New Dicamba Formulations for Cotton & Soybean Growers

As of April 1, 2017, the EPA has registered Engenia, FeXapan, and XtendiMax for in-season (pre-emergence, post-emergence) use on cotton and soybean crops genetically engineered to tolerate dicamba. Application restrictions and use patterns have changed, compared to previously registered dicamba products.

- It is critical that all retailers, applicators, and growers are knowledgeable of these new requirements.
- New requirements for spray tip, spray pressure, sprayer speed, and boom height are all designed to IMPROVE on-target pesticide applications, thereby more effectively stewarding agriculture.
- New wind speed restrictions during application also improve on-target applications. Additionally, understanding the influence of land terrain, humidity, and size of the crop during application is beneficial.
- New buffer requirements are designed to protect sensitive areas and specialty crops.
- Several states require training prior to using these herbicides in season; those requirements must be followed.

Aerial photo showing buffers (in yellow) on small fields in N.C.
Courtesy of Dr. Alan C. York, N.C. State University

Educational Programs Are Available!

Many educational programs are available to help growers understand and implement best management practices to safely apply pesticides and avoid the devastating effects of off-site pesticide movement.

Talk to your state extension service, crop adviser, or ag retailer to find an education program near you.

The continued availability of this new post-emergent technology depends on everyone making good management decisions and complying with the pesticide label.

New Requirements for Using Dicamba on Genetically Engineered Crops

Remember – The Label is the Law!

ALWAYS read and follow label directions, including checking supplemental labels for additional information.

Use of older dicamba formulations that are not registered for GE dicamba-tolerant cotton or soybean is a serious violation of the law!

- Misuse is taken very seriously and will be investigated by the State Department of Agriculture.
- Willful misuse violations can lead to serious legal ramifications, hefty monetary fines, and possible civil liability.

Cover photo courtesy of Dr. A. Stanley Culpepper, University of Georgia

Agricultural Retailers Association

EPA

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Dicamba GE Herbicide Formulation and the New Use Pattern

An important distinction between Engenia, FeXapan, and XtendiMax formulations and older dicamba formulations is that the new products expand dicamba applications to pre-emergence and post-emergence (over-the-top or directed) applications to GE dicamba-tolerant cotton and soybeans. Read and follow all applicable directions, restrictions, and precautions on the container label, booklet provided with the product container, and supplemental labeling. **The labeling MUST be in the possession of the user at the time of pesticide application.**

Spray Drift Management

Dicamba GE herbicide formulations require very specific and rigorous spray drift mitigation measures, including:

- Labeled spray tips and tank mixtures must be followed. These requirements increase spray droplet size, thereby reducing drift potential. Do not use AMS. Contact the manufacturer or visit its website for the latest information.
- Applicators are **required** to ensure that they are aware of the proximity to non-target susceptible crops, and to avoid drift to these crops.
- Before making an application, the applicator **must** survey the application site for neighboring non-target susceptible crops. The applicator **must** also consult sensitive crop registries to help identify these crops.
- **DO NOT APPLY** these products when the wind is blowing toward sensitive crops. MANY broadleaf crops are far more sensitive to dicamba than to Roundup.
- Boom height should not exceed 24 inches above the target; research has shown drift distances with a 24 inches boom height may be cut by nearly half of that compared to a boom height at 50 inches.
- Applications MUST NOT be made during inversions, often occurring when winds are less than 3 mph. Also, do not apply during wind speeds are greater than 15 mph (ideally less than 10 mph).
- Sprayer speed can influence spray coverage and drift; do not exceed 15 mph. Ideal sprayer speeds are 10 mph or less.
- EPA's analyses of the data show reduced volatility potential with the newer formulations.
- **Remember -** Failure to follow the requirements in the product label could result in severe injury or destruction to desirable sensitive broadleaf crops and trees when contacting their roots, stems, or foliage.

New dicamba products can be applied post-emergence
Courtesy of Dr. A. Stanley Culpepper, University of Georgia

Avoiding ALL Off-Site Movement is the Responsibility of the Grower/ Producer/ Applicator

The interaction of equipment and the environment must be monitored to maximize performance and on-target spray deposition of dicamba GE herbicide formulations. The applicator is responsible for considering all of the spray drift factors when applying a pesticide.

The applicator is also responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations.

Know the conditions BEFORE spraying.

Understanding inversions and volatility potential are critical for proper herbicide use
Courtesy of Jenna Smith, University of Georgia

Herbicide Resistance Management

New dicamba GE herbicide formulations require the manufacturer to provide an active resistance management stewardship of weed populations. The continued effectiveness of all dicamba products depends on successful implementation of integrated weed management programs that focus on diversified weed control tactics.

Read the label provided with dicamba GE herbicide formulations to learn more about better management practices useful for herbicide resistance management.