

## THE EFFECT OF BREED AND SLAUGHTER WEIGHT ON CARCASS AND NON CARCASS PERCENTAGE CATTLE IN CANGUK SLAUGHTERHOUSE MAGELANG

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### ABSTRACT

The aim of this research was to know the effect of breed and slaughter weight of carcass and non carcass percentage cattle in Canguk Slaughterhouse Magelang. The materials in this study were Ongole grade cattle (PO) and Simmental crossbreed (SimPO) cattle as many as 90 heads. That cattles was divided into three groups: <350 kg (30 heads), 350-400 kg (30 heads), and > 400 kg (30 heads). The data were collected including slaughter weight, carcass weight, carcass percentage, meat weight, meat percentage, bone weight, bone percentage, Meat Bone Ratio (MBR), percentage of liver, foot, skin, head, digestive tract, heart, kidney and lung. The data were analyzed using factorial pattern variance analysis (2x3), and the differences between means were tested by *Duncan's Multiple Range Test*. The results of the analysis showed that SimPO cattle breed have carcass weights  $221.76 \pm 47.08$  kg; meat  $174.00 \pm 41.41$  kg; percentage of carcass  $51.48 \pm 3.38\%$ ; foot  $4.34 \pm 0.54\%$ ; head  $6.11 \pm 1.04\%$ ; skin  $8.45 \pm 0.77\%$ ; and liver  $1.06 \pm 0.88\%$ . Slaughter weight of <350 kg group has the highest percentage of carcass, foot, skin, liver, and gastrointestinal percentage, respectively  $52,58 \pm 2,90\%$ ;  $3,93 \pm 1,03\%$ ;  $9.19 \pm 0.42\%$ ;  $1.07 \pm 0.10\%$ ; and  $5.79 \pm 0.41\%$ . Slaughter weight of 350-400 kg group has the highest average percentage of heads, which is  $6.77 \pm 0.65\%$ . Slaughter weight of >400 kg group has the highest average of carcass and meat weight,  $262.57 \pm 26.65$  kg and  $125.80 \pm 15.24$  kg. The conclusion of this study is that the SimPO cattle breed have higher carcass, meat, bone weight, percentage of carcass, bone, foot, head, skin, and liver than PO cattle breed. Slaughter weight influences to produce high carcass and non carcass percentage. There is a correlation between slaughter weight and cattle breeds on carcass, meat weight and percentage of carcass, foot, head, skin, liver, lung, kidney, and digestive tract.

Keywords : Cattle breed, Slaughter weight, Carcass and non carcass

## **PENGARUH BANGSA DAN BOBOT POTONG TERHADAP PERSENTASE KARKAS DAN NON KARKAS SAPI DI RUMAH POTONG HEWAN CANGUK MAGELANG**

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### **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh bangsa dan bobot potong terhadap persentase hasil karkas dan non karkas sapi yang dilakukan di Rumah Potong Hewan Canguk Magelang. Materi yang digunakan dalam penelitian ini adalah sapi Peranakan Ongole (PO) dan sapi Simmental Peranakan Ongole (SimPO) masing-masing sebanyak 90 ekor. Masing-masing dibagi menjadi tiga kelompok yaitu 30 ekor dengan bobot potong <350 kg, 30 ekor dengan bobot potong 350 kg sampai 400 kg, dan 30 ekor >400 kg. Data yang dikumpulkan meliputi bobot potong, bobot karkas, daging, tulang dan persentase karkas, daging, tulang, *Meat Bone Ratio* (MBR), hati, kaki, kulit, kepala, saluran pencernaan, jantung, ginjal, dan paru-paru. Data yang diperoleh dianalisis dengan menggunakan analisis variansi pola faktorial (2x3), jika terjadi perbedaan maka akan dilanjutkan dengan *Duncan's Multiple Range Test*. Hasil analisis menunjukkan adanya nilai yang signifikan ( $P < 0,05$ ) pada sapi bangsa SimPO dengan nilai bobot karkas  $221,76 \pm 47,08$  kg; daging  $174,00 \pm 41,41$  kg; persentase karkas  $51,48 \pm 3,38\%$ ; kaki  $4,34 \pm 0,54\%$ ; kepala  $6,11 \pm 1,04\%$ ; kulit  $8,45 \pm 0,77\%$ ; dan hati  $1,06 \pm 0,88\%$ . Bobot potong <350 kg memiliki rerata persentase karkas, kaki, kulit, hati, dan saluran pencernaan paling tinggi berturut-turut yaitu  $52,58 \pm 2,90\%$ ;  $3,93 \pm 1,03\%$ ;  $9,19 \pm 0,42\%$ ;  $1,07 \pm 0,10\%$ ; dan  $5,79 \pm 0,41\%$ . Bobot potong 350-400 kg memiliki rerata persentase kepala paling tinggi yaitu  $6,77 \pm 0,65\%$ . Bobot potong >400 kg memiliki rerata bobot karkas dan bobot daging paling tinggi yaitu  $262,57 \pm 26,65$  kg dan  $125,80 \pm 15,24$  kg. Kesimpulan pada penelitian ini adalah sapi bangsa SimPO memiliki bobot karkas, daging, tulang, persentase karkas, tulang, kaki, kepala, kulit, dan hati yang lebih tinggi dibandingkan dengan sapi bangsa PO. Bobot potong berpengaruh untuk menghasilkan persentase karkas dan non karkas yang tinggi. Terdapat korelasi antara bangsa dan bobot potong terhadap bobot karkas, daging dan persentase karkas, kaki, kepala, kulit, hati, paru, ginjal, dan saluran pencernaan.

Kata kunci : Bangsa sapi, Bobot potong, Karkas dan non karkas