

POLIMORFISME ALEL DNA MIKROSATELIT KROMOSOM Y PADA POPULASI SAPI MADURA (*Bos javanicus*)

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Biology

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Cow livestock was one of the livestock which was given large contribution in national meat preparation to fulfill people protein needs. Talib et al., (2002) stated that the demand of Indonesian meat was increasing in 6 to 8% every years. But the livestock population addition was imbalance with national meat needs (Putu et al., 1997). Local cow (indigenous) which was developed in Indonesia was various. One of them was Madura cow. As the other livestock, there was productivity decreasing which was caused by negative selection, that was productive cow cut / good appearance, and the other factor was inbreeding since Madura island was a close region for the other cow (Wijono and Setijadi, 2004). According to above condition, to support the success of Madura cow development, there needed genetic variance identification. One of the molecular sign which could be used in genetical identification in molecular way was microsatellite. Microsatellite or simple sequence Repeats (SSRs) consisted of DNA arrangement with motive 1-6 base couple, repeated five times or more in partnership way (Vigoroux et al., 2002). The research aimed to find out the description of polymorphism alel DNA according DNA character microsatellite at chromosome Y in Madura cow. The research was descriptive research which was used data input from genome Data isolated from full blood sample of 18 Madura cow. Data analyzed was DNA microsatellite alel which was the result of PCR reaction with micro-satellite used to decide the frequency alel value, hetero-sigosity alel, Hardy Weinberg balance and polymorphic information content (PIC). The research showed that the highest alel frequency was 1 and the lowest was 0.12. Highest Hetero-sigosity value was in INRA locus 124 (64%) and the lowest was in INRA 062 (0) and Madura cow population used in the research in general was not in HWE balance, while the highest PIC value was on INRA 124 locus, that was 52% and the lowest PIC was in INRA locus 062, that was (0). According to the locus criteria, the most polymorphic was INRA 124 locus. So that there hoped that the locus could be a major example for genetical quality statement of Madura cow.