PERFORMANCE OF GLYTOL[™] + LIBERTYLINK® COTTON TECHNOLOGIES WITH COMMON COTTON TANKMIX PARTNERS

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Abstract

Bayer CropScience has developed in-house glyphosate tolerant, GlyTol[™] cotton (event GHB614), expressing the 2*mepsps* gene and stacks of GlyTol with LibertyLink[®] cotton (event LL25). GlyTol + LibertyLink cotton is planned for commercial release in 2010, pending regulatory approval, and will provide US cotton growers with new cotton varieties with season-long tolerance to commercial glyphosate herbicide formulations as well as tolerance to Ignite[®] herbicide at levels producers are accustomed to in current commercial LibertyLink varieties.

Field testing of GlyTol + LibertyLink cotton was conducted to evaluate any possible effects from common cotton tankmix partners which included insecticides, herbicides, and plant growth regulators. Glyphosate + glufosinate ammonium was applied at full labelled rates at three application timings during the growing season; 2-4 leaf cotton, 6-8 leaf cotton, and at lay-by (blooming cotton). The various tankmix products were applied at their labelled rate at their appropriate timing(s) with the glyphosate + glufosinate ammonium treatment. These trials have recorded no adverse effects on GlyTol + LibertyLink cotton plant establishment, plant height, maturity, vigor, yield or quality. A summary of these results are presented here.

Once commercially available in elite germplasm, GlyTol + LibertyLink technology will provide US cotton growers with the option of using over the top applications from more than one non-selective herbicide mode of action, which can be an important tool in managing weed resistance.