

**MATURITY AND YIELD OF TRANSGENIC
COTTON LINES**

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Abstract

Cotton (*Gossypium hirsutum* L.) experimental lines, containing transgenic components, were evaluated in 1996 and 1997 for maturity, yield, and yield components. Objectives were to compare Bollgard® lines with their recurrent parent, identify the effects of the Roundup-Ready® gene, and compare different Bollgard® insertion events. Node above cracked boll measurements were used to determine maturity and end-of-season plant maps were used to determine various components of yield and yield distribution. Results indicated that transgenic lines were earlier and yields were equal to, or greater than, nontransgenic lines. Paymaster 1220 (BG/RR) was earlier and yields were similar to Paymaster 1220 (BG). Yields of Paymaster 1244 (BG/RR) were greater than Paymaster 1244 (BG) and were accumulated earlier. Insertion event M531 (Paymaster 1244) produced more lint than insertion event M757 (Paymaster 1244) and yields were accumulated earlier.