ABSTRACT

DINA TRI MARYA. Diversity of milk quality and butter based on the genotype of GH gene from Saanen and Etawah Grade goats. Supervised by RARAH RATIH ADJIE MAHESWARI and CECE SUMANTRI.

The Growth hormone (GH) secreted by the pituitary gland plays an important role in lactation. The objectives of this study were to observe the quality of raw milk (fat, protein, density, and dry matter) and characteristics of butter from Saanen and Etawah-Grade (EG) goat and to analyse the effect of GH gene type in milk quality. The DNA of 89 goats (Saanen and EG) was evaluated. Single-strand conformation polymorphisms (SSCP) was utilized to identify goat growth hormone (gGH) gene. The results showed that there were exist five types of GH gene in exon 4 consist of type CE, BC, CD, BB and CC. The CE, BC and BB types were found in all population (Saanen and EG). The CD and CC type only found in Saanen and EG goats respectively, but this diversity did not affect milk quality of the raw milk of Saanen and EG goats. Diversity of genotypes of GH gene also did not affect the characteristics of goat's milk butter.

Keywords: Goat milk, quality, butter, GH gene, Saanen, Etawah-Grade