

ABSTRACT

DETECTING LEPTIN GENE POLYMORPHISM IN NATIVE CATTLES RAISING IN AYDIN PROVINCE

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This study was carried out to determine leptin gene polymorphism in native cattles raised in Aydın province. DNA was extracted from 117 individual blood samples collected from cattles raised in 5 different locations. The PCR-RFLP methods were used to determine genotypes. A 422 bp DNA fragment within bovine leptin gene was amplified with PCR and then digested with restriction endonuclease enzyme *Sau3AI*. The *Sau3AI* digestion produced a mixture containing of 390, 303, 88 and 32 bp. In present study, A and B allele frequencies were identified with 0.803 and 0.197; AA, AB and BB genotype frequencies were identified with 0.641, 0.325 and 0.034, respectively. In order to reveal more concrete information, sequencing for the leptin gene may be useful. Results obtained from this study will provide a significant contribution to the literature.

Keywords: Native cattle, Leptin gene, PCR-RFLP, *Sau3AI*