



***FSHR* genotype affects estrogen levels but not pregnancy rates in Luxi cattle subjected to embryo transfer**

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ABSTRACT. Follicle-stimulating hormone receptor (*FSHR*), which mediates the functioning of FSH, plays a central role in reproduction. We investigated bovine *FSHR* gene polymorphisms and analyzed their relationships with pregnancy rates after embryo transfer and with hormone concentrations on the day of embryo transfer. One reported SNP of *FSHR*, G-278A, located in the 5'-upstream region, was analyzed and three genotypes (GG, GA and AA) were detected in 132 Luxi cattle recipients. Statistical analysis revealed that recipients with the GG genotype had significantly higher estrogen levels on the day of embryo transfer than did GA and AA genotypes. There were no significant differences in pregnancy rates among genotypes, after embryo transfer. We conclude that variation at these loci of the *FSHR* gene has no significant effect on pregnancy rates in Luxi cattle.

Key words: Luxi cattle; Embryo transfer; *FSHR*; Pregnancy rates