazone	Flucarbazone
1208	Metribuzin	Imazapic	Pyraflufen	1238	Metribuzin	Flucarbazone	Sulfentrazone
1209	Metribuzin	Imazapyr	Carfentrazone	1239	Metribuzin	Flucarbazone	Bromacil
1210	Metribuzin	Imazapyr	Flucarbazone	1240	Metribuzin	Flucarbazone	Saflufenacil
1211	Metribuzin	Imazapyr	Sulfentrazone	1241	Metribuzin	Flucarbazone	Flumioxazin
1212	Metribuzin	Imazapyr	Bromacil	1242	Metribuzin	Flucarbazone	Metazachlor
1213	Metribuzin	Imazapyr	Saflufenacil	1243	Metribuzin	Flucarbazone	Pinoxaden
1214	Metribuzin	Imazapyr	Flumioxazin	1244	Metribuzin	Flucarbazone	Pyraflufen
1215	Metribuzin	Imazapyr	Metazachlor	1245	Metribuzin	Sulfentrazone	Carfentrazone
1216	Metribuzin	Imazapyr	Pinoxaden	1246	Metribuzin	Sulfentrazone	Flucarbazone
1217	Metribuzin	Imazapyr	Pyraflufen	1247	Metribuzin	Sulfentrazone	Amicarbazone
1218	Metribuzin	Imazethapyr	Carfentrazone	1248	Metribuzin	Sulfentrazone	Bromacil
1219	Metribuzin	Imazethapyr	Flucarbazone	1249	Metribuzin	Sulfentrazone	Saflufenacil
1220	Metribuzin	Imazethapyr	Sulfentrazone	1250	Metribuzin	Sulfentrazone	Flumioxazin
1221	Metribuzin	Imazethapyr	Bromacil	1251	Metribuzin	Sulfentrazone	Metazachlor
1222	Metribuzin	Imazethapyr	Saflufenacil	1252	Metribuzin	Sulfentrazone	Pinoxaden
1223	Metribuzin	Imazethapyr	Flumioxazin	1253	Metribuzin	Sulfentrazone	Pyraflufen
1224	Metribuzin	Imazethapyr	Metazachlor	1254	Metribuzin	Flucarbazone-sodium	Carfentrazone
1225	Metribuzin	Imazethapyr	Pinoxaden	1255	Metribuzin	Flucarbazone-sodium	Flucarbazone
1226	Metribuzin	Imazethapyr	Pyraflufen	1256	Metribuzin	Flucarbazone-sodium	Sulfentrazone
1227	Metribuzin	Carfentrazone	Carfentrazone	1257	Metribuzin	Flucarbazone-sodium	Bromacil
1228	Metribuzin	Carfentrazone	Flucarbazone	1258	Metribuzin	Flucarbazone-sodium	Saflufenacil
1229	Metribuzin	Carfentrazone	Sulfentrazone	1259	Metribuzin	Flucarbazone-sodium	Flumioxazin
1230	Metribuzin	Carfentrazone	Bromacil	1260	Metribuzin	Flucarbazone-sodium	Metazachlor

1261	Metribuzin	Flucarbazone-sodium	Pinoxaden	1291	Metribuzin	Sulfosulfuron	Flucarbazone
1262	Metribuzin	Flucarbazone-sodium	Pyraflufen	1292	Metribuzin	Sulfosulfuron	Sulfentrazone
1263	Metribuzin	Bensulfuron	Carfentrazone	1293	Metribuzin	Sulfosulfuron	Bromacil
1264	Metribuzin	Bensulfuron	Flucarbazone	1294	Metribuzin	Sulfosulfuron	Saflufenacil
1265	Metribuzin	Bensulfuron	Sulfentrazone	1295	Metribuzin	Sulfosulfuron	Flumioxazin
1266	Metribuzin	Bensulfuron	Bromacil	1296	Metribuzin	Sulfosulfuron	Metazachlor
1267	Metribuzin	Bensulfuron	Saflufenacil	1297	Metribuzin	Sulfosulfuron	Pinoxaden
1268	Metribuzin	Bensulfuron	Flumioxazin	1298	Metribuzin	Sulfosulfuron	Pyraflufen
1269	Metribuzin	Bensulfuron	Metazachlor	1299	Metribuzin	Trifloxysulfuron	Carfentrazone
1270	Metribuzin	Bensulfuron	Pinoxaden	1300	Metribuzin	Trifloxysulfuron	Flucarbazone
1271	Metribuzin	Bensulfuron	Pyraflufen	1301	Metribuzin	Trifloxysulfuron	Sulfentrazone
1272	Metribuzin	Halosulfuron	Carfentrazone	1302	Metribuzin	Trifloxysulfuron	Bromacil
1273	Metribuzin	Halosulfuron	Flucarbazone	1303	Metribuzin	Trifloxysulfuron	Saflufenacil
1274	Metribuzin	Halosulfuron	Sulfentrazone	1304	Metribuzin	Trifloxysulfuron	Flumioxazin
1275	Metribuzin	Halosulfuron	Bromacil	1305	Metribuzin	Trifloxysulfuron	Metazachlor
1276	Metribuzin	Halosulfuron	Saflufenacil	1306	Metribuzin	Trifloxysulfuron	Pinoxaden
1277	Metribuzin	Halosulfuron	Flumioxazin	1307	Metribuzin	Trifloxysulfuron	Pyraflufen
1278	Metribuzin	Halosulfuron	Metazachlor	1308	Metribuzin	Metsulfuron	Carfentrazone
1279	Metribuzin	Halosulfuron	Pinoxaden	1309	Metribuzin	Metsulfuron	Flucarbazone
1280	Metribuzin	Halosulfuron	Pyraflufen	1310	Metribuzin	Metsulfuron	Sulfentrazone
1281	Metribuzin	Pyrazosulfuron	Carfentrazone	1311	Metribuzin	Metsulfuron	Bromacil
1282	Metribuzin	Pyrazosulfuron	Flucarbazone	1312	Metribuzin	Metsulfuron	Saflufenacil
1283	Metribuzin	Pyrazosulfuron	Sulfentrazone	1313	Metribuzin	Metsulfuron	Flumioxazin
1284	Metribuzin	Pyrazosulfuron	Bromacil	1314	Metribuzin	Metsulfuron	Metazachlor
1285	Metribuzin	Pyrazosulfuron	Saflufenacil	1315	Metribuzin	Metsulfuron	Pinoxaden
1286	Metribuzin	Pyrazosulfuron	Flumioxazin	1316	Metribuzin	Metsulfuron	Pyraflufen
1287	Metribuzin	Pyrazosulfuron	Metazachlor	1317	Metribuzin	Metazachlor	Carfentrazone
1288	Metribuzin	Pyrazosulfuron	Pinoxaden	1318	Metribuzin	Metazachlor	Flucarbazone
1289	Metribuzin	Pyrazosulfuron	Pyraflufen	1319	Metribuzin	Metazachlor	Sulfentrazone
1290	Metribuzin	Sulfosulfuron	Carfentrazone	1320	Metribuzin	Metazachlor	Bromacil
1321	Metribuzin	Metazachlor	Saflufenacil	1351	Metribuzin	Diclosulam	Pyraflufen
1322	Metribuzin	Metazachlor	Flumioxazin	1352	Metribuzin	Penoxsulam	Carfentrazone
1323	Metribuzin	Metazachlor	Metazachlor	1353	Metribuzin	Penoxsulam	Flucarbazone
1324	Metribuzin	Metazachlor	Pinoxaden	1354	Metribuzin	Penoxsulam	Sulfentrazone
1325	Metribuzin	Metazachlor	Pyraflufen	1355	Metribuzin	Penoxsulam	Bromacil
1326	Metribuzin	Pinoxaden	Carfentrazone	1356	Metribuzin	Penoxsulam	Saflufenacil
1327	Metribuzin	Pinoxaden	Flucarbazone	1357	Metribuzin	Penoxsulam	Flumioxazin

1328	Metribuzin	Pinoxaden	Sulfentrazone	1358	Metribuzin	Penoxsulam	Metazachlor
1329	Metribuzin	Pinoxaden	Bromacil	1359	Metribuzin	Penoxsulam	Pinoxaden
1330	Metribuzin	Pinoxaden	Saflufenacil	1360	Metribuzin	Penoxsulam	Pyraflufen
1331	Metribuzin	Pinoxaden	Flumioxazin	1361	Bromacil	Imazamox	Carfentrazone
1332	Metribuzin	Pinoxaden	Metazachlor	1362	Bromacil	Imazamox	Flucarbazone
1333	Metribuzin	Pinoxaden	Pinoxaden	1363	Bromacil	Imazamox	Sulfentrazone
1334	Metribuzin	Pinoxaden	Pyraflufen	1364	Bromacil	Imazamox	Bromacil
1335	Metribuzin	Pyraflufen	Carfentrazone	1365	Bromacil	Imazamox	Saflufenacil
1336	Metribuzin	Pyraflufen	Flucarbazone	1366	Bromacil	Imazamox	Flumioxazin
1337	Metribuzin	Pyraflufen	Sulfentrazone	1367	Bromacil	Imazamox	Metazachlor
1338	Metribuzin	Pyraflufen	Bromacil	1368	Bromacil	Imazamox	Pinoxaden
1339	Metribuzin	Pyraflufen	Saflufenacil	1369	Bromacil	Imazamox	Pyraflufen
1340	Metribuzin	Pyraflufen	Flumioxazin	1370	Bromacil	Imazapic	Carfentrazone
1341	Metribuzin	Pyraflufen	Metazachlor	1371	Bromacil	Imazapic	Flucarbazone
1342	Metribuzin	Pyraflufen	Pinoxaden	1372	Bromacil	Imazapic	Sulfentrazone
1343	Metribuzin	Diclosulam	Carfentrazone	1373	Bromacil	Imazapic	Bromacil
1344	Metribuzin	Diclosulam	Flucarbazone	1374	Bromacil	Imazapic	Saflufenacil
1345	Metribuzin	Diclosulam	Sulfentrazone	1375	Bromacil	Imazapic	Flumioxazin
1346	Metribuzin	Diclosulam	Bromacil	1376	Bromacil	Imazapic	Metazachlor
1347	Metribuzin	Diclosulam	Saflufenacil	1377	Bromacil	Imazapic	Pinoxaden
1348	Metribuzin	Diclosulam	Flumioxazin	1378	Bromacil	Imazapic	Pyraflufen
1349	Metribuzin	Diclosulam	Metazachlor	1379	Bromacil	Imazapyr	Carfentrazone
1350	Metribuzin	Diclosulam	Pinoxaden	1380	Bromacil	Imazapyr	Flucarbazone
1381	Bromacil	Imazapyr	Sulfentrazone	1411	Bromacil	Flucarbazone	Flumioxazin
1382	Bromacil	Imazapyr	Bromacil	1412	Bromacil	Flucarbazone	Metazachlor
1383	Bromacil	Imazapyr	Saflufenacil	1413	Bromacil	Flucarbazone	Pinoxaden
1384	Bromacil	Imazapyr	Flumioxazin	1414	Bromacil	Flucarbazone	Pyraflufen
1385	Bromacil	Imazapyr	Metazachlor	1415	Bromacil	Sulfentrazone	Carfentrazone
1386	Bromacil	Imazapyr	Pinoxaden	1416	Bromacil	Sulfentrazone	Flucarbazone
1387	Bromacil	Imazapyr	Pyraflufen	1417	Bromacil	Sulfentrazone	Amicarbazone
1388	Bromacil	Imazethapyr	Carfentrazone	1418	Bromacil	Sulfentrazone	Bromacil
1389	Bromacil	Imazethapyr	Flucarbazone	1419	Bromacil	Sulfentrazone	Saflufenacil
1390	Bromacil	Imazethapyr	Sulfentrazone	1420	Bromacil	Sulfentrazone	Flumioxazin
1391	Bromacil	Imazethapyr	Bromacil	1421	Bromacil	Sulfentrazone	Metazachlor
1392	Bromacil	Imazethapyr	Saflufenacil	1422	Bromacil	Sulfentrazone	Pinoxaden
1393	Bromacil	Imazethapyr	Flumioxazin	1423	Bromacil	Sulfentrazone	Pyraflufen
1394	Bromacil	Imazethapyr	Metazachlor	1424	Bromacil	Flucarbazone-sodium	Carfentrazone

1395	Bromacil	Imazethapyr	Pinoxaden	1425	Bromacil	Flucarbazone-sodium	Flucarbazone
1396	Bromacil	Imazethapyr	Pyraflufen	1426	Bromacil	Flucarbazone-sodium	Sulfentrazone
1397	Bromacil	Carfentrazone	Carfentrazone	1427	Bromacil	Flucarbazone-sodium	Bromacil
1398	Bromacil	Carfentrazone	Flucarbazone	1428	Bromacil	Flucarbazone-sodium	Saflufenacil
1399	Bromacil	Carfentrazone	Sulfentrazone	1429	Bromacil	Flucarbazone-sodium	Flumioxazin
1400	Bromacil	Carfentrazone	Bromacil	1430	Bromacil	Flucarbazone-sodium	Metazachlor
1401	Bromacil	Carfentrazone	Saflufenacil	1431	Bromacil	Flucarbazone-sodium	Pinoxaden
1402	Bromacil	Carfentrazone	Flumioxazin	1432	Bromacil	Flucarbazone-sodium	Pyraflufen
1403	Bromacil	Carfentrazone	Metazachlor	1433	Bromacil	Bensulfuron	Carfentrazone
1404	Bromacil	Carfentrazone	Pinoxaden	1434	Bromacil	Bensulfuron	Flucarbazone
1405	Bromacil	Carfentrazone	Pyraflufen	1435	Bromacil	Bensulfuron	Sulfentrazone
1406	Bromacil	Flucarbazone	Carfentrazone	1436	Bromacil	Bensulfuron	Bromacil
1407	Bromacil	Flucarbazone	Flucarbazone	1437	Bromacil	Bensulfuron	Saflufenacil
1408	Bromacil	Flucarbazone	Sulfentrazone	1438	Bromacil	Bensulfuron	Flumioxazin
1409	Bromacil	Flucarbazone	Bromacil	1439	Bromacil	Bensulfuron	Metazachlor
1410	Bromacil	Flucarbazone	Saflufenacil	1440	Bromacil	Bensulfuron	Pinoxaden
1441	Bromacil	Bensulfuron	Pyraflufen	1471	Bromacil	Trifloxysulfuron	Sulfentrazone
1442	Bromacil	Halosulfuron	Carfentrazone	1472	Bromacil	Trifloxysulfuron	Bromacil
1443	Bromacil	Halosulfuron	Flucarbazone	1473	Bromacil	Trifloxysulfuron	Saflufenacil
1444	Bromacil	Halosulfuron	Sulfentrazone	1474	Bromacil	Trifloxysulfuron	Flumioxazin
1445	Bromacil	Halosulfuron	Bromacil	1475	Bromacil	Trifloxysulfuron	Metazachlor
1446	Bromacil	Halosulfuron	Saflufenacil	1476	Bromacil	Trifloxysulfuron	Pinoxaden
1447	Bromacil	Halosulfuron	Flumioxazin	1477	Bromacil	Trifloxysulfuron	Pyraflufen
1448	Bromacil	Halosulfuron	Metazachlor	1478	Bromacil	Metsulfuron	Carfentrazone
1449	Bromacil	Halosulfuron	Pinoxaden	1479	Bromacil	Metsulfuron	Flucarbazone
1450	Bromacil	Halosulfuron	Pyraflufen	1480	Bromacil	Metsulfuron	Sulfentrazone
1451	Bromacil	Pyrazosulfuron	Carfentrazone	1481	Bromacil	Metsulfuron	Bromacil
1452	Bromacil	Pyrazosulfuron	Flucarbazone	1482	Bromacil	Metsulfuron	Saflufenacil
1453	Bromacil	Pyrazosulfuron	Sulfentrazone	1483	Bromacil	Metsulfuron	Flumioxazin
1454	Bromacil	Pyrazosulfuron	Bromacil	1484	Bromacil	Metsulfuron	Metazachlor
1455	Bromacil	Pyrazosulfuron	Saflufenacil	1485	Bromacil	Metsulfuron	Pinoxaden

