

A Genetic Structure of the Early Immigrants (Mukkalathor) of Tamil Nadu as Inferred From Autosomal Loci

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ABSTRACT Genomic affinity based on eight human – specific polymorphic insertion/ deletion loci was studied in an early immigrant population, Thevar group, of Tamil Nadu, South India. They are traditionally agriculturists, culturally homogenous and endogamous. The seven *Alu* elements (*Alu* APO, *Alu* CD4, *Alu* PV92, *Alu* FXIIB, *Alu* ACE, *Alu* PLAT, *Alu* D1) and one nuclear insertion of mitochondrial DNA segment (mtNUC) were analyzed for all the DNA samples. All these loci showed high levels of polymorphism in caste populations of Tamil Nadu, thereby reflecting their common ancestry. The significant greater inter-individual variation and the moderate population differentiation probably indicate genetic closeness of these populations. The present study populations were also compared with six other caste populations of Tamil Nadu for which the data were available. Phylogenetic analysis of these populations broadly corresponds to their known ethno-historical affinities.