

COTTON TECHNOLOGY TRAITS HELP PROTECT YIELD POTENTIAL

North Carolina cotton producer Gary Respass firmly believes that the latest generation of cotton biotech traits plays a major role in protecting good seed genetics and helping boost yields.

“Both our cotton yields and our corn yields continue to increase as the result of some of these biotechnologies,” says Respass, who farms with his son-in-law Derick Tetterton under the name Flatland Farms and Associates in the town of Pantego in Beaufort County, North Carolina. “I’m not doing much different in terms of production practices than I did five years ago, so I have to give some credit to the biotech traits.”

In 2008, Flatland Farms and Associates farmed 5,000 acres of ground, with 2,250 acres in cotton, roughly 2,250 acres in soybeans and 500 acres in corn. A good portion of Respass’s cotton is Bollgard II® with Roundup Ready® Flex, and he has planted these technologies on an ever-increasing number of acres since he began using them three years ago.

This year was a pretty good harvest year for the farmer. He averaged between 2 and 2 ½ bales per acre across all of his cotton, which is grown dryland. He also saved on time and production costs by using the Bollgard II with Roundup Ready Flex technologies. “The seed genetics carrying these traits are very good now,” Respass observes. “The traits help protect the genetics in terms of yield potential.”

Respass also appreciates that farmers planting Bollgard II can rely on a natural refuge instead of a structured non-Bt cotton refuge in most parts of the Cotton Belt. “We saved a considerable amount of time and money not having to plant the Insect Resistance Management refuge for Bollgard II,” he continues. “We also avoided the yield losses associated with planting the IRM refuges for the original Bollgard® cotton.”

There is also an economic advantage, he adds, to being able to plant the Bollgard II technology: Better yields across every acre.



North Carolina farmer Gary Respass says planting Bollgard II with Roundup Ready Flex cotton lowered his production costs, saved time and helped boost his cotton yields this season.

The North Carolina farmer says that he is saving between one and three insecticide sprays for worms by planting Bollgard II. He would often have to spray conventional cotton for a combination of bollworms, budworms, European corn borer and fall armyworms three times or more, and Bollgard cotton sometimes required one or two applications under heavy worm pressure. “Most years, we have to spray for worms,” he says.

“I have not had to spray most of my Bollgard II cotton for worms in the three years I’ve grown it,” Respass continues. “I did spray some isolated spots for worms when the pressure was really hot, but it was the exception. Because we don’t have to worry so much about worms, we can focus instead on control-

ling our early-season insects like plant bugs, thrips and aphids and do a better job of managing stink bugs.”

The cotton grower also likes the Roundup Ready Flex technology for its expanded application window and the flexibility it gives him. “This technology opens up more opportunities in our weed-control programs,” Respass explains. “Application timing is less critical, and we are able to focus on other aspects of our farming operation early in the season when time is tight, instead of racing the clock to apply over-the-top herbicide before the fourth-leaf stage.”

Respass says that his employees also like the stacked-trait cotton because it translates into more saved time and ability to focus on other things. “Before, people would shy away from working on 3,000 acres of cotton due to the rush to apply herbicides and the need to apply insecticides,” he observes. “Now, my employees feel that cotton is more manageable – and just like growing any other crop.”

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

Monsanto Company is a member of BIO's Excellence Through StewardshipSM (ETS) Initiative and complies with its Product Launch Stewardship Policy, which requires a global market assessment of a country's key export markets before commercializing a biotech product in that country, in order to facilitate the flow of goods in commerce and minimize the potential for trade disruption. This product has been commercialized in compliance with the ETS and Monsanto Product Launch Stewardship policies, after meeting applicable regulatory requirements in key export markets with functioning regulatory systems. This product may not be approved for import into all countries. It is a violation of national and international law to move material products containing biotech traits across boundaries into nations where import is not permitted. Monsanto encourages growers to talk to their grain handler to confirm their buying position for this product. **ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS and insect resistance management requirements.** Growers may utilize the natural refuge option for varieties containing the Bollgard II® trait in the following states: AL, AR, FL, GA, KS, KY, LA, MD, MS, MO, NC, OK, SC, TN, VA, and most of Texas (excluding the Texas counties of Brewster, Crane, Crockett, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Terrell, Val Verde, Ward and Winkler). The natural refuge option does not apply to Bollgard II cotton grown in areas where pink bollworm is a pest, including CA, AZ, NM, and the above-listed Texas counties. It also remains the case that Bollgard® and Bollgard II cotton cannot be planted south of Highway 60 in Florida, and that Bollgard cotton cannot be planted in certain other counties in the Texas panhandle. Refer to the Technology Use Guide and IRM Guide for additional information regarding Bollgard II, Bollgard, natural refuge and EPA-mandated geographical restrictions on the planting of Bt cotton. **Gin by-products of cotton containing Monsanto's biotech traits, including cottonseed for feed uses, are fully approved for export to Canada, Japan, Mexico and South Korea. Cottonseed containing Monsanto traits may not be exported for the purpose of planting without a license from Monsanto.**

Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® agricultural herbicides. Growers should be sure that the glyphosate product used over Roundup Ready® Flex cotton has been tested for that use so as to reduce the risk of leaf damage. See the Roundup Ready® Flex Technical Use Guide for details. Roundup® agricultural herbicides will kill crops that are not tolerant to glyphosate. Bollgard II®, Roundup®, and Roundup Ready® are registered trademarks of Monsanto Technology LLC. ©2008 Monsanto Company, [35242-3-VACAFMR-Respass-1/09]