1456	Bromacil	Pyrazosulfuron	Flumioxazin	1486	Bromacil	Metsulfuron	Pyraflufen
1457	Bromacil	Pyrazosulfuron	Metazachlor	1487	Bromacil	Metazachlor	Carfentrazone
1458	Bromacil	Pyrazosulfuron	Pinoxaden	1488	Bromacil	Metazachlor	Flucarbazone
1459	Bromacil	Pyrazosulfuron	Pyraflufen	1489	Bromacil	Metazachlor	Sulfentrazone
1460	Bromacil	Sulfosulfuron	Carfentrazone	1490	Bromacil	Metazachlor	Bromacil
1461	Bromacil	Sulfosulfuron	Flucarbazone	1491	Bromacil	Metazachlor	Saflufenacil
1462	Bromacil	Sulfosulfuron	Sulfentrazone	1492	Bromacil	Metazachlor	Flumioxazin
1463	Bromacil	Sulfosulfuron	Bromacil	1493	Bromacil	Metazachlor	Metazachlor
1464	Bromacil	Sulfosulfuron	Saflufenacil	1494	Bromacil	Metazachlor	Pinoxaden
1465	Bromacil	Sulfosulfuron	Flumioxazin	1495	Bromacil	Metazachlor	Pyraflufen
1466	Bromacil	Sulfosulfuron	Metazachlor	1496	Bromacil	Pinoxaden	Carfentrazone
1467	Bromacil	Sulfosulfuron	Pinoxaden	1497	Bromacil	Pinoxaden	Flucarbazone
1468	Bromacil	Sulfosulfuron	Pyraflufen	1498	Bromacil	Pinoxaden	Sulfentrazone
1469	Bromacil	Trifloxysulfuron	Carfentrazone	1499	Bromacil	Pinoxaden	Bromacil
1470	Bromacil	Trifloxysulfuron	Flucarbazone	1500	Bromacil	Pinoxaden	Saflufenacil
1501	Bromacil	Pinoxaden	Flumioxazin	1531	Saflufenacil	Imazamox	Carfentrazone
1502	Bromacil	Pinoxaden	Metazachlor	1532	Saflufenacil	Imazamox	Flucarbazone
1503	Bromacil	Pinoxaden	Pinoxaden	1533	Saflufenacil	Imazamox	Sulfentrazone
1504	Bromacil	Pinoxaden	Pyraflufen	1534	Saflufenacil	Imazamox	Bromacil
1505	Bromacil	Pyraflufen	Carfentrazone	1535	Saflufenacil	Imazamox	Saflufenacil
1506	Bromacil	Pyraflufen	Flucarbazone	1536	Saflufenacil	Imazamox	Flumioxazin
1507	Bromacil	Pyraflufen	Sulfentrazone	1537	Saflufenacil	Imazamox	Metazachlor
1508	Bromacil	Pyraflufen	Bromacil	1538	Saflufenacil	Imazamox	Pinoxaden
1509	Bromacil	Pyraflufen	Saflufenacil	1539	Saflufenacil	Imazamox	Pyraflufen
1510	Bromacil	Pyraflufen	Flumioxazin	1540	Saflufenacil	Imazapic	Carfentrazone
1511	Bromacil	Pyraflufen	Metazachlor	1541	Saflufenacil	Imazapic	Flucarbazone
1512	Bromacil	Pyraflufen	Pinoxaden	1542	Saflufenacil	Imazapic	Sulfentrazone
1513	Bromacil	Diclosulam	Carfentrazone	1543	Saflufenacil	Imazapic	Bromacil
1514	Bromacil	Diclosulam	Flucarbazone	1544	Saflufenacil	Imazapic	Saflufenacil
1515	Bromacil	Diclosulam	Sulfentrazone	1545	Saflufenacil	Imazapic	Flumioxazin
1516	Bromacil	Diclosulam	Bromacil	1546	Saflufenacil	Imazapic	Metazachlor
1517	Bromacil	Diclosulam	Saflufenacil	1547	Saflufenacil	Imazapic	Pinoxaden
1518	Bromacil	Diclosulam	Flumioxazin	1548	Saflufenacil	Imazapic	Pyraflufen
1519	Bromacil	Diclosulam	Metazachlor	1549	Saflufenacil	Imazapyr	Carfentrazone
1520	Bromacil	Diclosulam	Pinoxaden	1550	Saflufenacil	Imazapyr	Flucarbazone
1521	Bromacil	Diclosulam	Pyraflufen	1551	Saflufenacil	Imazapyr	Sulfentrazone
1522	Bromacil	Penoxsulam	Carfentrazone	1552	Saflufenacil	Imazapyr	Bromacil
1523	Bromacil	Penoxsulam	Flucarbazone	1553	Saflufenacil	Imazapyr	Saflufenacil

1524	Bromacil	Penoxsulam	Sulfentrazone	1554	Saflufenacil	Imazapyr	Flumioxazin
1525	Bromacil	Penoxsulam	Bromacil	1555	Saflufenacil	Imazapyr	Metazachlor
1526	Bromacil	Penoxsulam	Saflufenacil	1556	Saflufenacil	Imazapyr	Pinoxaden
1527	Bromacil	Penoxsulam	Flumioxazin	1557	Saflufenacil	Imazapyr	Pyraflufen
1528	Bromacil	Penoxsulam	Metazachlor	1558	Saflufenacil	Imazethapyr	Carfentrazone
1529	Bromacil	Penoxsulam	Pinoxaden	1559	Saflufenacil	Imazethapyr	Flucarbazone
1530	Bromacil	Penoxsulam	Pyraflufen	1560	Saflufenacil	Imazethapyr	Sulfentrazone
1561	Saflufenacil	Imazethapyr	Bromacil	1591	Saflufenacil	Sulfentrazone	Metazachlor
1562	Saflufenacil	Imazethapyr	Saflufenacil	1592	Saflufenacil	Sulfentrazone	Pinoxaden
1563	Saflufenacil	Imazethapyr	Flumioxazin	1593	Saflufenacil	Sulfentrazone	Pyraflufen
1564	Saflufenacil	Imazethapyr	Metazachlor	1594	Saflufenacil	Flucarbazone-sodium	Carfentrazone
1565	Saflufenacil	Imazethapyr	Pinoxaden	1595	Saflufenacil	Flucarbazone-sodium	Flucarbazone
1566	Saflufenacil	Imazethapyr	Pyraflufen	1596	Saflufenacil	Flucarbazone-sodium	Sulfentrazone
1567	Saflufenacil	Carfentrazone	Carfentrazone	1597	Saflufenacil	Flucarbazone-sodium	Bromacil
1568	Saflufenacil	Carfentrazone	Flucarbazone	1598	Saflufenacil	Flucarbazone-sodium	Saflufenacil
1569	Saflufenacil	Carfentrazone	Sulfentrazone	1599	Saflufenacil	Flucarbazone-sodium	Flumioxazin
1570	Saflufenacil	Carfentrazone	Bromacil	1600	Saflufenacil	Flucarbazone-sodium	Metazachlor
1571	Saflufenacil	Carfentrazone	Saflufenacil	1601	Saflufenacil	Flucarbazone-sodium	Pinoxaden
1572	Saflufenacil	Carfentrazone	Flumioxazin	1602	Saflufenacil	Flucarbazone-sodium	Pyraflufen
1573	Saflufenacil	Carfentrazone	Metazachlor	1603	Saflufenacil	Bensulfuron	Carfentrazone
1574	Saflufenacil	Carfentrazone	Pinoxaden	1604	Saflufenacil	Bensulfuron	Flucarbazone
1575	Saflufenacil	Carfentrazone	Pyraflufen	1605	Saflufenacil	Bensulfuron	Sulfentrazone
1576	Saflufenacil	Flucarbazone	Carfentrazone	1606	Saflufenacil	Bensulfuron	Bromacil
1577	Saflufenacil	Flucarbazone	Flucarbazone	1607	Saflufenacil	Bensulfuron	Saflufenacil
1578	Saflufenacil	Flucarbazone	Sulfentrazone	1608	Saflufenacil	Bensulfuron	Flumioxazin
1579	Saflufenacil	Flucarbazone	Bromacil	1609	Saflufenacil	Bensulfuron	Metazachlor
1580	Saflufenacil	Flucarbazone	Saflufenacil	1610	Saflufenacil	Bensulfuron	Pinoxaden
1581	Saflufenacil	Flucarbazone	Flumioxazin	16111	Saflufenacil	Bensulfuron	Pyraflufen
1582	Saflufenacil	Flucarbazone	Metazachlor	1612	Saflufenacil	Halosulfuron	Carfentrazone
1583	Saflufenacil	Flucarbazone	Pinoxaden	1613	Saflufenacil	Halosulfuron	Flucarbazone

1584	Saflufenacil	Flucarbazone	Pyraflufen	1614	Saflufenacil	Halosulfuron	Sulfentrazone
1585	Saflufenacil	Sulfentrazone	Carfentrazone	1615	Saflufenacil	Halosulfuron	Bromacil
1586	Saflufenacil	Sulfentrazone	Flucarbazone	1616	Saflufenacil	Halosulfuron	Saflufenacil
1587	Saflufenacil	Sulfentrazone	Amicarbazone	1617	Saflufenacil	Halosulfuron	Flumioxazin
1588	Saflufenacil	Sulfentrazone	Bromacil	1618	Saflufenacil	Halosulfuron	Metazachlor
1589	Saflufenacil	Sulfentrazone	Saflufenacil	1619	Saflufenacil	Halosulfuron	Pinoxaden
1590	Saflufenacil	Sulfentrazone	Flumioxazin	1620	Saflufenacil	Halosulfuron	Pyraflufen
1621	Saflufenacil	Pyrazosulfuron	Carfentrazone	1651	Saflufenacil	Metsulfuron	Bromacil
1622	Saflufenacil	Pyrazosulfuron	Flucarbazone	1652	Saflufenacil	Metsulfuron	Saflufenacil
1623	Saflufenacil	Pyrazosulfuron	Sulfentrazone	1653	Saflufenacil	Metsulfuron	Flumioxazin
1624	Saflufenacil	Pyrazosulfuron	Bromacil	1654	Saflufenacil	Metsulfuron	Metazachlor
1625	Saflufenacil	Pyrazosulfuron	Saflufenacil	1655	Saflufenacil	Metsulfuron	Pinoxaden
1626	Saflufenacil	Pyrazosulfuron	Flumioxazin	1656	Saflufenacil	Metsulfuron	Pyraflufen
1627	Saflufenacil	Pyrazosulfuron	Metazachlor	1657	Saflufenacil	Metazachlor	Carfentrazone
1628	Saflufenacil	Pyrazosulfuron	Pinoxaden	1658	Saflufenacil	Metazachlor	Flucarbazone
1629	Saflufenacil	Pyrazosulfuron	Pyraflufen	1659	Saflufenacil	Metazachlor	Sulfentrazone
1630	Saflufenacil	Sulfosulfuron	Carfentrazone	1660	Saflufenacil	Metazachlor	Bromacil
1631	Saflufenacil	Sulfosulfuron	Flucarbazone	1661	Saflufenacil	Metazachlor	Saflufenacil
1632	Saflufenacil	Sulfosulfuron	Sulfentrazone	1662	Saflufenacil	Metazachlor	Flumioxazin
1633	Saflufenacil	Sulfosulfuron	Bromacil	1663	Saflufenacil	Metazachlor	Metazachlor
1634	Saflufenacil	Sulfosulfuron	Saflufenacil	1664	Saflufenacil	Metazachlor	Pinoxaden
1635	Saflufenacil	Sulfosulfuron	Flumioxazin	1665	Saflufenacil	Metazachlor	Pyraflufen
1636	Saflufenacil	Sulfosulfuron	Metazachlor	1666	Saflufenacil	Pinoxaden	Carfentrazone
1637	Saflufenacil	Sulfosulfuron	Pinoxaden	1667	Saflufenacil	Pinoxaden	Flucarbazone
1638	Saflufenacil	Sulfosulfuron	Pyraflufen	1668	Saflufenacil	Pinoxaden	Sulfentrazone
1639	Saflufenacil	Trifloxysulfuron	Carfentrazone	1669	Saflufenacil	Pinoxaden	Bromacil
1640	Saflufenacil	Trifloxysulfuron	Flucarbazone	1670	Saflufenacil	Pinoxaden	Saflufenacil
1641	Saflufenacil	Trifloxysulfuron	Sulfentrazone	1671	Saflufenacil	Pinoxaden	Flumioxazin
1642	Saflufenacil	Trifloxysulfuron	Bromacil	1672	Saflufenacil	Pinoxaden	Metazachlor
1643	Saflufenacil	Trifloxysulfuron	Saflufenacil	1673	Saflufenacil	Pinoxaden	Pinoxaden
1644	Saflufenacil	Trifloxysulfuron	Flumioxazin	1674	Saflufenacil	Pinoxaden	Pyraflufen
1645	Saflufenacil	Trifloxysulfuron	Metazachlor	1675	Saflufenacil	Pyraflufen	Carfentrazone
1646	Saflufenacil	Trifloxysulfuron	Pinoxaden	1676	Saflufenacil	Pyraflufen	Flucarbazone
1647	Saflufenacil	Trifloxysulfuron	Pyraflufen	1677	Saflufenacil	Pyraflufen	Sulfentrazone
1648	Saflufenacil	Metsulfuron	Carfentrazone	1678	Saflufenacil	Pyraflufen	Bromacil
1649	Saflufenacil	Metsulfuron	Flucarbazone	1679	Saflufenacil	Pyraflufen	Saflufenacil
1650	Saflufenacil	Metsulfuron	Sulfentrazone	1680	Saflufenacil	Pyraflufen	Flumioxazin
1681	Saflufenacil	Pyraflufen	Metazachlor	1711	Bentazone	Imazapic	Flucarbazone

