

**HUBUNGAN *BODY CONDITION SCORE* TERHADAP KINERJA
REPRODUKSI INDUK PADA BERBAGAI BANGSA SAPI
POTONG DI PETERNAKAN RAKYAT KABUPATEN
NGAWI JAWA TIMUR**

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INTISARI

Penelitian ini bertujuan untuk mengetahui hubungan antara *body condition score* (BCS) dan bangsa terhadap kinerja reproduksi induk sapi potong serta interaksi keduanya. Penelitian ini dilakukan pada bulan Oktober hingga November 2022 di peternakan rakyat Kabupaten Ngawi, Jawa Timur. Penelitian ini menggunakan 30 ekor induk sapi potong terdiri atas 10 ekor sapi Peranakan Ongole, 10 ekor Persilangan Simmental Peranakan Ongole (SimPO), dan 10 ekor Persilangan Limousin Peranakan Ongole (LimPO). Syarat induk sapi yang digunakan adalah minimal pernah beranak 2 kali. Masing-masing bangsa induk sapi potong dikelompokkan pada BCS 2 (2,5 sampai 2,9) dan BCS 3 (3,0 sampai 3,5). Penilaian *body condition score* dilakukan dengan pengamatan secara langsung. Data yang diambil adalah kinerja reproduksi yang meliputi *Post Partum Mating* (PPM), *Service Per Conception* (S/C), dan *Calving Interval* (CI). Data reproduksi diperoleh dengan cara wawancara kepada peternak menggunakan kuisioner. Data yang diperoleh dianalisis menggunakan analisis variansi pola Faktorial 2x3. Hasil penelitian menunjukkan bahwa nilai PPM, S/C, dan CI pada induk BCS 2 dan BCS 3 berturut-turut masing-masing adalah $8,27 \pm 2,49$ dan $4,80 \pm 2,62$ bulan; $3,00 \pm 0,84$ dan $2,00 \pm 0,65$ kali; dan $20,20 \pm 2,45$ dan $15,27 \pm 2,01$ bulan. Nilai PPM, S/C, dan CI induk dengan BCS 2 lebih tinggi ($P < 0,01$) daripada induk dengan BCS 3. Nilai PPM, S/C, dan CI bangsa Sapi PO, SimPO, LimPO berturut-turut masing-masing adalah $6,90 \pm 2,96$, $7,10 \pm 3,21$, dan $5,60 \pm 3,13$ bulan; $2,80 \pm 0,78$, $2,40 \pm 1,07$, dan $2,80 \pm 0,78$ kali; serta $17,70 \pm 2,66$, $5,60 \pm 3,13$, dan $17,90 \pm 4,28$ bulan. Tidak terdapat perbedaan PPM, S/C, dan CI antara bangsa sapi PO, SimPO, dan LimPO. Tidak ada interaksi antara BCS dan bangsa sapi terhadap PPM, S/C, dan CI. Disimpulkan bahwa kinerja reproduksi sapi dengan BCS 3 lebih baik daripada BCS 2. Bangsa induk sapi tidak berpengaruh terhadap kinerja reproduksi induk sapi potong.

Kata Kunci : Induk Sapi Potong, *Body condition score*, *Service per conception*, *Post partum mating*, *Calving interval*.

**THE CORRELATION OF BODY CONDITION SCORE ON THE
REPRODUCTION PERFORMANCE OF COWS IN VARIOUS
BREEDS AT SMALLHOLDER FARMERS
NGAWI DISTRICT EAST JAVA**

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ABSTRACT

This study aimed to determine the correlation between body condition score (BCS), breeds, and their interaction. This research was conducted from October to November 2022 in smallholders at Ngawi Regency, East Java. This research used 30 head of cows, which consisted of 10 Ongole Crossbreed cattle (PO) cows, 10 Simmental Ongole Crossbreed (SimPO) cows, and 10 Limousin Ongole Crossbreed (LimPO) cows. The sample for cows that have given parturity at least 2 times. Each breed of cows was grouped into BCS 2 (2.5 to 2.9) and BCS 3 (3.0 to 3.5). The body condition score assessment is carried out by direct observation. The data collected is reproduction performance which consisted of Post Partum Mating (PPM), Service Per Conception (S/C), and Calving Interval (CI). Reproduction performances data were obtained by interview farmers used a questionnaire. The data obtained were analyzed using 2x3 factorial analysis of variance. The results showed the PPM, S/C, and CI of cows with BCS 2 and BCS 3 were 8.27 ± 2.49 and 4.80 ± 2.62 months; 3.00 ± 0.84 and 2.00 ± 0.65 times; and 20.20 ± 2.45 and 15.27 ± 2.01 months, respectively. The PPM, S/C, and CI of cows with BCS 2 were higher ($P < 0.01$) than those of cows with BCS 3. The PPM, S/C and CI of PO, SimPO, LimPO cows were 6.90 ± 2.96 , 7.10 ± 3.21 , and 5.60 ± 3.13 months; 2.80 ± 0.78 , 2.40 ± 1.07 , and 2.80 ± 0.78 times; and 17.70 ± 2.66 , 5.60 ± 3.13 , 17.90 ± 4.28 months, respectively. There was no significant differences in PPM, S/C, and CI among PO, SimPO, and LimPO cows. There was no interaction between cows BCS and breeds on the PPM, S/C and CI. It is concluded that cows with BCS 3 has better reproduction performance than cows with BCS 2. The breed of the cows doesn't affect their reproduction performance of cows.

Keywords: Cows, Body condition score, Service per conception, Post partum mating, Calving interval.