

FIBERMAX® COTTONSEED PERFORMANCE WITH THE LIBERTYLINK® HERBICIDE TECHNOLOGY**Gary Henniger, Jane Dever and David Becker****Bayer CropScience****Lubbock, TX****Jeff Gwyn****Bayer Cotton Seed International****Leland, MS****Abstract**

Bayer CropScience introduced LibertyLink® varieties in its FiberMax cottonseed which utilize the new technology seed trait and allows for the use of Ignite® herbicide post emergence over the cotton for weed control. In the 2004 launch year, approximately 130 thousand acres of LibertyLink varieties were planted commercially across the United States according to the USDA Cotton Variety Report.

Studies and commercial fields have shown that the LibertyLink trait expression and crop tolerance to Ignite herbicide is excellent. Crop tolerance studies utilized two sequential applications of Ignite at 1 and 3X rates with no effect observed on plant growth or development. Maturity, yield and fiber quality characteristics were not affected by sequential 3X applications of Ignite herbicide. The conversion of conventional FiberMax varieties to LibertyLink varieties was also very successful. The goal of trait conversion breeding programs is to achieve a converted line that incorporates the new trait technology without sacrificing the characteristics of the recurrent parent. Studies with the LibertyLink varieties and their recurrent parents showed that yield and fiber properties as well as plant characteristics of the recurrent parent were not compromised.

Ignite herbicide is a non-selective, contact herbicide with a quick speed of kill. It is currently labeled for over 67 broadleaf and 24 grass weeds with suppression of 25 biennial and perennial weeds and can be applied over the top of LibertyLink cotton throughout the growing season with only a 70 day pre-harvest interval. With its unique mode of action, Ignite is also an excellent tool for resistance management. Commercial fields showed that herbicide programs utilizing Ignite herbicide with LibertyLink cotton were very effective and controlled troublesome weeds in cotton production, including morningglory, marestail, and RoundupReady® cotton.