1682	Saflufenacil	Pyraflufen	Pinoxaden	1712	Bentazone	Imazapic	Sulfentrazone
1683	Saflufenacil	Diclosulam	Carfentrazone	1713	Bentazone	Imazapic	Bromacil
1684	Saflufenacil	Diclosulam	Flucarbazone	1714	Bentazone	Imazapic	Saflufenacil
1685	Saflufenacil	Diclosulam	Sulfentrazone	1715	Bentazone	Imazapic	Flumioxazin
1686	Saflufenacil	Diclosulam	Bromacil	1716	Bentazone	Imazapic	Metazachlor
1687	Saflufenacil	Diclosulam	Saflufenacil	1717	Bentazone	Imazapic	Pinoxaden
1688	Saflufenacil	Diclosulam	Flumioxazin	1718	Bentazone	Imazapic	Pyraflufen
1689	Saflufenacil	Diclosulam	Metazachlor	1719	Bentazone	Imazapyr	Carfentrazone
1690	Saflufenacil	Diclosulam	Pinoxaden	1720	Bentazone	Imazapyr	Flucarbazone
1691	Saflufenacil	Diclosulam	Pyraflufen	1721	Bentazone	Imazapyr	Sulfentrazone
1692	Saflufenacil	Penoxsulam	Carfentrazone	1722	Bentazone	Imazapyr	Bromacil
1693	Saflufenacil	Penoxsulam	Flucarbazone	1723	Bentazone	Imazapyr	Saflufenacil
1694	Saflufenacil	Penoxsulam	Sulfentrazone	1724	Bentazone	Imazapyr	Flumioxazin
1695	Saflufenacil	Penoxsulam	Bromacil	1725	Bentazone	Imazapyr	Metazachlor
1696	Saflufenacil	Penoxsulam	Saflufenacil	1726	Bentazone	Imazapyr	Pinoxaden
1697	Saflufenacil	Penoxsulam	Flumioxazin	1727	Bentazone	Imazapyr	Pyraflufen
1698	Saflufenacil	Penoxsulam	Metazachlor	1728	Bentazone	Imazethapyr	Carfentrazone
1699	Saflufenacil	Penoxsulam	Pinoxaden	1729	Bentazone	Imazethapyr	Flucarbazone
1700	Saflufenacil	Penoxsulam	Pyraflufen	1730	Bentazone	Imazethapyr	Sulfentrazone
1701	Bentazone	Imazamox	Carfentrazone	1731	Bentazone	Imazethapyr	Bromacil
1702	Bentazone	Imazamox	Flucarbazone	1732	Bentazone	Imazethapyr	Saflufenacil
1703	Bentazone	Imazamox	Sulfentrazone	1733	Bentazone	Imazethapyr	Flumioxazin
1704	Bentazone	Imazamox	Bromacil	1734	Bentazone	Imazethapyr	Metazachlor
1705	Bentazone	Imazamox	Saflufenacil	1735	Bentazone	Imazethapyr	Pinoxaden
1706	Bentazone	Imazamox	Flumioxazin	1736	Bentazone	Imazethapyr	Pyraflufen
1707	Bentazone	Imazamox	Metazachlor	1737	Bentazone	Carfentrazone	Carfentrazone
1708	Bentazone	Imazamox	Pinoxaden	1738	Bentazone	Carfentrazone	Flucarbazone
1709	Bentazone	Imazamox	Pyraflufen	1739	Bentazone	Carfentrazone	Sulfentrazone
1710	Bentazone	Imazapic	Carfentrazone	1740	Bentazone	Carfentrazone	Bromacil
1741	Bentazone	Carfentrazone	Saflufenacil	1771	Bentazone	Flucarbazone-sodium	Pinoxaden
1742	Bentazone	Carfentrazone	Flumioxazin	1772	Bentazone	Flucarbazone-sodium	Pyraflufen
1743	Bentazone	Carfentrazone	Metazachlor	1773	Bentazone	Bensulfuron	Carfentrazone
1744	Bentazone	Carfentrazone	Pinoxaden	1774	Bentazone	Bensulfuron	Flucarbazone
1745	Bentazone	Carfentrazone	Pyraflufen	1775	Bentazone	Bensulfuron	Sulfentrazone
1746	Bentazone	Flucarbazone	Carfentrazone	1776	Bentazone	Bensulfuron	Bromacil
1747	Bentazone	Flucarbazone	Flucarbazone	1777	Bentazone	Bensulfuron	Saflufenacil
1748	Bentazone	Flucarbazone	Sulfentrazone	1778	Bentazone	Bensulfuron	Flumioxazin

1749	Bentazone	Flucarbazone	Bromacil	1779	Bentazone	Bensulfuron	Metazachlor
1750	Bentazone	Flucarbazone	Saflufenacil	1780	Bentazone	Bensulfuron	Pinoxaden
1751	Bentazone	Flucarbazone	Flumioxazin	1781	Bentazone	Bensulfuron	Pyraflufen
1752	Bentazone	Flucarbazone	Metazachlor	1782	Bentazone	Halosulfuron	Carfentrazone
1753	Bentazone	Flucarbazone	Pinoxaden	1783	Bentazone	Halosulfuron	Flucarbazone
1754	Bentazone	Flucarbazone	Pyraflufen	1784	Bentazone	Halosulfuron	Sulfentrazone
1755	Bentazone	Sulfentrazone	Carfentrazone	1785	Bentazone	Halosulfuron	Bromacil
1756	Bentazone	Sulfentrazone	Flucarbazone	1786	Bentazone	Halosulfuron	Saflufenacil
1757	Bentazone	Sulfentrazone	Amicarbazone	1787	Bentazone	Halosulfuron	Flumioxazin
1758	Bentazone	Sulfentrazone	Bromacil	1788	Bentazone	Halosulfuron	Metazachlor
1759	Bentazone	Sulfentrazone	Saflufenacil	1789	Bentazone	Halosulfuron	Pinoxaden
1760	Bentazone	Sulfentrazone	Flumioxazin	1790	Bentazone	Halosulfuron	Pyraflufen
1761	Bentazone	Sulfentrazone	Metazachlor	1791	Bentazone	Pyrazosulfuron	Carfentrazone
1762	Bentazone	Sulfentrazone	Pinoxaden	1792	Bentazone	Pyrazosulfuron	Flucarbazone
1763	Bentazone	Sulfentrazone	Pyraflufen	1793	Bentazone	Pyrazosulfuron	Sulfentrazone
1764	Bentazone	Flucarbazone-sodium	Carfentrazone	1794	Bentazone	Pyrazosulfuron	Bromacil
1765	Bentazone	Flucarbazone-sodium	Flucarbazone	1795	Bentazone	Pyrazosulfuron	Saflufenacil
1766	Bentazone	Flucarbazone-sodium	Sulfentrazone	1796	Bentazone	Pyrazosulfuron	Flumioxazin
1767	Bentazone	Flucarbazone-sodium	Bromacil	1797	Bentazone	Pyrazosulfuron	Metazachlor
1768	Bentazone	Flucarbazone-sodium	Saflufenacil	1798	Bentazone	Pyrazosulfuron	Pinoxaden
1769	Bentazone	Flucarbazone-sodium	Flumioxazin	1799	Bentazone	Pyrazosulfuron	Pyraflufen
1770	Bentazone	Flucarbazone-sodium	Metazachlor	1800	Bentazone	Sulfosulfuron	Carfentrazone
1801	Bentazone	Sulfosulfuron	Flucarbazone	1831	Bentazone	Metazachlor	Saflufenacil
1802	Bentazone	Sulfosulfuron	Sulfentrazone	1832	Bentazone	Metazachlor	Flumioxazin
1803	Bentazone	Sulfosulfuron	Bromacil	1833	Bentazone	Metazachlor	Metazachlor
1804	Bentazone	Sulfosulfuron	Saflufenacil	1834	Bentazone	Metazachlor	Pinoxaden
1805	Bentazone	Sulfosulfuron	Flumioxazin	1835	Bentazone	Metazachlor	Pyraflufen
1806	Bentazone	Sulfosulfuron	Metazachlor	1836	Bentazone	Pinoxaden	Carfentrazone
1807	Bentazone	Sulfosulfuron	Pinoxaden	1837	Bentazone	Pinoxaden	Flucarbazone
1808	Bentazone	Sulfosulfuron	Pyraflufen	1838	Bentazone	Pinoxaden	Sulfentrazone
1809	Bentazone	Trifloxysulfuron	Carfentrazone	1839	Bentazone	Pinoxaden	Bromacil
1810	Bentazone	Trifloxysulfuron	Flucarbazone	1840	Bentazone	Pinoxaden	Saflufenacil

1811	Bentazone	Trifloxysulfuron	Sulfentrazone	1841	Bentazone	Pinoxaden	Flumioxazin
1812	Bentazone	Trifloxysulfuron	Bromacil	1842	Bentazone	Pinoxaden	Metazachlor
1813	Bentazone	Trifloxysulfuron	Saflufenacil	1843	Bentazone	Pinoxaden	Pinoxaden
1814	Bentazone	Trifloxysulfuron	Flumioxazin	1844	Bentazone	Pinoxaden	Pyraflufen
1815	Bentazone	Trifloxysulfuron	Metazachlor	1845	Bentazone	Pyraflufen	Carfentrazone
1816	Bentazone	Trifloxysulfuron	Pinoxaden	1846	Bentazone	Pyraflufen	Flucarbazone
1817	Bentazone	Trifloxysulfuron	Pyraflufen	1847	Bentazone	Pyraflufen	Sulfentrazone
1818	Bentazone	Metsulfuron	Carfentrazone	1848	Bentazone	Pyraflufen	Bromacil
1819	Bentazone	Metsulfuron	Flucarbazone	1849	Bentazone	Pyraflufen	Saflufenacil
1820	Bentazone	Metsulfuron	Sulfentrazone	1850	Bentazone	Pyraflufen	Flumioxazin
1821	Bentazone	Metsulfuron	Bromacil	1851	Bentazone	Pyraflufen	Metazachlor
1822	Bentazone	Metsulfuron	Saflufenacil	1852	Bentazone	Pyraflufen	Pinoxaden
1823	Bentazone	Metsulfuron	Flumioxazin	1853	Bentazone	Diclosulam	Carfentrazone
1824	Bentazone	Metsulfuron	Metazachlor	1854	Bentazone	Diclosulam	Flucarbazone
1825	Bentazone	Metsulfuron	Pinoxaden	1855	Bentazone	Diclosulam	Sulfentrazone
1826	Bentazone	Metsulfuron	Pyraflufen	1856	Bentazone	Diclosulam	Bromacil
1827	Bentazone	Metazachlor	Carfentrazone	1857	Bentazone	Diclosulam	Saflufenacil
1828	Bentazone	Metazachlor	Flucarbazone	1858	Bentazone	Diclosulam	Flumioxazin
1829	Bentazone	Metazachlor	Sulfentrazone	1859	Bentazone	Diclosulam	Metazachlor
1830	Bentazone	Metazachlor	Bromacil	1860	Bentazone	Diclosulam	Pinoxaden
1861	Bentazone	Diclosulam	Pyraflufen	1891	Bentazone-sodium	Imazapyr	Sulfentrazone
1862	Bentazone	Penoxsulam	Carfentrazone	1892	Bentazone-sodium	Imazapyr	Bromacil
1863	Bentazone	Penoxsulam	Flucarbazone	1893	Bentazone-sodium	Imazapyr	Saflufenacil
1864	Bentazone	Penoxsulam	Sulfentrazone	1894	Bentazone-sodium	Imazapyr	Flumioxazin
1865	Bentazone	Penoxsulam	Bromacil	1895	Bentazone-sodium	Imazapyr	Metazachlor
1866	Bentazone	Penoxsulam	Saflufenacil	1896	Bentazone-sodium	Imazapyr	Pinoxaden
1867	Bentazone	Penoxsulam	Flumioxazin	1897	Bentazone-sodium	Imazapyr	Pyraflufen
1868	Bentazone	Penoxsulam	Metazachlor	1898	Bentazone-sodium	Imazethapyr	Carfentrazone
1869	Bentazone	Penoxsulam	Pinoxaden	1899	Bentazone-sodium	Imazethapyr	Flucarbazone

1870	Bentazone	Penoxsulam	Pyraflufen	1900	Bentazone-sodium	Imazethapyr	Sulfentrazone
1871	Bentazone-sodium	Imazamox	Carfentrazone	1901	Bentazone-sodium	Imazethapyr	Bromacil
1872	Bentazone-sodium	Imazamox	Flucarbazone	1902	Bentazone-sodium	Imazethapyr	Saflufenacil
1873	Bentazone-sodium	Imazamox	Sulfentrazone	1903	Bentazone-sodium	Imazethapyr	Flumioxazin
1874	Bentazone-sodium	Imazamox	Bromacil	1904	Bentazone-sodium	Imazethapyr	Metazachlor
1875	Bentazone-sodium	Imazamox	Saflufenacil	1905	Bentazone-sodium	Imazethapyr	Pinoxaden
1876	Bentazone-sodium	Imazamox	Flumioxazin	1906	Bentazone-sodium	Imazethapyr	Pyraflufen
1877	Bentazone-sodium	Imazamox	Metazachlor	1907	Bentazone-sodium	Carfentrazone	Carfentrazone
1878	Bentazone-sodium	Imazamox	Pinoxaden	1908	Bentazone-sodium	Carfentrazone	Flucarbazone
1879	Bentazone-sodium	Imazamox	Pyraflufen	1909	Bentazone-sodium	Carfentrazone	Sulfentrazone
1880	Bentazone-sodium	Imazapic	Carfentrazone	1910	Bentazone-sodium	Carfentrazone	Bromacil
1881	Bentazone-sodium	Imazapic	Flucarbazone	1911	Bentazone-sodium	Carfentrazone	Saflufenacil
1882	Bentazone-sodium	Imazapic	Sulfentrazone	1912	Bentazone-sodium	Carfentrazone	Flumioxazin
1883	Bentazone-sodium	Imazapic	Bromacil	1913	Bentazone-sodium	Carfentrazone	Metazachlor
1884	Bentazone-sodium	Imazapic	Saflufenacil	1914	Bentazone-sodium	Carfentrazone	Pinoxaden
1885	Bentazone-sodium	Imazapic	Flumioxazin	1915	Bentazone-sodium	Carfentrazone	Pyraflufen
1886	Bentazone-sodium	Imazapic	Metazachlor	1916	Bentazone-sodium	Flucarbazone	Carfentrazone
1887	Bentazone-sodium	Imazapic	Pinoxaden	1917	Bentazone-sodium	Flucarbazone	Flucarbazone
1888	Bentazone-sodium	Imazapic	Pyraflufen	1918	Bentazone-sodium	Flucarbazone	Sulfentrazone

1889	Bentazone-sodium	Imazapyr	Carfentrazone	1919	Bentazone-sodium	Flucarbazone	Bromacil
1890	Bentazone-sodium	Imazapyr	Flucarbazone	1920	Bentazone-sodium	Flucarbazone	Saflufenacil
1921	Bentazone-sodium	Flucarbazone	Flumioxazin	1951	Bentazone-sodium	Bensulfuron	Pyraflufen
1922	Bentazone-sodium	Flucarbazone	Metazachlor	1952	Bentazone-sodium	Halosulfuron	Carfentrazone
1923	Bentazone-sodium	Flucarbazone	Pinoxaden	1953	Bentazone-sodium	Halosulfuron	Flucarbazone
1924	Bentazone-sodium	Flucarbazone	Pyraflufen	1954	Bentazone-sodium	Halosulfuron	Sulfentrazone
1925	Bentazone-sodium	Sulfentrazone	Carfentrazone	1955	Bentazone-sodium	Halosulfuron	Bromacil
1926	Bentazone-sodium	Sulfentrazone	Flucarbazone	1956	Bentazone-sodium	Halosulfuron	Saflufenacil
1927	Bentazone-sodium	Sulfentrazone	Amicarbazone	1957	Bentazone-sodium	Halosulfuron	Flumioxazin
1928	Bentazone-sodium	Sulfentrazone	Bromacil	1958	Bentazone-sodium	Halosulfuron	Metazachlor
1929	Bentazone-sodium	Sulfentrazone	Saflufenacil	1959	Bentazone-sodium	Halosulfuron	Pinoxaden
1930	Bentazone-sodium	Sulfentrazone	Flumioxazin	1960	Bentazone-sodium	Halosulfuron	Pyraflufen
1931	Bentazone-sodium	Sulfentrazone	Metazachlor	1961	Bentazone-sodium	Pyrazosulfuron	Carfentrazone
1932	Bentazone-sodium	Sulfentrazone	Pinoxaden	1962	Bentazone-sodium	Pyrazosulfuron	Flucarbazone
1933	Bentazone-sodium	Sulfentrazone	Pyraflufen	1963	Bentazone-sodium	Pyrazosulfuron	Sulfentrazone
1934	Bentazone-sodium	Flucarbazone-sodium	Carfentrazone	1964	Bentazone-sodium	Pyrazosulfuron	Bromacil
1935	Bentazone-sodium	Flucarbazone-sodium	Flucarbazone	1965	Bentazone-sodium	Pyrazosulfuron	Saflufenacil
1936	Bentazone-sodium	Flucarbazone-sodium	Sulfentrazone	1966	Bentazone-sodium	Pyrazosulfuron	Flumioxazin
1937	Bentazone-sodium	Flucarbazone-sodium	Bromacil	1967	Bentazone-sodium	Pyrazosulfuron	Metazachlor

