

SEED SELECTION: A SOUTHEASTERN GROWER'S PERSPECTIVE

Chuck B. Coley
Coley Gin & Fertilizer Company
Vienna, GA

Abstract

What parameters do you use for selecting the right seed for your farm? Obviously we want to use high germination and high cold test to be assured of the best quality seed available. Then we would determine the different maturity levels we need to match our harvest capacity and time frame. Those are the easy questions; with all the new transgenic varieties (i.e. RoundUp Ready, Bt and Stacked) the decision process becomes more complicated. Of course in the past few years availability has made these decisions for us. The following is a breakdown of how I determine whether to use transgenic or conventional varieties:

1. Bt vs. Conventional

- A. Irrigated or dryland – Plant Bt on irrigated land; front end cost too high to risk on dryland.
- B. Location of field – Certain fields are hard to spray with insecticides because of field location and relationship with the public as well as obstacles such as power lines and woods.

2. Roundup Ready vs. Conventional

- A. Yield potential – Weigh concerns of yield reduction with RoundUp. We still need more field experience to determine if yield potential of RoundUp Ready is as good as conventional.
- B. Field history – The amount of weed pressure and specific weed types. Also field's soil type and the effect of pre-emergence chemicals.
- C. Efficiency of production – This is becoming more important because farms are getting bigger and the number of quality farm workers are getting less and less. You can definitely keep RoundUp Ready cotton weed-free with less quality labor than conventional cotton.

These are a few of the parameters I use in determining my seed varieties. I do have other concerns for transgenic varieties. One is the effect weather stress such as excessive heat, humidity and drought on these transgenic varieties. How does this stress affect yield and fiber quality, especially strength and staple length?