

# ASSESSMENT OF GENETIC VARIABILITY IN *Kappa* CASEIN GENE IN INDIAN DROMEDARY

**Yamini, G.C. Gahlot, Urmila Pannu, Mohammed Ashraf and Sanjay Choudhary<sup>1</sup>**

Department of Animal Genetics and Breeding College of Veterinary and Animal Sciences, RAJUVAS, Bikaner 334001, Rajasthan

<sup>1</sup>Livestock Production Management Division, ICAR-National Dairy Research Institute, Karnal, Haryana

## ABSTRACT

The present study was undertaken to explore the genetic variability in *kappa* casein gene in Bikaneri camel. DNA from camel were extracted through spin column method. PCR was carried out in a final reaction volume of 50  $\mu$ l and the reaction mixture was subjected to standard PCR protocol. PCR products (488 bp) were digested with *AluI*. The RFLP analysis of *kappa* casein gene through *AluI* restriction enzyme detected 2 genotypic pattern in all the studied animals in a genotypic frequency of 0.41 and 0.59 for CT and TT genotype and gene frequency 0.79 (T allele) and 0.21 (C allele). In conclusion, the genetic polymorphism in *kappa* casein gene which is detected first time in Indian camel is considered the best way for enhancing milk composition by selection of animals with superior traits.

**Key words:** Genetic polymorphism, *Kappa* casein, Polymerase chain reaction