

MYF5 GENE INFLUENCE ON FATTENING AND MEAT TRAITS IN PIGS

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Summary. Biological role of MYF5 gene is skeletal muscle differentiation and controlling formation of myofibril. The lean meat weight of cattle, pig and other livestock depends on amount of myofibril. Pigs, who have more muscular fibre than remaining livestock, grow rapidly and have higher muscular weight. The objective of this study was to investigate MYF5 gene polymorphism and its influence on pig productive traits. 112 unrelated pigs were investigated. Porcine MYF5 gene AA genotype was found with frequency 0.531, AB genotype – 0.435 and BB genotype with frequency 0.034. In investigated pigs A allele was found with 0.748 frequency, B allele – 0.252 frequency, respectively. Animals with AA genotype had significantly lower body fat amount, higher muscularity percent and highest growth rate compared to animals with AB and BB genotypes. In addition, pigs with genotype AA had lowest feed consumption to reach 100 kg body weight than animals with AB and BB genotypes.

Keywords: MYF5 gene, restriction fragment length polymorphism (RFLP), pigs.