1938	Bentazone-sodium	Flucarbazone-sodium	Saflufenacil	1968	Bentazone-sodium	Pyrazosulfuron	Pinoxaden
1939	Bentazone-sodium	Flucarbazone-sodium	Flumioxazin	1969	Bentazone-sodium	Pyrazosulfuron	Pyraflufen
1940	Bentazone-sodium	Flucarbazone-sodium	Metazachlor	1970	Bentazone-sodium	Sulfosulfuron	Carfentrazone
1941	Bentazone-sodium	Flucarbazone-sodium	Pinoxaden	1971	Bentazone-sodium	Sulfosulfuron	Flucarbazone
1942	Bentazone-sodium	Flucarbazone-sodium	Pyraflufen	1972	Bentazone-sodium	Sulfosulfuron	Sulfentrazone
1943	Bentazone-sodium	Bensulfuron	Carfentrazone	1973	Bentazone-sodium	Sulfosulfuron	Bromacil
1944	Bentazone-sodium	Bensulfuron	Flucarbazone	1974	Bentazone-sodium	Sulfosulfuron	Saflufenacil
1945	Bentazone-sodium	Bensulfuron	Sulfentrazone	1975	Bentazone-sodium	Sulfosulfuron	Flumioxazin
1946	Bentazone-sodium	Bensulfuron	Bromacil	1976	Bentazone-sodium	Sulfosulfuron	Metazachlor
1947	Bentazone-sodium	Bensulfuron	Saflufenacil	1977	Bentazone-sodium	Sulfosulfuron	Pinoxaden
1948	Bentazone-sodium	Bensulfuron	Flumioxazin	1978	Bentazone-sodium	Sulfosulfuron	Pyraflufen
1949	Bentazone-sodium	Bensulfuron	Metazachlor	1979	Bentazone-sodium	Trifloxysulfuron	Carfentrazone
1950	Bentazone-sodium	Bensulfuron	Pinoxaden	1980	Bentazone-sodium	Trifloxysulfuron	Flucarbazone
1981	Bentazone-sodium	Trifloxysulfuron	Sulfentrazone	2011	Bentazone-sodium	Pinoxaden	Flumioxazin
1982	Bentazone-sodium	Trifloxysulfuron	Bromacil	2012	Bentazone-sodium	Pinoxaden	Metazachlor
1983	Bentazone-sodium	Trifloxysulfuron	Saflufenacil	2013	Bentazone-sodium	Pinoxaden	Pinoxaden
1984	Bentazone-sodium	Trifloxysulfuron	Flumioxazin	2014	Bentazone-sodium	Pinoxaden	Pyraflufen
1985	Bentazone-sodium	Trifloxysulfuron	Metazachlor	2015	Bentazone-sodium	Pyraflufen	Carfentrazone
1986	Bentazone-sodium	Trifloxysulfuron	Pinoxaden	2016	Bentazone-sodium	Pyraflufen	Flucarbazone

1987	Bentazone-sodium	Trifloxysulfuron	Pyraflufen	2017	Bentazone-sodium	Pyraflufen	Sulfentrazone
1988	Bentazone-sodium	Metsulfuron	Carfentrazone	2018	Bentazone-sodium	Pyraflufen	Bromacil
1989	Bentazone-sodium	Metsulfuron	Flucarbazone	2019	Bentazone-sodium	Pyraflufen	Saflufenacil
1990	Bentazone-sodium	Metsulfuron	Sulfentrazone	2020	Bentazone-sodium	Pyraflufen	Flumioxazin
1991	Bentazone-sodium	Metsulfuron	Bromacil	2021	Bentazone-sodium	Pyraflufen	Metazachlor
1992	Bentazone-sodium	Metsulfuron	Saflufenacil	2022	Bentazone-sodium	Pyraflufen	Pinoxaden
1993	Bentazone-sodium	Metsulfuron	Flumioxazin	2023	Bentazone-sodium	Diclosulam	Carfentrazone
1994	Bentazone-sodium	Metsulfuron	Metazachlor	2024	Bentazone-sodium	Diclosulam	Flucarbazone
1995	Bentazone-sodium	Metsulfuron	Pinoxaden	2025	Bentazone-sodium	Diclosulam	Sulfentrazone
1996	Bentazone-sodium	Metsulfuron	Pyraflufen	2026	Bentazone-sodium	Diclosulam	Bromacil
1997	Bentazone-sodium	Metazachlor	Carfentrazone	2027	Bentazone-sodium	Diclosulam	Saflufenacil
1998	Bentazone-sodium	Metazachlor	Flucarbazone	2028	Bentazone-sodium	Diclosulam	Flumioxazin
1999	Bentazone-sodium	Metazachlor	Sulfentrazone	2029	Bentazone-sodium	Diclosulam	Metazachlor
2000	Bentazone-sodium	Metazachlor	Bromacil	2030	Bentazone-sodium	Diclosulam	Pinoxaden
2001	Bentazone-sodium	Metazachlor	Saflufenacil	2031	Bentazone-sodium	Diclosulam	Pyraflufen
2002	Bentazone-sodium	Metazachlor	Flumioxazin	2032	Bentazone-sodium	Penoxsulam	Carfentrazone
2003	Bentazone-sodium	Metazachlor	Metazachlor	2033	Bentazone-sodium	Penoxsulam	Flucarbazone
2004	Bentazone-sodium	Metazachlor	Pinoxaden	2034	Bentazone-sodium	Penoxsulam	Sulfentrazone
2005	Bentazone-sodium	Metazachlor	Pyraflufen	2035	Bentazone-sodium	Penoxsulam	Bromacil

2006	Bentazone-sodium	Pinoxaden	Carfentrazone	2036	Bentazone-sodium	Penoxsulam	Saflufenacil
2007	Bentazone-sodium	Pinoxaden	Flucarbazone	2037	Bentazone-sodium	Penoxsulam	Flumioxazin
2008	Bentazone-sodium	Pinoxaden	Sulfentrazone	2038	Bentazone-sodium	Penoxsulam	Metazachlor
2009	Bentazone-sodium	Pinoxaden	Bromacil	2039	Bentazone-sodium	Penoxsulam	Pinoxaden
2010	Bentazone-sodium	Pinoxaden	Saflufenacil	2040	Bentazone-sodium	Penoxsulam	Pyraflufen
2041	Bromoxynil	Imazamox	Carfentrazone	2071	Bromoxynil	Imazethapyr	Bromacil
2042	Bromoxynil	Imazamox	Flucarbazone	2072	Bromoxynil	Imazethapyr	Saflufenacil
2043	Bromoxynil	Imazamox	Sulfentrazone	2073	Bromoxynil	Imazethapyr	Flumioxazin
2044	Bromoxynil	Imazamox	Bromacil	2074	Bromoxynil	Imazethapyr	Metazachlor
2045	Bromoxynil	Imazamox	Saflufenacil	2075	Bromoxynil	Imazethapyr	Pinoxaden
2046	Bromoxynil	Imazamox	Flumioxazin	2076	Bromoxynil	Imazethapyr	Pyraflufen
2047	Bromoxynil	Imazamox	Metazachlor	2077	Bromoxynil	Carfentrazone	Carfentrazone
2048	Bromoxynil	Imazamox	Pinoxaden	2078	Bromoxynil	Carfentrazone	Flucarbazone
2049	Bromoxynil	Imazamox	Pyraflufen	2079	Bromoxynil	Carfentrazone	Sulfentrazone
2050	Bromoxynil	Imazapic	Carfentrazone	2080	Bromoxynil	Carfentrazone	Bromacil
2051	Bromoxynil	Imazapic	Flucarbazone	2081	Bromoxynil	Carfentrazone	Saflufenacil
2052	Bromoxynil	Imazapic	Sulfentrazone	2082	Bromoxynil	Carfentrazone	Flumioxazin
2053	Bromoxynil	Imazapic	Bromacil	2083	Bromoxynil	Carfentrazone	Metazachlor
2054	Bromoxynil	Imazapic	Saflufenacil	2084	Bromoxynil	Carfentrazone	Pinoxaden
2055	Bromoxynil	Imazapic	Flumioxazin	2085	Bromoxynil	Carfentrazone	Pyraflufen
2056	Bromoxynil	Imazapic	Metazachlor	2086	Bromoxynil	Flucarbazone	Carfentrazone
2057	Bromoxynil	Imazapic	Pinoxaden	2087	Bromoxynil	Flucarbazone	Flucarbazone
2058	Bromoxynil	Imazapic	Pyraflufen	2088	Bromoxynil	Flucarbazone	Sulfentrazone
2059	Bromoxynil	Imazapyr	Carfentrazone	2089	Bromoxynil	Flucarbazone	Bromacil
2060	Bromoxynil	Imazapyr	Flucarbazone	2090	Bromoxynil	Flucarbazone	Saflufenacil
2061	Bromoxynil	Imazapyr	Sulfentrazone	2091	Bromoxynil	Flucarbazone	Flumioxazin
2062	Bromoxynil	Imazapyr	Bromacil	2092	Bromoxynil	Flucarbazone	Metazachlor
2063	Bromoxynil	Imazapyr	Saflufenacil	2093	Bromoxynil	Flucarbazone	Pinoxaden
2064	Bromoxynil	Imazapyr	Flumioxazin	2094	Bromoxynil	Flucarbazone	Pyraflufen
2065	Bromoxynil	Imazapyr	Metazachlor	2095	Bromoxynil	Sulfentrazone	Carfentrazone
2066	Bromoxynil	Imazapyr	Pinoxaden	2096	Bromoxynil	Sulfentrazone	Flucarbazone
2067	Bromoxynil	Imazapyr	Pyraflufen	2097	Bromoxynil	Sulfentrazone	Amicarbazone
2068	Bromoxynil	Imazethapyr	Carfentrazone	2098	Bromoxynil	Sulfentrazone	Bromacil
2069	Bromoxynil	Imazethapyr	Flucarbazone	2099	Bromoxynil	Sulfentrazone	Saflufenacil

2070	Bromoxynil	Imazethapyr	Sulfentrazone	2100	Bromoxynil	Sulfentrazone	Flumioxazin
2101	Bromoxynil	Sulfentrazone	Metazachlor	2131	Bromoxynil	Pyrazosulfuron	Carfentrazone
2102	Bromoxynil	Sulfentrazone	Pinoxaden	2132	Bromoxynil	Pyrazosulfuron	Flucarbazone
2103	Bromoxynil	Sulfentrazone	Pyraflufen	2133	Bromoxynil	Pyrazosulfuron	Sulfentrazone
2104	Bromoxynil	Flucarbazone-sodium	Carfentrazone	2134	Bromoxynil	Pyrazosulfuron	Bromacil
2105	Bromoxynil	Flucarbazone-sodium	Flucarbazone	2135	Bromoxynil	Pyrazosulfuron	Saflufenacil
2106	Bromoxynil	Flucarbazone-sodium	Sulfentrazone	2136	Bromoxynil	Pyrazosulfuron	Flumioxazin
2107	Bromoxynil	Flucarbazone-sodium	Bromacil	2137	Bromoxynil	Pyrazosulfuron	Metazachlor
2108	Bromoxynil	Flucarbazone-sodium	Saflufenacil	2138	Bromoxynil	Pyrazosulfuron	Pinoxaden
2109	Bromoxynil	Flucarbazone-sodium	Flumioxazin	2139	Bromoxynil	Pyrazosulfuron	Pyraflufen
2110	Bromoxynil	Flucarbazone-sodium	Metazachlor	2140	Bromoxynil	Sulfosulfuron	Carfentrazone
2111	Bromoxynil	Flucarbazone-sodium	Pinoxaden	2141	Bromoxynil	Sulfosulfuron	Flucarbazone
2112	Bromoxynil	Flucarbazone-sodium	Pyraflufen	2142	Bromoxynil	Sulfosulfuron	Sulfentrazone
2113	Bromoxynil	Bensulfuron	Carfentrazone	2143	Bromoxynil	Sulfosulfuron	Bromacil
2114	Bromoxynil	Bensulfuron	Flucarbazone	2144	Bromoxynil	Sulfosulfuron	Saflufenacil
2115	Bromoxynil	Bensulfuron	Sulfentrazone	2145	Bromoxynil	Sulfosulfuron	Flumioxazin
2116	Bromoxynil	Bensulfuron	Bromacil	2146	Bromoxynil	Sulfosulfuron	Metazachlor
2117	Bromoxynil	Bensulfuron	Saflufenacil	2147	Bromoxynil	Sulfosulfuron	Pinoxaden
2118	Bromoxynil	Bensulfuron	Flumioxazin	2148	Bromoxynil	Sulfosulfuron	Pyraflufen
2119	Bromoxynil	Bensulfuron	Metazachlor	2149	Bromoxynil	Trifloxysulfuron	Carfentrazone
2120	Bromoxynil	Bensulfuron	Pinoxaden	2150	Bromoxynil	Trifloxysulfuron	Flucarbazone
2121	Bromoxynil	Bensulfuron	Pyraflufen	2151	Bromoxynil	Trifloxysulfuron	Sulfentrazone
2122	Bromoxynil	Halosulfuron	Carfentrazone	2152	Bromoxynil	Trifloxysulfuron	Bromacil
2123	Bromoxynil	Halosulfuron	Flucarbazone	2153	Bromoxynil	Trifloxysulfuron	Saflufenacil
2124	Bromoxynil	Halosulfuron	Sulfentrazone	2154	Bromoxynil	Trifloxysulfuron	Flumioxazin
2125	Bromoxynil	Halosulfuron	Bromacil	2155	Bromoxynil	Trifloxysulfuron	Metazachlor
2126	Bromoxynil	Halosulfuron	Saflufenacil	2156	Bromoxynil	Trifloxysulfuron	Pinoxaden
2127	Bromoxynil	Halosulfuron	Flumioxazin	2157	Bromoxynil	Trifloxysulfuron	Pyraflufen
2128	Bromoxynil	Halosulfuron	Metazachlor	2158	Bromoxynil	Metsulfuron	Carfentrazone
2129	Bromoxynil	Halosulfuron	Pinoxaden	2159	Bromoxynil	Metsulfuron	Flucarbazone

