

**PROFIL GEN RESEPTOR GROWTH HORMONE (rGH) PADA SAPI
MADRASIN**

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ABSTRACT

Cross-breeding between Madura cattle and exotic breeds (exotic cows) occurs in Madura area. The reality in the field shows that the cross-breeding occurs between Limousin cow and Madura cow and the result of the breeding is called as Madrasin cow. One of factor that influences the animal's growth is Growth Hormone Receptor (GHR). GHR is needed by Growth Hormone (GH) to carry out its effects on target tissues. The purpose of this study is to identify the profile of Growth Hormone Receptors in Madrasin cow. This research was conducted on farmers in Bangkalan, East Java and the Center of Veterinary, Denpasar in May-June 2017. This study used 14 cows Madrasin. The samples of this study were blood which were taken and used for analyzing DNA that includes DNA isolation, DNA amplification by using Polymerase Chain Reaction (PCR) and Restriction Fragment Length Polymorphism (RFLP) method to determine the genotype. An identification of Growth Hormone Receptor gene polymorphism is done through digesting the DNA fragment of 298 bp by the restriction enzyme AluI. The results shows that the frequency of Growth Hormone Receptor Gene of cow Madrasin allele A was 0.92 and the G allele was 0.08 with frequency of the A allele is higher than G allele. The genotype changing was found in cow Madrasin as much as 0.85 to 0.14 for the AA and AG. As a result of the study, the researcher concluded that Growth Hormone Receptor gene experienced a changing or polymorphisms in Madrasin cow and information which stated in this study be able to used as a basic for selection.

Keywords: Beef cow, genetic polymorphisms, GHR, Madrasin cow, PCR-RFLP.