

Effects of Transgenic *Cry 1 Ac* plus *CpTI* Cotton on the Bioecology of Main Parasitoids in Laboratory Studies

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Effects of transgenic *Cry1Ac* plus *CpTI* cotton (double genes cotton) on development of main parasitoids were studied in the laboratory. Compared with the traditional cotton, the differences of the moulting rate and adult weight of cotton aphid-*Aphydius* from double gene cotton field were not obvious. The differences of parasited number, moulting rate duration, and adult weight of cotton aphid from the double genes cotton, the transgenic Bt cotton, and traditional cotton also were not very clear. The parasited rate of cotton aphid-*Aphydius* from the double genes cotton field decreased, but the moulting rate of the cotton aphid-*Aphydius* increased obviously, which showed that the effects of the double genes cotton on parasiting ability of the cotton aphid-*Aphydius* are little. In the meantime, the effects of double genes cotton and transgenic Bt cotton on the parasitoids of cotton bollworm showed that parasiting rate, moulting rate, cocoon weight, and adult weight of *Microplitis* sp and *Camponotus chlorideae* Uchida treated by the double genes cotton and transgenic Bt cotton all decreased obviously compared with conventional cotton. At the same time the effects of double genes cotton are less than that of transgenic Bt cotton.