

ABSTRAK

PENDUGAAN BOBOT BADAN KAMBING SABURAI BETINA MELALUI UKURAN-UKURAN TUBUH DENGAN MENGGUNAKAN PERSAMAAN LINEAR DI KELOMPOK TANI MAKMUR II, KECAMATAN GISTING, KABUPATEN TANGGAMUS

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Penelitian ini bertujuan untuk mengetahui hubungan antara ukuran-ukuran tubuh kambing dengan bobot badan kambing Saburai betina dan mengetahui pendugaan bobot badan menggunakan ukuran-ukuran tubuh melalui persamaan linier. Penelitian ini dilaksanakan pada Januari 2023, di Kelompok Ternak Makmur II, Kecamatan Gisting, Kabupaten Tanggamus, Provinsi Lampung. Penelitian ini menggunakan metode survei dengan menggunakan *purposive sampling* dengan kriteria kambing seperti tidak bunting dan umur 1--3 tahun. Peubah yang diamati yaitu lingkaran dada, panjang badan, tinggi pundak, tinggi pinggul, lebar pinggul dan bobot badan. Analisis korelasi dan regresi antara ukuran-ukuran tubuh dan bobot badan dilakukan dengan bantuan program R. Hasil penelitian menunjukkan bahwa lingkaran dada (LD) memiliki korelasi yang sangat kuat sedangkan tinggi pinggul (TPG) dan panjang badan (PB) memiliki korelasi yang kuat serta untuk tinggi pundak (TP) dan lebar pinggul (LPG) memiliki korelasi yang sedang terhadap bobot badan (BB) kambing Saburai dengan nilai korelasi berturut-turut yaitu 0,80, 0,74, 0,74, 0,58 dan 0,52. Sedangkan persamaan regresi antara lingkaran dada (LD), panjang badan (PB), tinggi pundak (TP), tinggi pinggul (TPG) dan lebar pinggul (LPG) terhadap bobot badan (BB) berturut-turut yaitu $BB = -49,9974 + 1,1903LD$; $BB = -24,8560 + 0,8687PB$; $BB = -11,2769 + 0,7036TP$; $BB = -27,9433 + 0,9273TPG$; dan $BB = -0,0109 + 2,1129LPG$ dengan koefisien determinasi (R^2) berturut-turut yaitu 0,6424, 0,5512, 0,3399, 0,5012, dan 0,2789.

Kata kunci: Kambing Saburai, Bobot badan, Lingkaran dada, Panjang badan, Tinggi pundak, