

**THE STIMULATION OF REPRODUCTION POINT WITH A  
SEMICONDUCTOR LASER PUNCTURE TO ESTRUS  
SYNCHRONISATION OF BALI CATTLE (*Bos sondaicus*)**

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**ABSTRACT**

This research to know the stimulation of reproduction point with a semiconductor laserpuncture to estrous synchronisation of Bali Cattle was conducted in Loka Penelitian Sapi Potong Grati-Pasuruan, East Java. Estrous synchronization is a technique to get the sign of estrous and ovulation (estrous outside of estrous cycle) to be easier to detect estrous, synchronisation of breeding, and shorter of calving interval. Laserpuncture was applied on 8 head Bali Cattle at 14 reproduction acupuncture points, 10 second for each point, 3 times frequency with interval 1 day (20-24 times). The variables of this assessment were response and signs of estrous, synchronized of estrous with *Chi square* test and *T-test* method. Result showed that there was significant correlation between semiconductor laserpuncture with estrus synchronization ( $p \leq 0.05$ ). The result of assessment 8 (100%) head Bali Cattle was estrous. The response of estrous appeared 1 head (12,5%) on 5<sup>th</sup> day (4<sup>th</sup> day post laserpuncture), 4 head (50%) on 6<sup>th</sup> day (5<sup>th</sup> day post laserpuncture), 1 head (12.5%) on 8<sup>th</sup> day (7<sup>th</sup> day post laserpuncture), and 2 head (25%) on 10<sup>th</sup> day (9<sup>th</sup> post laserpuncture). This result showed that semiconductor laserpuncture technology was effective to stimulate estrous synchronization and resulting ovulation, with the evidence that conception was occurred.

**Key word :** Bali cattle, semiconductor laserpuncture, estrous synchronisation