

GENETIC POLYMORPHISM OF B-LACTOGLOBULIN IN LITHUANIAN BLACKFACE AND LITHUANIAN NATIVE COARSEWOOLED SHEEP

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Summary. We describe the polymorphism of the β -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_{obs} =0.511) was slightly lower than mean expected heterozygosity (H_{exp} =0.667) in Lithuanian Blackface sheep. In Lithuanian Native Coarsewooled sheep mean expected heterozygosity value (H_{obs} =0.461) was similar to the mean observed heterozygosity (H_{exp} =0.434) and deviation from Hardy-Weinberg equilibrium was not detected in any of those breeds.

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