

GOAT KAPPA CASEIN GENE POLYMORPHISM

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Summary. The genetic polymorphism of goat caseins has raised a considerable research interest due to its relationship with milk composition and technological characteristics important for cheese making. The goat milk also is important in human dietary as it quite different in composition from bovine milk. The aim of this study was to identify milk protein kappa casein gene polymorphism by PCR-RFLP method in goat populations bred in Lithuania-Lithuanian native, Saanen, German White and Czcek White. Digestion of 459 bp kappa casein gene region produced three fragments of 54, 51 and 354 bp for alleles A and B while allele C generated only two fragments 54 and 405 bp. The A and B alleles were predominant in all studied populations ranging from 0.83 to 1 while C allele was present at a low frequency with highest value in Lithuanian native – 1.7%, and not found in German White breed.

Key words: polymorphism, kappa casein gene, milk, goat, PCR-RFLP.