2130	Bromoxynil	Halosulfuron	Pyraflufen	2160	Bromoxynil	Metsulfuron	Sulfentrazone
2161	Bromoxynil	Metsulfuron	Bromacil	2191	Bromoxynil	Pyraflufen	Metazachlor
2162	Bromoxynil	Metsulfuron	Saflufenacil	2192	Bromoxynil	Pyraflufen	Pinoxaden
2163	Bromoxynil	Metsulfuron	Flumioxazin	2193	Bromoxynil	Diclosulam	Carfentrazone
2164	Bromoxynil	Metsulfuron	Metazachlor	2194	Bromoxynil	Diclosulam	Flucarbazone
2165	Bromoxynil	Metsulfuron	Pinoxaden	2195	Bromoxynil	Diclosulam	Sulfentrazone
2166	Bromoxynil	Metsulfuron	Pyraflufen	2196	Bromoxynil	Diclosulam	Bromacil
2167	Bromoxynil	Metazachlor	Carfentrazone	2197	Bromoxynil	Diclosulam	Saflufenacil
2168	Bromoxynil	Metazachlor	Flucarbazone	2198	Bromoxynil	Diclosulam	Flumioxazin
2169	Bromoxynil	Metazachlor	Sulfentrazone	2199	Bromoxynil	Diclosulam	Metazachlor
2170	Bromoxynil	Metazachlor	Bromacil	2200	Bromoxynil	Diclosulam	Pinoxaden
2171	Bromoxynil	Metazachlor	Saflufenacil	2201	Bromoxynil	Diclosulam	Pyraflufen
2172	Bromoxynil	Metazachlor	Flumioxazin	2202	Bromoxynil	Penoxsulam	Carfentrazone
2173	Bromoxynil	Metazachlor	Metazachlor	2203	Bromoxynil	Penoxsulam	Flucarbazone
2174	Bromoxynil	Metazachlor	Pinoxaden	2204	Bromoxynil	Penoxsulam	Sulfentrazone
2175	Bromoxynil	Metazachlor	Pyraflufen	2205	Bromoxynil	Penoxsulam	Bromacil
2176	Bromoxynil	Pinoxaden	Carfentrazone	2206	Bromoxynil	Penoxsulam	Saflufenacil
2177	Bromoxynil	Pinoxaden	Flucarbazone	2207	Bromoxynil	Penoxsulam	Flumioxazin
2178	Bromoxynil	Pinoxaden	Sulfentrazone	2208	Bromoxynil	Penoxsulam	Metazachlor
2179	Bromoxynil	Pinoxaden	Bromacil	2209	Bromoxynil	Penoxsulam	Pinoxaden
2180	Bromoxynil	Pinoxaden	Saflufenacil	2210	Bromoxynil	Penoxsulam	Pyraflufen
2181	Bromoxynil	Pinoxaden	Flumioxazin	2211	Diuron	Imazamox	Carfentrazone
2182	Bromoxynil	Pinoxaden	Metazachlor	2212	Diuron	Imazamox	Flucarbazone
2183	Bromoxynil	Pinoxaden	Pinoxaden	2213	Diuron	Imazamox	Sulfentrazone
2184	Bromoxynil	Pinoxaden	Pyraflufen	2214	Diuron	Imazamox	Bromacil
2185	Bromoxynil	Pyraflufen	Carfentrazone	2215	Diuron	Imazamox	Saflufenacil
2186	Bromoxynil	Pyraflufen	Flucarbazone	2216	Diuron	Imazamox	Flumioxazin
2187	Bromoxynil	Pyraflufen	Sulfentrazone	2217	Diuron	Imazamox	Metazachlor
2188	Bromoxynil	Pyraflufen	Bromacil	2218	Diuron	Imazamox	Pinoxaden
2189	Bromoxynil	Pyraflufen	Saflufenacil	2219	Diuron	Imazamox	Pyraflufen
2190	Bromoxynil	Pyraflufen	Flumioxazin	2220	Diuron	Imazapic	Carfentrazone
2221	Diuron	Imazapic	Flucarbazone	2251	Diuron	Carfentrazone	Saflufenacil
2222	Diuron	Imazapic	Sulfentrazone	2252	Diuron	Carfentrazone	Flumioxazin
2223	Diuron	Imazapic	Bromacil	2253	Diuron	Carfentrazone	Metazachlor
2224	Diuron	Imazapic	Saflufenacil	2254	Diuron	Carfentrazone	Pinoxaden
2225	Diuron	Imazapic	Flumioxazin	2255	Diuron	Carfentrazone	Pyraflufen
2226	Diuron	Imazapic	Metazachlor	2256	Diuron	Flucarbazone	Carfentrazone
2227	Diuron	Imazapic	Pinoxaden	2257	Diuron	Flucarbazone	Flucarbazone

2228	Diuron	Imazapic	Pyraflufen	2258	Diuron	Flucarbazone	Sulfentrazone
2229	Diuron	Imazapyr	Carfentrazone	2259	Diuron	Flucarbazone	Bromacil
2230	Diuron	Imazapyr	Flucarbazone	2260	Diuron	Flucarbazone	Saflufenacil
2231	Diuron	Imazapyr	Sulfentrazone	2261	Diuron	Flucarbazone	Flumioxazin
2232	Diuron	Imazapyr	Bromacil	2262	Diuron	Flucarbazone	Metazachlor
2233	Diuron	Imazapyr	Saflufenacil	2263	Diuron	Flucarbazone	Pinoxaden
2234	Diuron	Imazapyr	Flumioxazin	2264	Diuron	Flucarbazone	Pyraflufen
2235	Diuron	Imazapyr	Metazachlor	2265	Diuron	Sulfentrazone	Carfentrazone
2236	Diuron	Imazapyr	Pinoxaden	2266	Diuron	Sulfentrazone	Flucarbazone
2237	Diuron	Imazapyr	Pyraflufen	2267	Diuron	Sulfentrazone	Amicarbazone
2238	Diuron	Imazethapyr	Carfentrazone	2268	Diuron	Sulfentrazone	Bromacil
2239	Diuron	Imazethapyr	Flucarbazone	2269	Diuron	Sulfentrazone	Saflufenacil
2240	Diuron	Imazethapyr	Sulfentrazone	2270	Diuron	Sulfentrazone	Flumioxazin
2241	Diuron	Imazethapyr	Bromacil	2271	Diuron	Sulfentrazone	Metazachlor
2242	Diuron	Imazethapyr	Saflufenacil	2272	Diuron	Sulfentrazone	Pinoxaden
2243	Diuron	Imazethapyr	Flumioxazin	2273	Diuron	Sulfentrazone	Pyraflufen
2244	Diuron	Imazethapyr	Metazachlor	2274	Diuron	Flucarbazone-sodium	Carfentrazone
2245	Diuron	Imazethapyr	Pinoxaden	2275	Diuron	Flucarbazone-sodium	Flucarbazone
2246	Diuron	Imazethapyr	Pyraflufen	2276	Diuron	Flucarbazone-sodium	Sulfentrazone
2247	Diuron	Carfentrazone	Carfentrazone	2277	Diuron	Flucarbazone-sodium	Bromacil
2248	Diuron	Carfentrazone	Flucarbazone	2278	Diuron	Flucarbazone-sodium	Saflufenacil
2249	Diuron	Carfentrazone	Sulfentrazone	2279	Diuron	Flucarbazone-sodium	Flumioxazin
2250	Diuron	Carfentrazone	Bromacil	2280	Diuron	Flucarbazone-sodium	Metazachlor
2281	Diuron	Flucarbazone-sodium	Pinoxaden	2311	Diuron	Sulfosulfuron	Flucarbazone
2282	Diuron	Flucarbazone-sodium	Pyraflufen	2312	Diuron	Sulfosulfuron	Sulfentrazone
2283	Diuron	Bensulfuron	Carfentrazone	2313	Diuron	Sulfosulfuron	Bromacil
2284	Diuron	Bensulfuron	Flucarbazone	2314	Diuron	Sulfosulfuron	Saflufenacil
2285	Diuron	Bensulfuron	Sulfentrazone	2315	Diuron	Sulfosulfuron	Flumioxazin
2286	Diuron	Bensulfuron	Bromacil	2316	Diuron	Sulfosulfuron	Metazachlor
2287	Diuron	Bensulfuron	Saflufenacil	2317	Diuron	Sulfosulfuron	Pinoxaden

2288	Diuron	Bensulfuron	Flumioxazin	2318	Diuron	Sulfosulfuron	Pyraflufen
2289	Diuron	Bensulfuron	Metazachlor	2319	Diuron	Trifloxysulfuron	Carfentrazone
2290	Diuron	Bensulfuron	Pinoxaden	2320	Diuron	Trifloxysulfuron	Flucarbazone
2291	Diuron	Bensulfuron	Pyraflufen	2321	Diuron	Trifloxysulfuron	Sulfentrazone
2292	Diuron	Halosulfuron	Carfentrazone	2322	Diuron	Trifloxysulfuron	Bromacil
2293	Diuron	Halosulfuron	Flucarbazone	2323	Diuron	Trifloxysulfuron	Saflufenacil
2294	Diuron	Halosulfuron	Sulfentrazone	2324	Diuron	Trifloxysulfuron	Flumioxazin
2295	Diuron	Halosulfuron	Bromacil	2325	Diuron	Trifloxysulfuron	Metazachlor
2296	Diuron	Halosulfuron	Saflufenacil	2326	Diuron	Trifloxysulfuron	Pinoxaden
2297	Diuron	Halosulfuron	Flumioxazin	2327	Diuron	Trifloxysulfuron	Pyraflufen
2298	Diuron	Halosulfuron	Metazachlor	2328	Diuron	Metsulfuron	Carfentrazone
2299	Diuron	Halosulfuron	Pinoxaden	2329	Diuron	Metsulfuron	Flucarbazone
2300	Diuron	Halosulfuron	Pyraflufen	2330	Diuron	Metsulfuron	Sulfentrazone
2301	Diuron	Pyrazosulfuron	Carfentrazone	2331	Diuron	Metsulfuron	Bromacil
2302	Diuron	Pyrazosulfuron	Flucarbazone	2332	Diuron	Metsulfuron	Saflufenacil
2303	Diuron	Pyrazosulfuron	Sulfentrazone	2333	Diuron	Metsulfuron	Flumioxazin
2304	Diuron	Pyrazosulfuron	Bromacil	2334	Diuron	Metsulfuron	Metazachlor
2305	Diuron	Pyrazosulfuron	Saflufenacil	2335	Diuron	Metsulfuron	Pinoxaden
2306	Diuron	Pyrazosulfuron	Flumioxazin	2336	Diuron	Metsulfuron	Pyraflufen
2307	Diuron	Pyrazosulfuron	Metazachlor	2337	Diuron	Metazachlor	Carfentrazone
2308	Diuron	Pyrazosulfuron	Pinoxaden	2338	Diuron	Metazachlor	Flucarbazone
2309	Diuron	Pyrazosulfuron	Pyraflufen	2339	Diuron	Metazachlor	Sulfentrazone
2310	Diuron	Sulfosulfuron	Carfentrazone	2340	Diuron	Metazachlor	Bromacil
2341	Diuron	Metazachlor	Saflufenacil	2371	Diuron	Diclosulam	Pyraflufen
2342	Diuron	Metazachlor	Flumioxazin	2372	Diuron	Penoxsulam	Carfentrazone
2343	Diuron	Metazachlor	Metazachlor	2373	Diuron	Penoxsulam	Flucarbazone
2344	Diuron	Metazachlor	Pinoxaden	2374	Diuron	Penoxsulam	Sulfentrazone
2345	Diuron	Metazachlor	Pyraflufen	2375	Diuron	Penoxsulam	Bromacil
2346	Diuron	Pinoxaden	Carfentrazone	2376	Diuron	Penoxsulam	Saflufenacil
2347	Diuron	Pinoxaden	Flucarbazone	2377	Diuron	Penoxsulam	Flumioxazin
2348	Diuron	Pinoxaden	Sulfentrazone	2378	Diuron	Penoxsulam	Metazachlor
2349	Diuron	Pinoxaden	Bromacil	2379	Diuron	Penoxsulam	Pinoxaden
2350	Diuron	Pinoxaden	Saflufenacil	2380	Diuron	Penoxsulam	Pyraflufen
2351	Diuron	Pinoxaden	Flumioxazin	2381	Linuron	Imazamox	Carfentrazone
2352	Diuron	Pinoxaden	Metazachlor	2382	Linuron	Imazamox	Flucarbazone
2353	Diuron	Pinoxaden	Pinoxaden	2383	Linuron	Imazamox	Sulfentrazone
2354	Diuron	Pinoxaden	Pyraflufen	2384	Linuron	Imazamox	Bromacil
2355	Diuron	Pyraflufen	Carfentrazone	2385	Linuron	Imazamox	Saflufenacil

2356	Diuron	Pyraflufen	Flucarbazone	2386	Linuron	Imazamox	Flumioxazin
2357	Diuron	Pyraflufen	Sulfentrazone	2387	Linuron	Imazamox	Metazachlor
2358	Diuron	Pyraflufen	Bromacil	2388	Linuron	Imazamox	Pinoxaden
2359	Diuron	Pyraflufen	Saflufenacil	2389	Linuron	Imazamox	Pyraflufen
2360	Diuron	Pyraflufen	Flumioxazin	2390	Linuron	Imazapic	Carfentrazone
2361	Diuron	Pyraflufen	Metazachlor	2391	Linuron	Imazapic	Flucarbazone
2362	Diuron	Pyraflufen	Pinoxaden	2392	Linuron	Imazapic	Sulfentrazone
2363	Diuron	Diclosulam	Carfentrazone	2393	Linuron	Imazapic	Bromacil
2364	Diuron	Diclosulam	Flucarbazone	2394	Linuron	Imazapic	Saflufenacil
2365	Diuron	Diclosulam	Sulfentrazone	2395	Linuron	Imazapic	Flumioxazin
2366	Diuron	Diclosulam	Bromacil	2396	Linuron	Imazapic	Metazachlor
2367	Diuron	Diclosulam	Saflufenacil	2397	Linuron	Imazapic	Pinoxaden
2368	Diuron	Diclosulam	Flumioxazin	2398	Linuron	Imazapic	Pyraflufen
2369	Diuron	Diclosulam	Metazachlor	2399	Linuron	Imazapyr	Carfentrazone
2370	Diuron	Diclosulam	Pinoxaden	2400	Linuron	Imazapyr	Flucarbazone
2401	Linuron	Imazapyr	Sulfentrazone	2431	Linuron	Flucarbazone	Flumioxazin
2402	Linuron	Imazapyr	Bromacil	2432	Linuron	Flucarbazone	Metazachlor
2403	Linuron	Imazapyr	Saflufenacil	2433	Linuron	Flucarbazone	Pinoxaden
2404	Linuron	Imazapyr	Flumioxazin	2434	Linuron	Flucarbazone	Pyraflufen
2405	Linuron	Imazapyr	Metazachlor	2435	Linuron	Sulfentrazone	Carfentrazone
2406	Linuron	Imazapyr	Pinoxaden	2436	Linuron	Sulfentrazone	Flucarbazone
2407	Linuron	Imazapyr	Pyraflufen	2437	Linuron	Sulfentrazone	Amicarbazone
2408	Linuron	Imazethapyr	Carfentrazone	2438	Linuron	Sulfentrazone	Bromacil
2409	Linuron	Imazethapyr	Flucarbazone	2439	Linuron	Sulfentrazone	Saflufenacil
2410	Linuron	Imazethapyr	Sulfentrazone	2440	Linuron	Sulfentrazone	Flumioxazin
2411	Linuron	Imazethapyr	Bromacil	2441	Linuron	Sulfentrazone	Metazachlor
2412	Linuron	Imazethapyr	Saflufenacil	2442	Linuron	Sulfentrazone	Pinoxaden
2413	Linuron	Imazethapyr	Flumioxazin	2443	Linuron	Sulfentrazone	Pyraflufen
2414	Linuron	Imazethapyr	Metazachlor	2444	Linuron	Flucarbazone-sodium	Carfentrazone
2415	Linuron	Imazethapyr	Pinoxaden	2445	Linuron	Flucarbazone-sodium	Flucarbazone
2416	Linuron	Imazethapyr	Pyraflufen	2446	Linuron	Flucarbazone-sodium	Sulfentrazone
2417	Linuron	Carfentrazone	Carfentrazone	2447	Linuron	Flucarbazone-sodium	Bromacil
2418	Linuron	Carfentrazone	Flucarbazone	2448	Linuron	Flucarbazone-sodium	Saflufenacil

