STIMULATION OF OESTRUS USING SEMICONDUCTOR LASERPUNCTURE IN BALI CATTLE (*Bos sondaicus*)

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ABSTRACT

The research was conducted to study the acceleration response of estrous and it's relationship with follicle dominant size in Bali cattle. This research used sixteen females of Bali cattle with random oestrus cycle, 5 years of age, healthy, reproductively, non-pregnant, with body condition score was 4 on scale score of 5. The stimulation of oestrus in this study was using semiconductor laserpuncture with 0,5 J of dose applicated on 8 reproduction acupuncture points, once a day, 4 days. The control group wasn't using any stimulation or naturally oestrus. The data were reported descriptively and analysed using Independent T-Test. The result showed after stimulation of semiconductor laserpuncture, response of oestrus occured 1 female Bali cattle (12,5%) on 4^{th} day, 4 (50%) on 5^{th} day, 1 (12,5%) on 7^{th} day, and 2 (25%) on 9^{th} day, followed with dominant follicle size when standing heat occured (11,7±0,5mm). Control group showed the response of oestrus occured on $18,5^{th}$ day, followed with dominant follicle size when standing heat occured (11,5±0,8mm). It was concluded that the acceleration of oestrus response after stimulated with semiconductor laserpuncture could have a relation with the size of dominant follicle in Bali cattle.

Keywords : *laserpuncture semiconductor, estrous, Bali cattle*