

**NILAI HERITABILITAS SAPI BRAHMAN DI BALAI PEMBIBITAN  
TERNAK UNGGUL DAN HIJAUAN PAKAN TERNAK  
SEMBAWA**

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**INTISARI<sup>\*)</sup>**

Penelitian ini bertujuan untuk mengetahui berat lahir dan berat sapih berdasarkan jenis kelamin dan paritas serta mengetahui nilai heritabilitas ( $h^2$ ) berat lahir dan berat sapih sapi Brahman. Penelitian ini dilaksanakan pada tanggal 06 Maret-14 Maret 2019 di Balai Pembibitan Ternak Unggul dan Hijauan Pakan Ternak (BPTU-HPT) Sembawa. Data yang digunakan yaitu berat lahir, berat sapih, paritas, jenis kelamin, silsilah, tanggal lahir dan tanggal sapih yang diperoleh dari *recording performance* ternak. Metode yang digunakan adalah metode korelasi saudara tiri seapak menggunakan Rancangan Acak Lengkap (RAL) pola searah. Hasil penelitian berdasarkan jenis kelamin berat lahir jantan dan betina berturut-turut adalah  $35,81 \pm 5,16$ kg ;  $35,09 \pm 4,87$ kg sedangkan berat sapih jantan dan betina berturut-turut adalah  $144,93 \pm 26,85$ kg ;  $140,31 \pm 26,75$ kg, terdapat perbedaan yang nyata ( $P < 0,05$ ) antara pedet jantan dan betina. Hasil analisis statistik berdasarkan paritas berat lahir adalah sebagai berikut :  $32,11 \pm 3,71$ kg ;  $34,75 \pm 4,99$ kg ;  $34,82 \pm 5,26$ kg ;  $34,25 \pm 4,29$ kg ;  $33,37 \pm 5,65$ kg. Hasil analisis statistic berdasarkan paritas berat sapih adalah sebagai berikut :  $142,36 \pm 26,33$ kg ;  $149,38 \pm 24,3$ kg ;  $151,74 \pm 28,85$ kg ;  $145,27 \pm 29,93$ kg ;  $129,01 \pm 30,57$ kg. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan yang nyata ( $P > 0,05$ ) antara berat lahir dan berat sapih berdasarkan paritas. Hasil perhitungan nilai heritabilitas berat lahir  $0,44 \pm 0,05$  dan berat sapih  $0,64 \pm 0,09$ . Disimpulkan bahwa berat lahir dan berat sapih berdasarkan jenis kelamin menunjukkan bahwa pedet jantan lebih besar daripada pedet betina. Berat lahir berdasarkan paritas menunjukkan bahwa paritas 1-5 adalah sama. Berat sapih berdasarkan paritas menunjukkan bahwa paritas 1-4 adalah sama dan nilai heritabilitas pada penelitian ini termasuk dalam kategori tinggi.

**(Kata Kunci : Heritabilitas, Berat sapih, Berat lahir, Sapi BrahmanSembawa)**

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# THE HERITABILITY VALUE OF BRAHMAN IN BALAI PEMBIBITAN TERNAK UNGGUL DAN HIJAUAN PAKAN TERNAK SEMBAWA

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## ABSTRACT\*)

This research aims to determine birth weight and weaning weight based on sex and parity as well as to know the heritability value ( $h^2$ ) of Brahman cattle birth weight and weaning weight. This study was conducted on 6<sup>th</sup>-14<sup>th</sup> of March 2019 at *Balai Pembibitan Ternak Unggul and Hijauan Pakan Ternak* (BPTU-HPT) Sembawa. The data used were birth weight, weaning weight, parity, gender, and pedigree, date of birth and weaning date obtained from Brahman's recording performance. The method used was the half brother correlation method using a Completely Randomized Design (CRD) one way classification. The results of the study based on sex of male and female birth weight were  $32,11 \pm 3,71$ kg ;  $35,09 \pm 4,87$ kg while the weight of male and female weaning was  $144,93 \pm 26,85$ kg;  $140,31 \pm 26,75$ kg there were significant differences ( $P < 0,05$ ) between male and female calves. The results of statistical analysis based on birth weight parity are as follows:  $32,11 \pm 3,71$ kg ;  $34,75 \pm 4,99$ kg ;  $34,82 \pm 5,26$ kg ;  $34,25 \pm 4,29$ kg ;  $33,37 \pm 5,65$ kg. The results of the statistical analysis based on weaning weight parity are as follows:  $142,36 \pm 26,33$ kg;  $149,38 \pm 24,3$ kg;  $151,74 \pm 28,85$ kg;  $145,27 \pm 29,93$ kg;  $129,01 \pm 30,57$ kg. The results showed that there was no significant difference ( $P > 0,05$ ) between birth weight and weaning weight based on parity. The results of the calculation of the birth heritability values were  $0,44 \pm 0,05$  and weaning weight was  $0,64 \pm 0,09$ . It was concluded that birth weight and weaning weight based on sex preferences, showed that male calves were greater than female calves, while based on birth weight parity showed 1-5 was the same. Based on birth weight parity showed 1-4 was the same and heritability values in this research included as the high category.

**(Keywords : Heritability, Weaning weight, Birth weight, Brahman Sembawa'scow)**

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