2419	Linuron	Carfentrazone	Sulfentrazone	2449	Linuron	Flucarbazone-sodium	Flumioxazin
2420	Linuron	Carfentrazone	Bromacil	2450	Linuron	Flucarbazone-sodium	Metazachlor
2421	Linuron	Carfentrazone	Saflufenacil	2451	Linuron	Flucarbazone-sodium	Pinoxaden
2422	Linuron	Carfentrazone	Flumioxazin	2452	Linuron	Flucarbazone-sodium	Pyraflufen
2423	Linuron	Carfentrazone	Metazachlor	2453	Linuron	Bensulfuron	Carfentrazone
2424	Linuron	Carfentrazone	Pinoxaden	2454	Linuron	Bensulfuron	Flucarbazone
2425	Linuron	Carfentrazone	Pyraflufen	2455	Linuron	Bensulfuron	Sulfentrazone
2426	Linuron	Flucarbazone	Carfentrazone	2456	Linuron	Bensulfuron	Bromacil
2427	Linuron	Flucarbazone	Flucarbazone	2457	Linuron	Bensulfuron	Saflufenacil
2428	Linuron	Flucarbazone	Sulfentrazone	2458	Linuron	Bensulfuron	Flumioxazin
2429	Linuron	Flucarbazone	Bromacil	2459	Linuron	Bensulfuron	Metazachlor
2430	Linuron	Flucarbazone	Saflufenacil	2460	Linuron	Bensulfuron	Pinoxaden
2461	Linuron	Bensulfuron	Pyraflufen	2491	Linuron	Trifloxysulfuron	Sulfentrazone
2462	Linuron	Halosulfuron	Carfentrazone	2492	Linuron	Trifloxysulfuron	Bromacil
2463	Linuron	Halosulfuron	Flucarbazone	2493	Linuron	Trifloxysulfuron	Saflufenacil
2464	Linuron	Halosulfuron	Sulfentrazone	2494	Linuron	Trifloxysulfuron	Flumioxazin
2465	Linuron	Halosulfuron	Bromacil	2495	Linuron	Trifloxysulfuron	Metazachlor
2466	Linuron	Halosulfuron	Saflufenacil	2496	Linuron	Trifloxysulfuron	Pinoxaden
2467	Linuron	Halosulfuron	Flumioxazin	2497	Linuron	Trifloxysulfuron	Pyraflufen
2468	Linuron	Halosulfuron	Metazachlor	2498	Linuron	Metsulfuron	Carfentrazone
2469	Linuron	Halosulfuron	Pinoxaden	2499	Linuron	Metsulfuron	Flucarbazone
2470	Linuron	Halosulfuron	Pyraflufen	2500	Linuron	Metsulfuron	Sulfentrazone
2471	Linuron	Pyrazosulfuron	Carfentrazone	2501	Linuron	Metsulfuron	Bromacil
2472	Linuron	Pyrazosulfuron	Flucarbazone	2502	Linuron	Metsulfuron	Saflufenacil
2473	Linuron	Pyrazosulfuron	Sulfentrazone	2503	Linuron	Metsulfuron	Flumioxazin
2474	Linuron	Pyrazosulfuron	Bromacil	2504	Linuron	Metsulfuron	Metazachlor
2475	Linuron	Pyrazosulfuron	Saflufenacil	2505	Linuron	Metsulfuron	Pinoxaden
2476	Linuron	Pyrazosulfuron	Flumioxazin	2506	Linuron	Metsulfuron	Pyraflufen
2477	Linuron	Pyrazosulfuron	Metazachlor	2507	Linuron	Metazachlor	Carfentrazone
2478	Linuron	Pyrazosulfuron	Pinoxaden	2508	Linuron	Metazachlor	Flucarbazone
2479	Linuron	Pyrazosulfuron	Pyraflufen	2509	Linuron	Metazachlor	Sulfentrazone
2480	Linuron	Sulfosulfuron	Carfentrazone	2510	Linuron	Metazachlor	Bromacil
2481	Linuron	Sulfosulfuron	Flucarbazone	2511	Linuron	Metazachlor	Saflufenacil
2482	Linuron	Sulfosulfuron	Sulfentrazone	2512	Linuron	Metazachlor	Flumioxazin
2483	Linuron	Sulfosulfuron	Bromacil	2513	Linuron	Metazachlor	Metazachlor

2484	Linuron	Sulfosulfuron	Saflufenacil	2514	Linuron	Metazachlor	Pinoxaden
2485	Linuron	Sulfosulfuron	Flumioxazin	2515	Linuron	Metazachlor	Pyraflufen
2486	Linuron	Sulfosulfuron	Metazachlor	2516	Linuron	Pinoxaden	Carfentrazone
2487	Linuron	Sulfosulfuron	Pinoxaden	2517	Linuron	Pinoxaden	Flucarbazone
2488	Linuron	Sulfosulfuron	Pyraflufen	2518	Linuron	Pinoxaden	Sulfentrazone
2489	Linuron	Trifloxysulfuron	Carfentrazone	2519	Linuron	Pinoxaden	Bromacil
2490	Linuron	Trifloxysulfuron	Flucarbazone	2520	Linuron	Pinoxaden	Saflufenacil
2521	Linuron	Pinoxaden	Flumioxazin	2536	Linuron	Diclosulam	Bromacil
2522	Linuron	Pinoxaden	Metazachlor	2537	Linuron	Diclosulam	Saflufenacil
2523	Linuron	Pinoxaden	Pinoxaden	2538	Linuron	Diclosulam	Flumioxazin
2524	Linuron	Pinoxaden	Pyraflufen	2539	Linuron	Diclosulam	Metazachlor
2525	Linuron	Pyraflufen	Carfentrazone	2540	Linuron	Diclosulam	Pinoxaden
2526	Linuron	Pyraflufen	Flucarbazone	2541	Linuron	Diclosulam	Pyraflufen
2527	Linuron	Pyraflufen	Sulfentrazone	2542	Linuron	Penoxsulam	Carfentrazone
2528	Linuron	Pyraflufen	Bromacil	2543	Linuron	Penoxsulam	Flucarbazone
2529	Linuron	Pyraflufen	Saflufenacil	2544	Linuron	Penoxsulam	Sulfentrazone
2530	Linuron	Pyraflufen	Flumioxazin	2545	Linuron	Penoxsulam	Bromacil
2531	Linuron	Pyraflufen	Metazachlor	2546	Linuron	Penoxsulam	Saflufenacil
2532	Linuron	Pyraflufen	Pinoxaden	2547	Linuron	Penoxsulam	Flumioxazin
2533	Linuron	Diclosulam	Carfentrazone	2548	Linuron	Penoxsulam	Metazachlor
2534	Linuron	Diclosulam	Flucarbazone	2549	Linuron	Penoxsulam	Pinoxaden
2535	Linuron	Diclosulam	Sulfentrazone	2550	Linuron	Penoxsulam	Pyraflufen

[0075] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) pyraflufen; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0076] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) diclosulam; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0077] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) bentazone or bentazone-sodium;

(b) penoxsulam; and

(c) a chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

[0078] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) ametryn;

(b) sulfentrazone; and

(c) amicarbazone.

[0079] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) ametryn;

(b) sulfentrazone;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0080] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) diuron;

(b) sulfentrazone; and

(c) amicarbazone.

[0081] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) diuron;

(b) sulfentrazone;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0082] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) ametryn;

(b) halosulfuron-methyl; and

(c) amicarbazone.

[0083] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) ametryn;

(b) halosulfuron-methyl;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0084] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) diuron;

(b) halosulfuron-methyl; and

(c) amicarbazone.

[0085] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) diuron;

(b) halosulfuron-methyl;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0086] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) ametryn;

(b) imazapic; and

(c) amicarbazone.

[0087] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) ametryn;

(b) imazapic;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0088] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) diuron;

(b) imazapic; and

(c) amicarbazone.

[0089] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) diuron;

(b) imazapic;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0090] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) ametryn;

(b) trifloxysulfuron-sodium; and

(c) amicarbazone.

[0091] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) ametryn;

(b) trifloxysulfuron-sodium;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0092] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) ametryn;

(b) indaziflam; and

(c) amicarbazone.

[0093] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) ametryn;

(b) indaziflam;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0094] In an embodiment, the present invention provides an herbicidal combination comprising:

(a) diuron;

(b) indaziflam; and

(c) amicarbazone.

[0095] In an embodiment, the present invention provides an herbicidal composition comprising:

(a) diuron;

(b) indaziflam;

(c) amicarbazone; and

(d) at least one agrochemically acceptable excipient.

[0096] In an embodiment, each individual row appearing in Table 1 below represents the combinations in an embodiment of the present invention.

[0097] In an embodiment, the present invention may provide a combination comprising the three herbicides as listed in each individual row from row 1 to row 2550 in Table 1.

[0098] In an embodiment, the present invention may provide a composition comprising the three herbicides as listed in each individual row from row 1 to row 2550 in theTable 1, and at least one agrochemically acceptable excipient.

[0099] These combinations may be applied to the locus of the weeds, in an herbicidally effective amount.

[0100] In an embodiment, the combination of the present invention may be combined with at least another active ingredient such as those selected from but not limited to herbicide, insecticide, fungicide, biological agent, plant growth activator, fertilizers, or combinations thereof.

[0101] Thus, in an embodiment, the combination of the present invention may be combined with another herbicide. Exemplary herbicides that may be combined with the combination of the present invention may be selected from but not limited to herbicides belonging to classes such as EPSP synthase inhibitors, synthetic auxins, auxin transport inhibitors, glutamate synthase inhibitors, HPPD inhibitors, lipid synthesis inhibitors, long chain fatty acid inhibitors, as well as herbicides with unknown modes of action.

[0102] In an embodiment, the total amount of photosystem II inhibitor in the composition may be in the range of 0.1 to 99% by weight, preferably 0.2 to 90% by weight.

[0103] In an embodiment, the total amount of ALS inhibitor in the composition may be in the range of 0.1 to 99% by weight.

[0104] In an embodiment, the total amount of chlorophyll and heme biosynthesis inhibitor in the composition may be in the range of 0.1 to 99% by weight.

[0105] In an embodiment, the constituent herbicides of the combination of the present invention may be admixed in ratio of (1-80): (1-80): (1-80) of the three herbicides respectively.

[0106] The herbicidal combination of the present invention maybe used to target weeds among the crops such corn, rice, wheat, barley, rye, oat, sorghum, cotton, soybean, peanut, buckwheat, beet, rapeseed, sunflower, sugar cane, tobacco, etc.; vegetables: solanaceous vegetables such as eggplant, tomato, pimento, pepper, potato, etc., cucurbit vegetables such as cucumber, pumpkin, zucchini, water melon, melon, squash, etc., cruciferous vegetables such as radish, white turnip, horseradish, kohlrabi, Chinese cabbage, cabbage, leaf mustard, broccoli, cauliflower, etc., asteraceous vegetables such as burdock, crown daisy, artichoke, lettuce, etc, liliaceous vegetables such as green onion, onion, garlic, and asparagus, ammiaceous vegetables such as carrot, parsley, celery, parsnip, etc., chenopodiaceous vegetables such as spinach, Swiss chard, etc., lamiaceous vegetables such as Perilla frutescens, mint, basil, etc, strawberry, sweet potato, Dioscorea japonica, colocasia, etc., flowers, foliage plants, turf grasses, fruits: pome fruits such apple, pear, quince, etc, stone fleshy fruits such as peach, plum, nectarine, Prunus mume, cherry fruit, apricot, prune, etc., citrus fruits such as orange, lemon, rime, grapefruit, etc., nuts such as chestnuts, walnuts, hazelnuts, almond, pistachio, cashew nuts, macadamia nuts, etc. berries such as blueberry, cranberry, blackberry, raspberry, etc., grape, kaki fruit, olive, plum, banana, coffee, date palm, coconuts, etc. , trees other than fruit trees; tea, mulberry, flowering plant, trees such as ash, birch, dogwood, Eucalyptus, Ginkgo biloba, lilac, maple, Quercus, poplar, Judas tree, Liquidambar formosana, plane tree, zelkova, Japanese arborvitae, fir wood, hemlock, juniper, Pinus, Picea, and Taxus cuspidate, and the like.

[0107] In an embodiment, the composition of the present invention may contain agriculturally acceptable adjuvants, carriers, diluents, emulsifiers, fillers, anti-foaming agents, thickening agents, anti-freezing agents, freezing agents and the like. The compositions may be either solid or liquids. They can be solids, such as, for example, dusts, granules, water-

dispersible granules, microcapsules or wettable powders, or liquids, such as, for example, emulsifiable concentrates, solutions, emulsions or suspensions, ZC formulations. They can also be provided as a pre-mix or tank mixed.

[0108] Exemplary agricultural adjuvants and carriers may include, but are not limited to, crop oil concentrates; methylated seed oils, emulsified methylated seed oil, nonylphenol ethoxylate; benzylcocoalkyldimethyl quaternary ammonium salt; blend of petroleum hydrocarbon, alkyl esters, organic acid, and anionic surfactant; C9-C11 alkylpolyglycoside; phosphated alcohol ethoxylate; natural primary alcohol (C12-C16) ethoxylate; di-sec-butylphenol EO-PO block copolymer; polysiloxane-methyl cap; nonylphenol ethoxylate, urea ammonium nitrate; tridecyl alcohol (synthetic) ethoxylate (8EO); tallow amine ethoxylate ; PEG(400) dioleate-99, alkyl sulfates, such as diethanolammonium lauryl sulfate; alkylarylsulfonate salts, such as calcium dodecylbenzenesulfonate; alkylphenol-alkylene oxide addition products, such as nonylphenol-C_{18} ethoxylate; alcohol-alkylene oxide addition products, such as tridecyl alcohol-C_{16} ethoxylate; soaps, such as sodium stearate; alkyl-naphthalene-sulfonate salts, such as sodium dibutylnaphthalenesulfonate; dialkyl esters of sulfosuccinate salts, such as sodium di(2-ethylhexyl)sulfosuccinate; sorbitol esters, such as sorbitol oleate; quaternary amines, such as lauryl trimethylammonium chloride; polyethylene glycol esters of fatty acids, such as polyethylene glycol stearate; block copolymers of ethylene oxide and propylene oxide; salts of mono and dialkyl phosphate esters; vegetable or seed oils such as soybean oil, rapeseed/canola oil, olive oil, castor oil, sunflower seed oil, coconut oil, corn oil, cottonseed oil, linseed oil, palm oil, peanut oil, safflower oil, sesame oil, tung oil and the like; and esters of the above vegetable oils, and in certain embodiments, methyl esters.

