

ASSOCIATIONS OF GH AND IGF1R GENE POLYMORPHISM WITH AVERAGE DAILY GAIN AND BODY MEASUREMENT IN PESISIR CATTLE

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Abstract. The objectives of the present study were to investigate the genetic variability of the *GH/AluI*, *GH/MBoll* and *IGF1R/MspI* in Pesisir cattle and to analyze their effect on average daily gain and body measurement such as body length, chest girth, height withers. Total 175 Pesisir Cattles were used in this research. Weight gain, and body measurement were fitted using the General Linear Model (GLM) procedure of the SAS program. The results showed significant associations between *GH/MBoll* and *IGF1R/MspI* polymorphism with weight gain and height withers ($p < 0.05$). The effect of *GH/AluI* polymorphisms was not observed on average daily gain and body measurement in Pesisir cattle ($P > 0.05$). The results demonstrated that the *GH/MBoll* and *IGF1R/MspI* polymorphisms could be used as a candidate gene for selection in Pesisir cattle.

Key words: Pesisir cattle, *GH/MBoll*, *GH/AluI*, *IGF1R/MspI* polymorphism, RFLP, average daily gain, body measurement.