

## Genetic Diversity and Relationships among Diploid and Tetraploid Cotton Using RAPD Markers

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*Gossypium* species (+19) represent a vast resource of genetic diversity for improvement of cultivated cotton. To determine intra- and inter-specific genetic diversity and relationships, we employed 30 RAPD random decamer primers on twenty eight cotton accessions from 2 diploid cultivated species (*G. arboreum*, *G. herbaceum*) and 2 tetraploid cultivated species (*G. hirsutum*, *G. barbadense*). A total of 422 RAPD bands were amplified of which 88% (366) were polymorphic. Similarity indices estimated on the basis RAPD markers and cluster analysis based on similarity values showed high correspondence between RAPD markers and known taxonomic relationships.

**Key words:** DNA; fingerprinting; *Gossypium* species; genetic similarity; RAPD