ROUNDUP READY® XTEND CROP SYSTEM FOR COTTON Scott Bollman Monsanto Company St. Louis, MO

Abstract

Currently under development by Monsanto Company, Roundup Ready® Xtend Crop System for cotton is a third generation herbicide technology with tolerance to glyphosate, glufosinate and dicamba. Pending regulatory approvals, this new technology will provide growers with choices and flexibility in their management of glyphosate-resistant and tough-to-control weeds. The proposed application timing of glyphosate is the same as current applications made to Genuity® Roundup Ready® Flex where a grower can apply glyphosate preplant through preharvest. Glufosinate applications will follow current label requirements of Liberty® herbicide when applied to LibertyLink® cotton varieties. The proposed application timing for dicamba in Roundup Ready Xtend cotton is from preplant through preharvest with the maximum combined total quantity of all dicamba applications in a season of 2 lb ae/A. A grower may apply up to 1 lb ae/A preplant/preemergence or if no preplant or preemergence application are made a grower may apply up to 2 lb ae/A in crop with a single in crop maximum use rate of 0.5 lb ae/A.

Growers will have multiple herbicide options that will provide more consistent and flexible control of glyphosateresistant and tough-to-control weeds. Roundup Ready Xtend cotton enables farmers to manage weeds before planting, and as an over-the-top herbicide option during the season. Timely application of Roundup® agricultural brand herbicides, dicamba and Liberty will be important as well as the use of residual herbicides. Recommendations will focus on use of multiple modes of action, including the use of preemergence applied residual herbicides in combinations with Roundup brand herbicides.

Complementary to the trait launch, pending regulatory approvals Monsanto will also launch new dicamba formulations built with low-volatility technology. Roundup® Xtend, a glyphosate + dicamba premix and a straight goods dicamba product called XtendiMaxTM can be used before, at, and after planting with Roundup Ready® Xtend Crop Systems. By utilizing low volatility formulations like Roundup® Xtend in combination with application requirements, growers can significantly reduce the potential for off-target movement.