THE POLYMORPHISM RFLP / MBOI AND RFLP / BSA AI AT LOCUS OF LEPTINE GENE OF MARAMURES BROWN BREED AND ROMANIAN SIEMMENTAL CATTLE

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SUMMARY

Leptine, the ob gene product, is a proteic hormone made up 167 amino acids. It is involved in regulation of body weight in rodents, primates and humans. The polymorphism at locus of leptine gene was studied using technique PCR –RFLP, using and testing 2 protocols (Leiffers et al 2002) and (Lien et al 1997) for genotyping of leptine gene at cattle. The polymorphism at locus of leptine gene was studied using PCR-RFLP (Leiffers et al 2002), amplifying a 400 pb fragment from leptine gene and the amplification products were restricted with Sau 3AI enzyme. The blood DNA extraction was obtain from Maramures Brown breed and Romanian Siemmental cattle. In both protocols, two PCR reaction mixes were used, one with 10 µl final volume, and other with 25 µl final volume. The restriction of the 400 bp PCR product was performed with Sau 3AI restriction enzyme at 37°C, for 4 hours. 4% agarose gel was used for sample migration (Fig 1).

The second polymorphism at locus of leptine gene was studied using technique PCR –RFLP , using and testing the protocol (Lien et al 1997) for genotyping of leptine gene at cattle. The polymorphism at locus of leptine gene was studied using PCR-RFLP, amplifying a 522 pb fragment from leptine gene and the amplification products were restricted with BSA AI enzyme, the allele A was nerestricted PCR reaction mixes was the same with the first protocol (Lien et al 1997).

BIBLIOGRAPHY