New Crop Herbicide Products for 2014

Corn Herbicides

Anthem™ ATZ [atrazine (42.5%) + pyroxasulfone (5.15%) + fluthiacet-methyl (0.15%)]. It can be applied pre-plant, pre-emergence, or early post-emergence for control of broadleaf and grass weeds in all type of corn. Do not apply more than 39 oz/acre per growing season in coarse textured soil and do not apply more than 76.46 oz/acre in medium and fine textured soils. Do not harvest or feed grain or stover within 70 days of last application. EPA Reg. No. 279-3449.

Breakfree® NXT ATZ [acetochlor (33.4%) + atrazine (26.9%)]. It is a premix from DuPont for pre-plant and pre-emergence control of selected broadleaf and grass weeds in corn. The application rate ranges from 1.4 to 3 quarts/acre depending on soil texture and organic matter content. EPA Reg. No. 62719-671-352. Breakfree® NXT Lite [acetochlor (46.3%) + atrazine (18.3)]. EPA Reg. No. 62719-670-352.

Callisto® GT [glyphosate (34%) + Mesotrione (3.4%)]. It is a new premix from Syngenta for post-emergence weed control in Roundup Ready corn. Do not apply more than one time per year and do not apply more than 2 pints/acre per year. Do not harvest forage, grain or stover within 45 days after application. EPA Reg. No. 100-1470.

Instigate™ [rimsulfuron (4.17%) + mesotrione (41.67%)]. Instigate is a new premix from DuPont for pre-plant and pre-emergence control of broadleaf and grass weeds in corn. It can be applied up to 14 days prior to planting or before corn emergence. It can be applied within a rate range of 5.25 to 7 oz/acre before corn emergence. EPA Reg. No. 352-873.

Lexar® EZ [S-metolachlor (19%) + atrazine (18.61%) + mesotrione (2.44%)]. Lumax EZ [S-metolachlor (27.1%) + atrazine (10.2%) + mesotrione (2.71%)]. Lexar EZ and Lumax EZ are products of Syngenta for pre-emergence control of annual grasses and broadleaf weeds in corn and grain sorghum. The application rate of Lumax EZ is 2.75 to 3.25 quarts/acre. For Lexar EZ it is 3 to 3.5 quarts/acre. EPA Reg. No. 100-1414 for Lexar EZ and 100-1442 for Lumax EZ.

Realm™ Q [rimsulfuron (7.5%) + mesotrione (31.25%)]. Realm Q is a new premix herbicide from DuPont for post-emergence use in field corn. It contains a safener (isoxadifen) and may be applied at 4 oz/acre to emerged corn through 20-inch or V7 corn, whichever is more restrictive. Realm Q provides selective post-emergence control of annual grasses and broadleaf weeds. It may be tank-mixed with glyphosate when used in glyphosate-tolerant corn or glufosinate in LibertyLink corn. MOA: rimsulfuron is an ALS inhibitor (Group 2) and mesotrione is an HPPD inhibitor (Group 27). EPA Reg. No. 352-837.

Solstice™ [mesotrione (38.52%) + fluthiacet-methyl (2.2%)]. This FMC product contains the active ingredients of Callisto and Cadet. It can be applied post-emergence in corn for selective control of broadleaf weeds. For effective control of grasses, it can be tank-mixed with other grass herbicides. EPA Reg. No. 279-3461.

Zemax™ [S-metolachlor (36.8%) + mesotrione (3.68%)]. Zemax is a Syngenta product containing the active ingredients of Callisto (mesotrione) and Dual II Magnum (S-metolachlor). The double mode-of-action herbicide can be applied from 14 days early pre-plant up to 30-inch corn. Zemax is also used in grain sorghum for pre-emergence control of many annual grass and broadleaf weeds. EPA Reg. No. 100-1410.

Zidua™ [pyroxasulfone (85%)]. Zidua is an herbicide from BASF for pre-emergence control of annual grasses and some small seeded broadleaf weeds in corn. It is also labeled for early post-emergence application in corn. Pyroxasulfone is a seedling growth inhibitor. Application rates of Zidua may vary depending on soil texture. EPA Reg. No. 7969-338.

Sorghum Herbicide

Huskie™ [pyrasulfotole (3.3%) + bromoxynil (26.3%)]. Huskie received a supplemental label for use in grain and forage sorghum. It may be applied post-emergence from 3-leaf to 12-inch sorghum at 12.8-16 oz/acre. It is also acceptable for use in sorghum for seed production. EPA Reg. No. 264-1023.

Soybean Herbicides

Authority® Elite [sulfentrazone (7.55%) + S-metolachlor (68.25%)]. It is a soil-applied herbicide for control of broadleaf, grass, and sedge weeds in soybeans. The crop rotation restriction for corn and sorghum is 10 months. It should not be applied more than 38.7 fl oz/acre per year. EPA Reg. No. 279-3442.

Authority® Maxx [sulfentrazone (62.12%) + clorimuron-ethyl (3.88%)]. It can be applied pre-plant or pre-emergence in soybean for broadleaf and partial grass weed control. The application rate is 6 to 9 oz/acre, depending on soil texture and organic matter content. EPA Reg. No. 279-9560.
**Flexstar® GT 3.5** [fomesafen (5.88%) + glyphosate (22.4%)]. Flexstar GT is a new premix herbicide from Syngenta for pre- and post-emergence control of certain grasses, broadleaf, and sedge weeds in soybean. A maximum of 3.5 pts/acre may be applied in alternate years. Fomesafen is a PPO inhibitor (Group 14) and glyphosate is an EPSPS inhibitor (Group 9). EPA Reg. No. 100-1385.

