

Genetic Diversity in Indian Arabica Coffee (*Coffea arabica* L) Germplasm Collection through RAPD Markers

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SUMMARY

Genetic diversity was assessed through RAPD markers in 32 arabica coffee germplasm collections available in India along with three diploid species. Total 284 markers were produced by 43 random primers tested out of which 138 were found polymorphic between the arabica populations studied. RAPD markers revealed less diversity among arabica collections available in India. Genetic distance based UPGMA tree resulted two major groups one being pure arabica genotypes and the second is robusta / HdeT introgressed lines. Kent, S-288, Bourbon, Dilla & Alghe, S-12 Kaffa, Geisha, Blue Mountain, San Ramon, Cioccie, Agaro, Tafari-kela and hybrids like S-795, S-5A, S-10, S-11, S-2800 and S-2803 formed group one representing pure arabicas wherein S-2790, S-2794, S-7.3, Cavimor, Sarchimor, Ruiru II, S-12 (Catimor), HdeT, S-6, Devamachy and Rume Sudan formed second group. Three diploid species separated from all arabica populations.