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Alu Insertion/Deletion Polymorphism in Four Tribes of South India

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ABSTRACT The present study was conducted to investigate the genetic diversity and affinities of four South Indian tribal populations namely, Malaikuravan, Malasar, Palliyan and Kattunaikkan. DNA samples from 184 unrelated individuals belonging to four tribal populations were analyzed for nine human-specific insertion and deletion polymorphic loci. The results indicate that all the studied biallelic loci are highly polymorphic in terms of allele frequencies and average heterozygosities (H_T = 0.49) in all the study populations. The genomic diversity (G_{ST}) of the four tribal populations was quite low (2.4%). The neighbor joining tree and centroid analysis showed that the four tribal populations under consideration are equally distant from other Indian tribal and world populations. The results reveal that the study populations have received moderate gene flow compared to other populations.