

Studies on 45S rDNA — FISH and Karyotype of *Gossypium herbaceum* and *Gossypium arboreum*

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Abstract: Based on the fluorescein in situ hybrid-

ization (FISH) of somatic chromosome of *G. herbaceum* L., and *G. arboreum* L., with the probe of 45S rDNA, The FISH results revealed that there were six hybridized signals on chromosomes of *G. herbaceum* L., showed three pairs of NOR (Nuclear Organization Region) which were located in chromosome number 3, 9 and 13, respectively. There were four hybridized signals on chromosomes of *G. arboreum* L., showed two pairs of NOR, which were located in chromosome number 6 and 13, respectively. The karyotype formula of *G. herbaceum* L., based on its 45S rDNA-FISH was $2n=2x=26=20m(4sat)+6sm(2sat)$ 和 $2n=2x=26=26m(4sat)$.

Key words: cotton; somatic chromosomes; rDNA; FISH