## WEED MANAGEMENT STEWARDSHIP OF ENGENIA $^{\mathsf{m}}$ HERBICIDE IN DICAMBAGLUFOSINATE TOLERANT COTTON

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## **Abstract**

New weed control options are needed to manage herbicide resistant weeds that are limiting control tactics and in some areas cropping options. Dicamba glufosinate tolerant (DGT) cotton will enable the use of dicamba to manage these problematic weeds with an additional herbicide mechanism-of-action. In addition to being a new control tactic, DGT-cotton will allow for application of dicamba as a preplant burndown without a planting interval and postemergence over the top of the crop. Engenia<sup>™</sup> herbicide is an advanced formulation (EPA approval pending) based on the BAPMA (N, N-Bis-(aminopropyl) methylamine) form of dicamba. In addition to formulation innovation, a comprehensive stewardship strategy will be implemented to focus on weed management and effective control, weed resistance management, and maximizing ontarget application. Engenia herbicide should be used as a complimentary tool in a grower's weed control program where it is integrated into a comprehensive strategy that includes cultural, mechanical, and chemical control. A robust herbicide program uses sequential and/or tank mixtures of herbicides that have multiple effective sites of action on a single weed. Likewise, Engenia should complement current programs to add an additional effective site of action for broadleaf weed control. Over several years of testing, the most effective cotton weed control programs have utilized sequential POST applications of glufosinate and dicamba tank mixed with residual herbicides following application of PRE residual herbicides.