

STUDY OF DUMPS DISORDER IN KHUZESTAN NATIVE COWS POPULATION OF IRAN

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ABSTRACT

The present study investigated the occurrence of autosomal recessive genetic disease, DUMPS, that causing early embryo mortality during its implantation in the uterus in Khuzestan native cows. Genomic DNA was isolated from the blood of the cows (n=230). The polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) analysis was performed to identify carriers of this disease. Then to determine existence of mutant DUMPS allele, all cows were confirmed by DNA sequencing. This study showed that none of the cows were carriers or mutants of DUMPS deficiency. More attention is necessary to check bulls related to possibility of being DUMPS carrier. This is important for economical reason and DUMPS mutation and its recessive hereditary disorder. However not any carrier observed in this study, for more detection of genetic disorders, it seems that a wide screening program is needed.

Key words: DUMPS, sequencing, PCR-RFLP, Native Cattle



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