

The Study on Physiological and Biochemical Characters of Insect-resistant Transgenic Cotton Harboring Double-gene

LI Fu-guang

(Cotton Research Institute, Chinese Academy of Agricultural Sciences, Key Laboratory of Cotton Genetic Improvement, Ministry of Agriculture, Anyang Henan 455112, China)

Abstract: In insect-resistant transgenic cotton varieties (*G. hirsutum* L.) harboring double-gene (Bt + CpTI) and their receptor varieties, the

trends MDA, proline, chlorophyll and endogenous ABA contents in the main functional leaves in the whole growth period are similar, and there is still fluctuations among years because of the climate conditions. The content of endogenous IAA is low in seedling period and increases in latter periods. The activity of SOD is consistent among years, lower in seedling period, up to the high peak on 8th and 9th August, and descending afterwards.

Key words: double-gene (Bt + CpTI); transgenic cotton; physiological characters