News Column

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Update on new herbicides for Kansas crops in 2020

Recently, the popular farm press has reported that Bayer is developing a yet-to-be-named post-emergence herbicide with a new mode of action with anticipated commercialization in about 10 years. However, new herbicides for use in Kansas during 2020 are combinations of existing herbicides. Products that have gained approval for use in agronomic crops in 2020 are discussed in this article, as well as some products that anticipate approval for 2020. Herbicide labels supersede information provided here. Always read and follow label directions.

Alite27 (isoxaflutole)

Group: 27

Crop: isoxaflutole-resistant soybean (GT27 soybean)

Timing: pre-emergence

Rate: 2-3 fl oz/A

Alite 27 will be the isoxaflutole formulation registered for use in GT27 or LLGT27 soybean. It should be tank-mixed with other registered soybean herbicides to control key weeds such as **Palmer amaranth, kochia, and marestail.** Alite 27 is currently in the final phases of being registered for use in Kansas; but use restrictions similar to Balance Flex, an isoxalfutole formulation currently registered for use in corn in Kansas, are expected. It will be important to check location-specific requirements that protect groundwater resources prior to application.

<u>AuthorityEdge (sulfentrazone + pyroxasulfone)</u>

Group: 14 + 15

Crop: soybean and sunflower

Timing: fall, pre-plant, pre-emergence Rate: 5.9-15.7 fl oz/acre (soybean)

AuthorityEdge is a new product based on sulfentrazone (Authority, Spartan). It will control key weeds including **Palmer amaranth, kochia, crabgrass, and johnsongrass**. Use higher application rates in fine-textured soils with pH below 7.2 and organic matter greater than 3%. AuthorityEdge may be applied in one or two applications per year.

<u>Pixxaro EC (halauxifen-methyl + fluroxypyr)</u>

Group: 4 Crop: wheat

Timing: 2-leaf to flag leaf

Rate: 6 fl oz/A

Pixxaro is a mixture of Elevore and Starane that will control **kochia, marestail, flixweed**, and other species post-emergence.

<u>Purpetuo (pyroxasulfone + flumiclorac)</u>

Group: 15 + 14 Crop: corn, soybean

Timing: pre-emergence, post-emergence

Rate: 6 fl oz/A

Purpetuo is a mixture of Zidua and Resource that has received US EPA approval and is expected to be approved for use in Kansas during 2020. It is designed for residual control **Palmer amaranth** and **waterhemp** in soybean.

Roundup Xtend (glyphosate + dicamba)

Group: 9 + 15

Crop: dicamba-resistant soybean and cotton (Xtend soybean and Xtend cotton)

Timing: pre-plant, pre-emergence, post-emergence

Rate: 64 fl oz/A

Roundup Xtend is a mixture of glyphosate and dicamba in a low-volatility formulation. It will control a wide spectrum of weed species, including **Palmer amaranth and marestail.** The label is still awaiting US EPA approval. Once approved, it will carry requirements and restrictions similar to Xtendimax, Engenia, and FeXapan.

Tavium (dicamba + S-metolachlor)

Group: 4 + 15

Crop: dicamba-resistant soybean and cotton (Xtend soybean and Xtend cotton)

Timing: pre-plant, pre-emergence, post-emergence

Rate: 56.5 fl oz/A

Tavium is a mixture of *S*-metolachlor (Dual Magnum) and a low-volatility formulation of dicamba. It can be used once pre-emergence and once post-emergence in a growing season. When applied prior to weed emergence, it will control troublesome weeds like **Palmer amaranth and grasses**. Postemergence applications will control only broadleaved weed such as **Palmer amaranth, kochia, and marestail**. Tavium carries the same requirements and restrictions as Engenia, FeXapan, or XtendiMax.

In addition, new herbicide-resistant crops continue to be commercialized. Bayer anticipates approval of **XtendFlex** soybean for 2020. These varieties will be resistant to glyphosate, dicamba, and glufosinate (Liberty). Dicamba products used in-crop will be limited to XtendiMax, Engenia, FeXapan, and Tavium.

Information provided by Sarah Lancaster, K-State Extension Weed Science Specialist.