[0109] Exemplary liquid carriers that may be employed in a composition of the present invention may include water or organic solvents. The organic solvents include, but are not limited to, petroleum fractions or hydrocarbons such as mineral oil, aromatic solvents, paraffinic oils, and the like; vegetable oils such as soybean oil, rapeseed oil, olive oil, castor oil, sunflower seed oil, coconut oil, corn oil, cottonseed oil, linseed oil, palm oil, peanut oil, safflower oil, sesame oil, tung oil and the like; esters of the above vegetable oils; esters of monoalcohols or dihydric, trihydric, or other lower polyalcohols (4-6 hydroxy containing), such as 2-ethyl hexyl stearate, n-butyl oleate, isopropyl myristate, propylene glycol dioleate, di-octyl succinate, di-butyl adipate, di-octyl phthalate and the like; esters of mono, di and polycarboxylic acids and the like. Organic solvents include, but are not limited to toluene,

xylene, petroleum naphtha, crop oil, acetone, methyl ethyl ketone, cyclohexanone, trichloroethylene, perchloroethylene, ethyl acetate, amyl acetate, butyl acetate, propylene glycol monomethyl ether and diethylene glycol monomethyl ether, methyl alcohol, ethyl alcohol, isopropyl alcohol, amyl alcohol, ethylene glycol, propylene glycol, glycerine, N-methyl-2-pyrrolidinone, N,N-dimethyl alkylamides, dimethyl sulfoxide.

[0110] Solid carriers that may be employed in the compositions of the present invention may include but are not limited to attapulgite, pyrophyllite clay, silica, kaolin clay, kieselguhr, chalk, diatomaceous earth, lime, calcium carbonate, bentonite clay, Fuller's earth, talc, cottonseed hulls, wheat flour, soybean flour, pumice, wood flour, walnut shell flour, lignin, cellulose etc.

[0111] The target weeds may be selected from Alopecurus myosuroides Huds. (blackgrass, ALOMY), Amaranthus palmeri (Palmer amaranth, AMAPA) Amaranthus viridis (slender amaranth, AMAVI), Avena fatua (wild oat, AVEFA), Brachiaria decumbens Stapf. or Urochloa decumbens (Stapf), Brachiaria brizantha or Urochloa brizantha, Brachiaria platyphylla (Groseb.) Nash or Urochloa platyphylla (broadleaf signalgrass, BRAPP), Brachiaria plantaginea. or Urochloa plantaginea (alexandergrass, BRAPL), Cenchrus echinatus (southern sandbur, CENEC), Digitaria horizontalis Willd. (Jamaican crabgrass, DIGHO), Digitaria insularis (sourgrass, TRCIN), Digitaria sanguinalis (large crabgrass, DIGSA), Echinochloa crus-galli (barnyardgrass, ECHCG), Echinochloa colonum (junglerice, ECHCO), Eleusine indica Gaertn. (goosegrass, ELEIN), Lolium multiflorum Lam. (Italian ryegrass, LOLMU), Panicum dichotomiflorum Michx. (fall panicum, PANDI), Panicum miliaceum L. (wild-proso millet, PANMI), Sesbania exaltata (hemp sesbania, SEBEX), Setaria faberi Herrm. (giant foxtail, SETFA), Setaria viridis (green foxtail, SETVI), Sorghum halepense (Johnsongrass, SORHA), Sorghum bicolor, Moench ssp., Arundinaceum (shattercane, SORVU), Cyperus esculentus (yellow nutsedge, CYPES), Cyperus rotundus (purple nutsedge, CYPRO), Abutilon theophrasti (velvetleaf, ABUTH), Amaranthus species (pigweeds and amaranths, AMASS), Ambrosia artemisiifolia L. (common ragweed, AMBEL), Ambrosia psilostachya DC. (western ragweed, AMBPS), Ambrosia trifida (giant ragweed, AMBTR), Anoda cristata (spurred anoda, ANVCR), Asclepias syriaca (common milkweed, ASCSY), Bidens pilosa (hairy beggarticks, BIDPI), Borreria species (BOISS), Borreria alata or Spermacoce alata Aubl. or Spermacoce latifolia (broadleaf buttonweed, BOILF), Chenopodium album L. (common lambsquarters, CHEAL), Cirsium arvense (Canada thistle, CIRAR), Commelina benghalensis (tropical spiderwort, COMBE), Datura

stramonium (jimsonweed, DATST), Daucus carota (wild carrot, DAUCA), Euphorbia heterophylla (wild poinsettia, EPHHL), Euphorbia hirta or Chamaesyce hirta (garden spurge, EPHHI), Euphorbia dentata Michx. (toothed spurge, EPHDE), Erigeron bonariensis or Conyza bonariensis (hairy fleabane, ERIBO), Erigeron canadensis or Conyza canadensis (horseweed, ERICA), Conyza sumatrensis (tall fleabane, ERIFL), Helianthus annuus (common sunflower, HELAN), Jacquemontia tamnifolia (smallflower morningglory, IAQTA), Ipomoea hederacea (ivyleaf morningglory, IPOHE), Ipomoea lacunosa (white morningglory, IPOLA), Lactuca serriola (prickly lettuce, LACSE), Portulaca oleracea (common purslane, POROL), Richardia species (pusley, RCHSS), Salsola tragus (Russian thistle, SASKR), Sida species (sida, SIDSS), Sida spinosa (prickly sida, SIDSP), Sinapis arvensis (wild mustard, SINAR), Solanum ptychanthum (eastern black nightshade, SOLPT), Tridax procumbens (coat buttons, TRQPR), Rumex dentatus (RUMDE)or Xanthium strumarium (common cocklebur, XANST).

[0112] In an embodiment, the combinations of the present invention may be applied to the locus either simultaneously or sequentially, such that the three herbicides may be applied in a tank mix or as a pre-mixed composition.

[0113] Thus, in this aspect, the present invention provides a tank-mix combination comprising:

(a) at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0114] In an embodiment, the present invention may be applied either pre or post emergent weed applications. The advantage of the combination is surprisingly good residual effects, when applied in pre-emergent as well as quick knockdown when applied post emergent leading to quick control of weeds. In another embodiment, the present invention may be applied for quick burndown of weeds. Another advantage is quick knockdown in the case of burndown.

[0115] The method of control of the present invention may be carried out by spraying the suggested tank mixes, or the individual herbicides may be formulated as a kit-of-parts containing various components that may be mixed as instructed prior to spraying.

[0116] In an embodiment, the present invention provides a kit-of-parts comprising a plurality of components, wherein said plurality of components comprises:

(a) a first component comprising at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) a second component comprising at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) a third component comprising at least one chlorophyll and heme biosynthesis inhibitor herbicide.

[0117] In an embodiment, the kit-of-parts comprises an instructions manual, said instructions manual comprising instructions directing a user to admix the components before being used.

[0118] In an embodiment, the components of the present invention may be packaged such that the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynthesis inhibitor may be packaged separately and then tank mixed before the spraying.

[0119] In another embodiment, the components of the present invention may be packaged such that the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynthesis inhibitor may be packaged separately, whereas other additives are packaged separately, such that the two maybe tank mixed at the time of spraying.

[0120] In another embodiment, the components of the present invention may be packaged as composition such that the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynthesis inhibitor are formulated into one composition and other additives are packaged separately, such that the two maybe tank mixed at the time of spraying.

[0121] Surprisingly, it has been found by the present inventors, that the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynthesis inhibitor of the present invention, when applied individually, was ineffective in the control of weeds, but

demonstrated excellent synergistic control on when applied together. The combination controlled the weed both pre and post emergently. As will be demonstrated by the examples, the combination of clodinafop propargyl, the first herbicide and the second herbicide synergistically controlled broadleaf as well as grasses and sedges at a locus. The current invention therefore provides advantageous methods of controlling weeds both pre and post emergently. The present method also provides a broader spectrum of controlling weeds that helps in resistance management, thus preventing the weed from becoming resistant to either of the herbicides while providing a broader spectrum of control at lower use rates.

[0122] It was also found that bentazon alone did not provide sufficient weed control of yellow nutsedge. The addition of halosulfuron to sulfentrazone antagonized initial yellow nutsedge control compared to sulfentrazone alone; thereby, requiring a second application to achieve >90% control. In an aspect, the combinaitons described herein can provide >90% weed contraol after a single application.

[0123] It was surprisingly also found that the presence of an ALS inhibitor safened the herbicidal effect of the combination of a photosystem II inhibitor, and a chlorophyll and heme biosynthesis inhibitor. Therefore, the combination of the present invention was a non-phytotoxic combination providing a synergistic weed control.

Examples:

[0124] An exemplary combination according to the invention was used for sedge and broadleaf weed control for agricultural crops, turf, ornamentals, and landscape. The exemplary combination was used for the post-emergence control of sedges, as well as the control/ suppression of various broadleaf and grassy weeds.

[0125] A field trial was conducted to evaluate th eeffectiveness of the combinations of three active ingredients according to the invention when used post emergence, at different rates, compared to industry standards - stand alone and 2 way mixture of compoundsfor efficacy of yellow nutsedge. The active ingredient combination used in the trial was bentazon+halosulfuron+sulfentrazone. The trial was conducted in Blacksburg, VA and was initiated on June 6 under Protocol # BRLM-62-US-VA-18-10-BTC. The plots were in fallow area primarily covered with yellow nutsedge and tall fescue, and were sprayed at 4 week intervals. (2 applications total). The application dosages of the herbicides, when used in isolation and when used in the combinations were as follows:

TABLE 2

S No.	Combination	Concentration used	Formulation type	Rate
1	Bentazon	4 lb/gal	L	0.375 oz ai/1000 sq ft
2	Sulfentrazone	4.16 lb/gal	L	0.048 oz ai/1000 sq ft
3	Halosulfuron-methyl	75%	SC	0.024 oz ai/1000 sq ft
4	Bentazon + Halosulfuron-methyl + Sulfentrazone	4 lb/gal + 75% SC + 4.16 lb/gal	L	0.125 + 0.008 + 0.016 oz ai/1000 sq ft

The following results were noted from these trials:

TABLE 3

S No.	Herbicide used	Dosage	Yellow nut sedge at 29 DAT (Percentage Control)		
			13/06	20/6	05/07
1	Untreated	-	0	0	0
2	Bentazone	1X	65	75	76
3	Sulfentrazone	1X	58	73	75
4	Halosulfuron	1X	36	60	81
5	Bentazone + Sulfentrazone	0.5X	61	65	49
6	Bentazone + Halosulfuron	0.5X	50	73	84
7	Sulfentrazone + Halosulfuron	0.5X	48	65	85
8	Bentazone + Sulfentrazone + Halosulfuron	0.33X	56	74	90

The percentage weed cover in these treatment trials were observed and tabulated as hereunder:

TABLE 4

S No.	Herbicide used	Dosage	Yellow nut sedge at 29 DAT (Percentage weed cover)		
			13/06	20/6	05/07
1	Untreated	-	50	49	59
2	Bentazone	1X	40	8	10
3	Sulfentrazone	1X	44	11	9
4	Halosulfuron	1X	50	16	8
5	Bentazone + Sulfentrazone	0.5X	43	16	21
6	Bentazone + Halosulfuron	0.5X	38	10	5
7	Sulfentrazone + Halosulfuron	0.5X	50	14	6
8	Bentazone + Sulfentrazone + Halosulfuron	0.33X	53	7	3

[0126] It was thus found that the combination of Halosulfuron, Bentazon and Sulfentrazone at each rate, provided superior control of yellow nutsedge compared to each individual product and 2 way mixes. In an aspect, the three-part combinations descbed herein provide improved weed control, measured for example as burn down and/or residual control, compared to any combination of 2 of the components. A clear rate response with the three-way combination was seen from low to high application rates. The three-way combination provided faster burn down and longer residual control. The use of this three way combination, with three different modes of action, helped provide resistance management and superior weed control

[0127] Without wishing to be bound by theory, the present inventors believe that there were several ways to suppress, but not fully control, the primary varieties of plants from the sedge family. Bentazon and sulfentrazone provided fairly rapid burn down of some of the sedges, while halosulfuron had a delayed response of up to four weeks before plant necrosis began to take place. As a result, multiple sprays were required throughout the growing season to provide adequate control.

[0128] Surprisingly, the combinations of the present invention provided quick suppression/control of the sedges, broadleaves and grassy weeds and allowed for longer residual control. The use of the three herbicidal components of the present invention having three different modes of action prevented sedges, broadleaves and grassy weeds to mature into a reproductive state. In an aspect, a single application of the combinations described herein provides effective weed control for an enire growing season.

[0129] The use of the terms "a" and "an" and "the" and similar referents (especially in the context of the following claims) are to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. The terms first, second etc. as used herein are not meant to denote any particular ordering, but simply for convenience to denote a plurality of, for example, layers. The terms "comprising", "having", "including", and "containing" are to be construed as open-ended terms (i.e., meaning "including, but not limited to") unless otherwise noted. Recitation of ranges of values are merely intended to serve as a shorthand method of referring individually to each separate value falling within the range, unless otherwise indicated herein, and each separate value is incorporated into the specification as if it were individually recited herein. The endpoints of all ranges are included within the range and independently combinable. All methods described herein can be performed in a suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., "such as"), is intended merely to better illustrate the invention and does not pose a limitation on the scope of the invention unless otherwise claimed. No language in the specification should be construed as indicating any non-claimed element as essential to the practice of the invention as used herein.

[0130] While the foregoing written description of the invention enables one of ordinary skill to make and use what is considered presently to be the best mode thereof, those of ordinary skill will understand and appreciate the existence of variations, combinations, and equivalents of the specific embodiment, method, and examples herein. The invention should therefore not be limited by the above described embodiment, method, and examples, but by all embodiments and methods within the scope and spirit of the invention.

Claims:

1. An herbicidal combination comprising a photosystem II inhibitor, an acetolactate synthase (ALS) inhibitor, and a chlorophyll and heme biosynthesis inhibitor.

2. The combination as claimed in of claim 1, wherein:

the photosystem II inhibitor is selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide; and

the ALS inhibitor is selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide.

3. The combination of claim 2, wherein the photosystem II inhibitor is:

a phenylcarbamate herbicide selected from the group consisting of barban, BCPC), carbasulam, carbetamide, CEPC), chlorbufam, chlorpropham, (RS)-2-chloro-1-methylethyl 3-chlorocarbanilate (CPPC), desmedipham, phenisopham, phenmedipham, phenmedipham-ethyl, propham, and methyl(3,4 dichlorophenyl)carbamate;

a triazine herbicide selected from the group consisting of dipropetryn, fucaojing, trihydroxytriazine, atrazine, chlorazine, cyanazine, cyprazine, eglinazine, ipazine, mesoprazine, procyazine, proglinazine, propazine, sebuthylazine, simazine, terbuthylazine, trietazine, indaziflam, triaziflam, atraton, methometon, prometon, secbumeton, simeton, terbumeton, ametryn, aziprotryne, cyanatryn, desmetryn, dimethametryn, methoprotryne, propmetryn, simetryn, and terbutryn;

a triazinone herbicide selected from the group consisting of ametridione, amibuzin, ethiozin, hexazinone, isomethiozin, metamitron, metribuzin, and trifludimoxazin;

a uracil herbicide selected from the group consisting of benzfendizone, bromacil, butafenacil, flupropacil, isocil, lenacil, saflufenacil, terbacil, and tiafenacil;

a benzothiazole herbicide selected from the group consisting of benazolin, benzthiazuron, fenthiaprop, mefenacet, and methabenzthiazuron;

a benzothiadiazole herbicide which is bentazone or bentazone-sodium;

a nitrile herbicide selected from the group consisting of bromobonil, bromoxynil, chloroxynil, cyclopyranil, dichlobenil, iodobenil, ioxynil and pyraclonil; or

a phenylurea herbicide selected from the group consisting of anisuron, buturon, chlorbromuron, chloreturon, chlorotoluron, chloroxuron, daimuron, difenoxuron, dimefuron,

diruon, fenuron, fluometuron, fluothiuron, isoproturon, linuron, methiruon, methyldymuron, metobenzuron, metobromuron, metoxuron, monolinuron, monuron, neburon, parafluron, phenobenzuron, siduron, tetrafluron, and thidiazuron.

