GENETIC POLYMORPHISM OF \( \beta \)-LACTOGLOBULIN IN LITHUANIAN BLACKFACE AND LITHUANIAN NATIVE COARSEWOOLED SHEEP

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Summary. We describe the polymorphism of the \( \beta \)-LG milk protein locus in the Lithuanian Blackface sheep breed obtained using isoelectric focusing (IEF) method and in the Lithuanian Native Coarsewooled sheep – using PCR-RFLP method. In Lithuanian Blackface sheep two genetic variants A and B with allele frequencies of A=0.52 and B=0.48 were identified. In Lithuanian Native Coarsewooled sheep allele frequencies were A=0.69 and B=0.31. Mean observed heterozygosity value (\( H_{\text{obs}}=0.511 \)) was slightly lower than mean expected heterozygosity (\( H_{\text{exp}}=0.667 \)) in Lithuanian Blackface sheep. In Lithuanian Native Coarsewooled sheep mean expected heterozygosity value (\( H_{\text{obs}}=0.461 \)) was similar to the mean observed heterozygosity (\( H_{\text{exp}}=0.434 \)) and deviation from Hardy-Weinberg equilibrium was not detected in any of those breeds.

Keywords: Lithuanian sheep, \( \beta \)-lactoglobulin, isoelectric focusing (IEF) method, PCR-RFLP.