



# What if Engenia<sup>®</sup>, FeXapan<sup>®</sup> or Xtendimax<sup>®</sup> are not an Option for Cotton Weed Control?

## EXTENSION

June 2020

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**Recently the 9th Circuit Court vacated the labels for Engenia<sup>®</sup>, FeXapan<sup>®</sup> and Xtendimax<sup>®</sup> in cotton. What does that mean?**

In Oklahoma, as it currently stands, existing stocks of Engenia<sup>®</sup>, FeXapan<sup>®</sup> and Xtendimax<sup>®</sup> may be applied to Roundup<sup>®</sup> Ready Xtend cotton and soybean through July 31, 2020.

**What are my options if I haven't already purchased dicamba or need to make an application after July 31st?**

Currently the following products are labeled for over-top applications in Roundup<sup>®</sup> Ready XtendFlex cotton:

- **Tavium<sup>®</sup>**
- **Liberty<sup>®</sup> and Roundup<sup>®</sup> (glyphosate)**
- **Staple<sup>®</sup>**
- **Dual Magnum<sup>®</sup> (metolachlor), Outlook<sup>®</sup> and Warrant<sup>®</sup>**
- **Assure II<sup>®</sup>, Fusilade<sup>®</sup> DX, Poast<sup>®</sup> and Select<sup>®</sup> (clethodim)**

**Tavium<sup>®</sup>** is a premix of dicamba and metolachlor. It was not included with the 9th Circuit Court ruling because it was not labeled at the time of the case filing. It is the only dicamba formulation that currently has a federal label. Tavium<sup>®</sup> has the added benefit of including metolachlor for additional residual weed control. Depending on the weed spectrum in your area, it may be beneficial to include glyphosate with this herbicide. Controlling small weeds will still be important for success with this herbicide. Special precautions and label restrictions apply to Tavium<sup>®</sup>. Tavium<sup>®</sup> can be applied through the 6th leaf growth stage or within 60 days after planting, whichever comes first. The postharvest interval on cotton is 100 days prior to harvest.

**Liberty<sup>®</sup> and Roundup<sup>®</sup> (glyphosate)** are non-selective herbicides that have activity on a wide range of weeds including both broadleaves and grasses. The current issue with Roundup<sup>®</sup> is the number of fields that have weeds resistant to this herbicide. However, there are many weeds in cotton (especially grasses) that are still controlled by Roundup<sup>®</sup>. Timing is critical on all weed species with Liberty<sup>®</sup> especially with pigweed and grasses. Pigweeds need to be 4 inches or less and grasses 3 to 8 inches for most species. Inadequate control has been consistently observed when applications are made to larger weeds. Some evidence has been seen that a tank-mix combination of these herbicides can be effective where resistant pigweed or larger weeds occur.

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A second application of Liberty<sup>®</sup> or Liberty<sup>®</sup> + Roundup<sup>®</sup> 10 to 14 days after the initial application may be beneficial as well.

For cotton growers who have enough Engenia<sup>®</sup>, FeXapan<sup>®</sup> or Xtendimax<sup>®</sup> on hand for one application — consider applying Liberty<sup>®</sup> first to small emerged weeds and following with a later application of dicamba. This will only work if applications of Liberty<sup>®</sup> are made to small weeds (less than 4 inches) and applications are made to achieve thorough coverage of these small weeds.

**Staple<sup>®</sup>** herbicide has activity on several broadleaf weeds in Oklahoma. Additionally, it provides postemergence as well as residual weed control on several of these weeds. Timing based on weed size is extremely important for postemergence weed control with Staple<sup>®</sup>. Many weeds require applications to be made prior to the weed being greater than 2 inches in height. Staple is also ineffective on ALS-resistant weeds. In some areas this includes Palmer pigweed.

**Dual Magnum<sup>®</sup> (metolachlor), Outlook<sup>®</sup> and Warrant<sup>®</sup>** herbicides can be applied after cotton is up, but will not control any emerged weeds at the time of application. These herbicides only control weeds that have not emerged at the time of application. Additionally, these herbicides require an activating rainfall or irrigation to move the herbicide into the soil profile to control weeds that are not emerged. These products provide residual weed control if they are tank-mixed with an effective postemergence herbicide or are applied before the next flush of weeds occur. Considering the current supply restrictions on dicamba it would likely be a good idea to tankmix one of these herbicides with any existing dicamba products or one of the other postemergence herbicides.

**Assure II<sup>®</sup>, Fusilade<sup>®</sup> DX, Poast<sup>®</sup> and Select<sup>®</sup> (clethodim)** will control most grass species when applied postemergence. These herbicides do not provide any activity on broadleaf weeds like pigweed. Size of grass control will vary by species and herbicide applied. However, with the exception of rhizome Johnsongrass control is generally better on grasses less than 6 inches in size.

There are several options that can be applied either post-directed or through a hooded application. Cultivation or hand weeding is a final option to control troublesome weed escapes in cotton.

Consult all herbicide labels for restrictions, weed size, crop stage, use rates, tank mix partners and herbicide adjuvants needed. It is also important to read labels for preharvest and crop rotation intervals.

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of 20 cents per copy. June/2020 GH.