4. The combination of claim 2, wherein the ALS inhibitor herbicide is:

an imidazolinone herbicide selected from the group consisting of imazamethabenz, imazamox, imazapic, imazapyr, imazaquin, and imazethapyr;

a triazolone herbicide selected from the group consisting of amicarbazone, bencarbazone, carfentrazone, flucarbazone, ipfencarbazone, propoxycarbazone, sulfentrazone, and thiencarbazone;

a sulfonylamino-carbonyltriazolinone herbicide selected from the group consisting of flucarbazone, and flucarbazone-sodium;

a sulfonylurea herbicide selected from the group consisting of amidosulfuron, azimsulfuron, bensulfuron, chlorimuron, cyclosulfamuron, ethoxysulfuron, flazasulfuron, flucetosulfuron, flupyrsulfuron, foramsulfuron, halosulfuron, imazosulfuron, mesosulfuron, metazosulfuron, methiopyrisulfuron, monosulfuron, nicosulfuron, orthosulfamuron, oxasulfuron, primisulfuron, propyrisulfuron, pyrazosulfuron, rimsulfuron, sulfometuron, sulfosulfuron, trifloxysulfuron, zuomihuanglong, chlorsulfuron, cinosulfuron, ethametsulfuron, iodosulfuron, iofensulfuron, metsulfuron, prosulfuron, thifensulfuron, triasulfuron, tribenuron, trflusulfuron, and tritosulfuron;

a pyrazole herbicide selected from the group consisting of azimsulfuron, cyclopyranil, difenzoquat, halosulfuron, flazasulfuron, metazachlor, metazosulfuron, pyrazosulfuron, pyraclonil, pyroxasulfone, benzofenap, pyrasulfotole, pyrazolynate, pyrazoxyfen, tolpyralate, topramezone, fluazolate, nipyraclofen, pinoxaden, and pyraflufen; or

a triazolopyrimidine herbicide selected from the group consisting of chloransulam, diclosulam, florasulam, flumetsulam, metosulam, penoxsulam, and pyroxsulam.

5. The combination as claimed in any one of the preceding claims, wherein the photosystem II inhibitor is selected from the group consisting of chlorpropham, desmedipham, phenmedipham, phenmedipham-ethyl, atrazine, hexazinone, metamitron, metribuzin, bromacil, saflufenacil, bentazone, bentazone-sodium, bromoxynil, diruon, and linuron.

6. The combination as claimed in any one of the preceding claims, wherein the ALS inhibitor herbicide is selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, flucarbazone, sulfentrazone, flucarbazone, amicarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, flazasulfuron, sulfosulfuron,

trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam.

7. The combination as claimed in any one of the preceding claims, wherein the chlorophyll and heme biosynthesis inhibitor is:

a triazolone herbicide selected from the group consisting of amicarbazone, bencarbazone, carfentrazone, flucarbazone, ipfencarbazone, propoxycarbazone, sulfentrazone, and thiencarbazone;

a uracil herbicide selected from the group consisting of benzfendizone, bromacil, butafenacil, flupropacil, isocil, lenacil, saflufenacil, terbacil and tiafenacil;

a dicarboximide herbicide selected from the group consisting of cinidon-ethyl, flumezin, flumiclorac, flumioxazin, and flumipropyn; or

a pyrazole herbicide selected from the group consisting of azimsulfuron, cyclopyranil, difenzoquat, halosulfuron, metazachlor, flazasulfuron, metazosulfuron, pyrazosulfuron, pyraclonil, pyroxasulfone, benzofenap, pyrasulfotole, pyrazolynate, pyrazoxyfen, tolpyralate, topramezone, fluazolate, nipyraclofen, pinoxaden, and pyraflufen.

8. The combination as claimed in any one of the preceding claims, wherein the chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, amicarbazone, pinoxaden, and pyraflufen.

9. An herbicidal combination comprising:

(a) a photosystem II inhibitor selected from the group consisting of chlorpropham, desmedipham, phenmedipham, phenmedipham-ethyl, atrazine, hexazinone, metamitron, metribuzin, bromacil, saflufenacil, bentazone, bentazone-sodium, bromoxynil, diruon, and linuron;

(b) an ALS inhibitor selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, amicarbazone, flucarbazone, sulfentrazone, flucarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, sulfosulfuron, flazasulfuron, trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam; and

(c) a chlorophyll and heme biosynthesis inhibitor selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

10. The combination as claimed in any one of the preceding claims, wherein the photosystem II inhibitor, the ALS inhibitor and the chlorophyll and heme biosynethesis inhibitor herbicides are not the same.

11. The combination as claimed in any one of the preceding claims comprising:

(a) the photosystem II inhibitor selected from bentazone and bentazone-sodium;

(b) the ALS inhibitor selected from the group consisting of imazamox, imazapic, imazapyr, imazethapyr, carfentrazone, amicarbazone, flucarbazone, sulfentrazone, flucarbazone, flucarbazone-sodium, bensulfuron, halosulfuron, pyrazosulfuron, flazasulfuron, sulfosulfuron, trifloxysulfuron, metsulfuron, metazachlor, pinoxaden, pyraflufen, diclosulam, and penoxsulam; and

(c) the chlorophyll and heme biosynthesis inhibitor is selected from the group consisting of carfentrazone, amicarbazone, flucarbazone, sulfentrazone, bromacil, saflufenacil, flumioxazin, metazachlor, pinoxaden, and pyraflufen.

12. The combination as claimed in any one of the preceding claims, wherein the combination comprises at least three herbicides listed as combinations in 1 – 2550 of table 1.

13. An herbicidal combination comprising bentazon, sulfentrazone, and halosulfuron.

14. A kit-of-parts comprising a plurality of components, wherein said plurality of components comprises:

(a) a first component comprising at least one photosystem II inhibitor selected from the group consisting of (i) a phenylcarbamate herbicide; (ii) a triazine herbicide; (iii) a triazinone herbicide; (iv) an uracil herbicide; (v) a benthiadiazole herbicide; (vi) a nitrile herbicide; and (vii) an urea herbicide;

(b) a second component comprising at least one ALS inhibitor selected from the group consisting of (i) an imidazolinone herbicide; (ii) a sulfonylamino-carbonyltriazolinone herbicide; (iii) a sulfonylurea herbicide; (iv) a pyrazole herbicide; (v) a triazolpyramidine herbicide; and (vi) a triazolone herbicide; and

(c) a third component comprising at least one chlorophyll and heme biosynthesis inhibitor herbicide.

15. A method of controlling weeds at a locus, said method comprising applying to the locus a combination comprising a photosystem II inhibitor, an ALS inhibitor, and a chlorophyll and heme biosynthesis inhibitor.

16. The composition of claim 1, further comprising at least one agrochemically acceptable excipient.

17. A method of increasing yield in a crop by application to the crop a composition comprising a photosystem II inhibitor, an ALS inhibitor, and a chlorophyll and heme biosynthesis inhibitor.

18. A method of improving the plant health, said method comprising application at the locus of the plant a composition comprising a photosystem II inhibitor, an ALS inhibitor, and a chlorophyll and heme biosynthesis inhibitor.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2019/061135

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:

because they relate to subject matter not required to be searched by this Authority, namely:

the subject matter listed in Rule 39 on which, under Article 17(2)(a)(i), an international search is not required to be carried out, including

2. ☒ Claims Nos.: **12**

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

See Supplemental Box

3. ☐ Claims Nos:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2019/061135

A. CLASSIFICATION OF SUBJECT MATTER

A01N 43/88 (2006.01) A01N 43/653 (2006.01) A01N 47/36 (2006.01) A01P 13/02 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPOQUE 5.2 (PATENW): Applicant/Inventor names (UPL Limited, Mark Vincent Delsantro, Beth Erickson Sears, Jaidev Rajnikant Shroff, Vikram Rajnikant Shroff), CPC/IPC symbols (A01N 43/88, 43/653, 47/36), Keywords (bentazone, sulfentrazone, halosulfuron and alternatives thereof). **NEW STN (CAPlus, BIOSIS, CABA, Registry, CN/DE/FR/IN/JP/KR FULL):** Applicant/Inventor names *(as above)*, CAS Registry numbers (25057-89-0, 135397-30-7, 122836-35-5, and alternatives thereof), Keywords *(as above)*. **ONLINE DATABASES (Espacenet, Google Scholar/Patents/Search):** Applicant/Inventor names *(as above)*, Keywords (bentazone, sulfentrazone, halosulfuron, ternary combination, herbicide and like terms & alternatives). **INTERNAL DATABASES:** Applicant/Inventor names *(as above)*.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Documents are listed in the continuation of Box C	

[X] Further documents are listed in the continuation of Box C [X] See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"D" document cited by the applicant in the international application

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
18 February 2020	18 February 2020

Name and mailing address of the ISA/AU	**Authorised officer**
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA Email address: pct@ipaustralia.gov.au	Austin Smith AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. +61262832381

INTERNATIONAL SEARCH REPORT C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		International application No. **PCT/US2019/061135**
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 105994331 A (HENAN ZHONG TIAN HENG XIN BIOCHEMICAL TECH CO LTD) 12 October 2016 Abstract (based on English machine translation obtained from Espacenet, 11 FEB 2020)	1-11 & 14-18
X	WO 2000/027203 A1 (NOVARTIS AG) 18 May 2000 p9 par 5 & p18 ln 15-16, p66 par 2 & p72 ln 7, p107 par 2, p147 ln 8 & 11, Claims 5, 8, 12 & 19-20	1-11 & 13-18
X	SOLTANI, N. *et al.*, "Weed management in white beans with postemergence herbicide tankmixes", *Canadian Journal of Plant Science* (2013) vol 93, pages 669-674. Abstract, Table 1, p670 col 1 par 2-4	1-7, 10 & 14-18
X	WO 2014/013998 A1 (NIHON NOHYAKU CO., LTD.) 23 January 2014 Abstract, Examples (based on English machine translation obtained from Google Patents, 11 FEB 2020)	1-11 & 14-18
X	WO 2016/116531 A1 (BASF AGRO B.V.) 28 July 2016 Table 1 (No 1 & 8-11), claims 1 & 7	1-11 & 14-18
X	CN 108651490 A (BEIJING KEFA WEIYE PESTICIDE TECH CT) 16 October 2018 Abstract (based on English machine translation obtained from Espacenet, 05 FEB 2020)	1-11 & 14-18
X	WO 2009/141367 A2 (BASF SE) 26 November 2009 Table 1 (No 298, 320, 591 & 612), p7 ln 25-28, p36 ln 13-14	1-11 & 13-18
X	BLUM, R. R. *et al.*, "Purple (*Cyperus rotundus*) and Yellow Nutsedge (*C. esculentus*) Control in Bermudagrass (*Cynodon dactylon*) Turf", *Weed Technology* (2000) vol 14, pages 357-365. Abstract, Table 3	1-11 & 13-14
A	TAZIAR, A. N. *et al.*, "Sulfentrazone plus a Low Rate of Halosulfuron for Weed Control in White Bean (*Phaseolus vulgaris* L.)", *Agricultural Sciences* (2017) vol 8, pages 227-238. Abstract, Tables 1-6, Conclusion	

Supplemental Box

Continuation of **Box II**

Claim 12 does not comply with Rule 6.2(a) because it relies on references to the description ("...at least three herbicides listed as combinations in 1 - 2550 of table 1").

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. **PCT/US2019/061135**

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	**Publication Date**	**Publication Number**	**Publication Date**
CN 105994331 A	12 October 2016	CN 105994331 A	12 Oct 2016
WO 2000/027203 A1	18 May 2000	WO 0027203 A1	18 May 2000
		AR 021121 A1	12 Jun 2002
		AU 1381400 A	29 May 2000
		AU 760278 B2	08 May 2003
		BR 9915141 A	07 Aug 2001
		CA 2347774 A1	18 May 2000
		CN 1332608 A	23 Jan 2002
		CO 5210934 A1	30 Oct 2002
		DE 19851854 A1	15 Apr 1999
		DE 19859224 A1	06 May 1999
		DE 19915013 A1	26 Aug 1999
		DE 19919951 A1	16 Sep 1999
		EP 1128729 A1	05 Sep 2001
		EP 1128729 B1	21 May 2003
		HU 0104270 A2	28 Mar 2002
		IN 637CH2001 A	04 Mar 2005
		JP 2002529379 A	10 Sep 2002
		KR 20010086009 A	07 Sep 2001
		MX PA01004693 A	01 Mar 2002
		MX 219218 B	20 Feb 2004
		PL 347628 A1	22 Apr 2002
		US 2002004457 A1	10 Jan 2002
		ZA 200103193 B	19 Apr 2002
WO 2014/013998 A1	23 January 2014	WO 2014013998 A1	23 Jan 2014
		AR 091823 A1	04 Mar 2015
WO 2016/116531 A1	28 July 2016	WO 2016116531 A1	28 Jul 2016
		AR 103505 A1	17 May 2017
		AU 2016208585 A1	03 Aug 2017
		BR 112017015652 A2	13 Mar 2018
		CA 2973915 A1	28 Jul 2016
		CN 107427004 A	01 Dec 2017

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. **PCT/US2019/061135**

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	**Publication Date**	**Publication Number**	**Publication Date**
		EA 201791661 A1	29 Dec 2017
		EA 033465 B1	31 Oct 2019
		EP 3247213 A1	29 Nov 2017
		JP 2018502879 A	01 Feb 2018
		US 2018064111 A1	08 Mar 2018
		US 10375959 B2	13 Aug 2019

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. **PCT/US2019/061135**

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	**Publication Date**	**Publication Number**	**Publication Date**
CN 108651490 A	16 October 2018	CN 108651490 A	16 Oct 2018
WO 2009/141367 A2	26 November 2009	WO 2009141367 A2	26 Nov 2009
		AR 071858 A1	21 Jul 2010
		AR 109257 A2	14 Nov 2018
		AU 2009248755 A1	26 Nov 2009
		AU 2009248755 B2	09 Apr 2015
		BR PI0913114 A2	04 Aug 2015
		BR PI0913114 B1	26 Dec 2017
		CA 2723310 A1	26 Nov 2009
		CA 2940381 A1	26 Nov 2009
		CA 2940383 A1	26 Nov 2009
		CA 3006377 A1	26 Nov 2009
		CL 2009001251 A1	13 Aug 2010
		CL 2014002173 A1	19 Dec 2014
		CL 2014002174 A1	19 Dec 2014
		CL 2014002175 A1	19 Dec 2014
		CN 102036563 A	27 Apr 2011
		CN 102036563 B	05 Nov 2014
		CR 11796 A	10 Jan 2011
		EA 201001768 A1	30 Jun 2011
		EA 019458 B1	31 Mar 2014
		EP 2315525 A2	04 May 2011
		JP 2011520939 A	21 Jul 2011
		JP 5635977 B2	03 Dec 2014
		MX 2010011981 A	07 Dec 2010
		SG 191594 A1	31 Jul 2013
		TW 201002206 A	16 Jan 2010
		US 2011065579 A1	17 Mar 2011
		US 9629366 B2	25 Apr 2017
		US 2017042159 A1	16 Feb 2017
		US 9999223 B2	19 Jun 2018
		US 2017325455 A1	16 Nov 2017
		UY 31837 A	14 Dec 2009
		ZA 201009061 B	26 Aug 2015

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. **PCT/US2019/061135**

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Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	**Publication Date**	**Publication Number**	**Publication Date**

End of Annex

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.