

Study on Bt Gene Expression in the Different Transgenic Bt Upland Cotton

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Abstract: Bt gene expression in the ten different cotton lines was studied. The result showed: (1) Bt gene was full pressed in the different upland cotton lines. So there is an obvious resistance of the transgenic Bt upland cotton line. (2) Among the different transgenic Bt cotton lines, insect-resistance was different. Between some of

cotton lines, the difference of the resistance to bollworm was remarkable. (3) The difference of Bt gene expression in the different cotton line was gradually reduced from the second generation of bollworm to the fourth generation. In the early period, there was remarkable difference, but the difference was disappeared in the later period. (4) The levels of Bt gene expression in the transgenic Bt cotton lines were reduced along with the developmental periods of the cotton. That showed: resistance to the second generation of bollworm > resistance to the third generation > resistance to the fourth generation.

Key words: Upland cotton; Bt gene; Genetic background; Expression