

Insertion/Deletion Polymorphisms in Indian Tribal Populations

P. Veerraju¹, D.A. Demarchi², N. Lakshmi¹ and T. Venkateswara Rao¹

1. *Department of Human Genetics, Andhra University, Visakhapatnam, Andhra Pradesh, India*

2. *Museo de Antropología, Facultad de Filosofía y Humanidades, Universidad Nacional de Córdoba, Córdoba, Argentina*

KEYWORDS Alu markers; Indian tribes; gene diversity; genetic distance

ABSTRACT Five Alu markers (Alu APO, PV 92, TPA 25, D1 and ACE) were studied in five tribal populations namely, Konda Reddi, Koya Dora and Konda Kammara of East Godavari district, Lambada and Chenchu of Mahaboobnagar district of Andhra Pradesh. All the five loci were found to be highly polymorphic. While the lowest heterozygosity was observed in the Chenchu the Lambadi shows the highest. Both Neighbour Joining tree and Principal Component analysis based on genetic distances suggest two broad clusters, one formed by the Lambada and Chenchu and the other by the Konda Reddi and Koya Dora with Konda Kammara as an outer element to this three-point cluster. Another cluster analysis carried out along with 19 other Indian populations brings out no distinct cluster of the 5 AP tribes; instead these AP tribal populations are integrated into different subclusters of the UP and Bengal suggesting lack of distinct genetic identity of these AP tribes as far as the few Alu markers are concerned.