**Marvel®** [fluthiacet-methyl (1.2%) + fomesafen (30.08%)]. It is a new premix herbicide from FMC for post-emergence weed control in soybean. It can be applied at 5 to 7.25 fl oz/acre from pre-plant through full flowering stage (prior to R3). It is a contact herbicide; therefore, good coverage is essential for optimum weed control. Do not apply more than 7.25 fl oz/acre per application and 9.75 fl oz/acre per year. EPA Reg. No. 279-3455.

**OptTill® PRO** [saflufenacil (17.8%) + imazethapyr (32%) + dimethenamid-P (63.9%)]. It is one of the Kixor-based herbicides from BASF. This co-pack features three modes of action in Sharpen, Pursuit and Outlook herbicides (Group 2, 14, and 15). It provides both contact burndown and residual pre-emergence weed control in soybean. EPA Reg. No. 7969-332.

**Pummel™** [metolachlor (5 lb ai/gal) + imazethapyr (0.25 lb ae/gal)]. Pummel is a new product from MANA to be used for preplant or preemergence control of annual grasses and many broadleaf weeds in soybeans. The use rate ranges from 1.6 to 2 pints/acre, depending upon soil type and organic matter. EPA Reg. No. 66222-251.

**Torment™** [fomesafen (2 lb ae/gal) + imazethapyr (0.5 lb ae/gal)]. Torment is a new product from MANA that can be applied preplant, preemergence or early post-emergence to control broadleaf and grass weeds in soybeans. The use rate is 1 pint/acre when soil-applied and 0.75 to 1 pint/acre with a minimum 15 GPA carrier volume when applied post-emergence. EPA Reg. No. 66222-249.

### Herbicides Labeled for Use in Multiple Crops

**Anthem™** [pyroxasulfone + fluthiacet]. Anthem is a new premix from FMC for pre-emergence or early post-emergence control of annual grasses and some small-seeded broadleaf weeds in corn and soybean. Pyroxasulfone is a seedling growth inhibitor (Group 15) and fluthiacet-methyl is a PPO inhibitor (Group 14). EPA Reg. No.279-3450.

**Autumn Super™** [iodosulfuron-methyl (6%) + thiencarbazone-methyl (45%)]. Autumn Super is an herbicide from Bayer for burndown of existing vegetation and residual weed control. It can be applied after fall harvest and in early spring at least 30 days prior to planting field corn, cereals, and grain and forage sorghum or at least 60 days prior to planting soybean, sweet corn, popcorn or corn grown for seed. It cannot be applied at a rate of more than 0.5 oz/acre in a year. EPA Reg. No. 264-1134.

**Fierce™** [flumioxazin (33.5%) + pyroxasulfone (42.5%)]. Fierce is a new premix from Valent for pre-emergence control of broadleaf and grass weeds. It will be labeled for use in soybeans and no-till and minimum till corn. The use of residual herbicides can help manage or prevent the development of glyphosate-resistant weed biotypes and reduce early season weed competition. Flumioxazin is a PPO inhibitor and pyroxasulfone is a seedling growth inhibitor. EPA Reg. No. 63588-93-59639.

**Finesse® Cereal and Fallow** [chlorsulfuron (62.5%) + metsulfuron (12.5%)]. Finesse Cereal and Fallow is for use in wheat, barley, triticale, fallow and CRP grasses. Use rates are 0.2 to 0.4 oz/acre in small grains and fallow. Consult the label for rotational crop restrictions. EPA Reg. No. 352-827.

**Finesse® Grass and Broadleaf** [chlorsulfuron (25%) + flucarbazone-sodium (32%) + dimethenamid-P (63.9%)]. It is one of the Kixor-based herbicides from BASF. This co-pack features three modes of action in Sharpen, Pursuit and Outlook herbicides (Group 2, 14, and 15). It provides both contact burndown and residual pre-emergence weed control. EPA Reg. No. 352-718.

**Panoflex™** [tribenuron-methyl (40%) + thifensulfuron-methyl (10%)]. It is used for selective post-harvest burndown, fallow, and pre-plant burndown weed control. Apply 0.3 to 0.6 oz/acre as a burndown treatment prior to planting any crop, or shortly after planting wheat (including durum), barley or triticale (prior to emergence). Sequential treatments can be made, but the total amount should not exceed 0.6 oz/acre. EPA Reg. No. 352-876.

**Pyroxasulfone** is a new herbicide active ingredient that will be marketed in Anthem, Fierce, and Zidua herbicides. It is a preemergence, seedling growth inhibitor. Users should expect performance and control of a similar weed spectrum as obtained with other seedling growth inhibitors such as metolachlor, acetochlor, and dimethenamid-P (small seeded broadleaves and most annual grasses).

**Warrant®** [acetochlor (33%)]. Warrant is an encapsulated formulation of acetochlor from Monsanto. It is now labeled for pre-plant, at-planting, or pre-emergence to soybeans and sorghum at 1.25 to 2 quarts/acre depending on soil texture and organic matter content. It can also be applied post-emergence to soybean and sorghum. EPA Reg. No. 524-591.

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