

**GLYTOL™ AND GLYTOL™ + LIBERTYLINK® COTTON TECHNOLOGIES AND THEIR
TOLERANCE TO MULTIPLE GLYPHOSATE FORMULATIONS**

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Abstract

Bayer CropScience has developed in-house GlyTol™ glyphosate tolerant technology for cotton, expressing the *2mepsps* gene and stacks of GlyTol with LibertyLink® cotton. Contingent upon regulatory approvals, GlyTol cotton is planned for commercial release in 2010 and will provide US cotton growers with new cotton varieties with season-long tolerance to commercial formulations of glyphosate herbicide. Contingent upon regulatory approvals, GlyTol + LibertyLink cotton is also planned for commercial release in 2010 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 (glufosinate ammonium) at levels producers are accustomed to using in current commercial LibertyLink varieties.

Extensive field testing of GlyTol cotton was conducted by Bayer CropScience and third parties from 2006 to 2008 and with GlyTol + LibertyLink from 2007 through 2009. These trials have recorded no adverse effects on GlyTol or GlyTol + LibertyLink cotton plant establishment, plant height, maturity, vigor, yield or fiber quality following multiple applications at full rates or higher of a number of commercial formulations of glyphosate. A summary of these results are presented here.

Once commercially available in elite germplasm, GlyTol technology will provide US cotton growers with the ability of over the top applications of more than one formulation of glyphosate herbicide.