

Study of DGAT-1 gene polymorphism in Mehraban-sheep by PCR-RFLP technique

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Abstract

Aim and Background: The aim of this study to compare the coding area of the exon 17 DGAT1 gene polymorphism in Mehraban sheep.

Materials and Methods: DNA was extracted using Kit method, 120 samples of Mehraban sheep were obtained, and also polymerase chain reaction was performed to amplify 309 bp of exon 17 DGAT1 gene using a specific primer. In RFLP method, PCR products using AluI enzyme digestion were digested and the three genotypes TT, TC and CC were found.

Conclusion: Mehraban sheep in two alleles T and C respectively, with frequency of 0.37 and 0.63 were observed. Also the population was not found to follow Hardy-Weinberg equilibrium.

Keywords: gene DGAT1, sheep, PCR-RFLP

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