

ASSOCIATION BETWEEN GROWTH HORMONE GENE POLYMORPHISM AND ECONOMIC TRAITS IN PIGS

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Summary. Growth hormone (GH) regulates growth, development and various metabolic activities. The objective of this study was to investigate the effect of single nucleotide polymorphisms in growth hormone (GH) gene on performance traits in pigs. Genotypes of growth hormone gene (*GH*) were established with PCR-RFLP technique using *FokI* endonuclease. Porcine GH gene AA genotype was found with frequency 0.121, AG genotype – 0.474 and GG genotype with frequency 0.405. Animals with GG genotype had less body fat amount and higher muscularity percent, compared to AG and AA genotype animal. Pigs with GG genotype had the lowest age while reaching 100 kg.

Keywords: Growth hormone (GH), restriction fragments length polymorphism (RFLP), pigs.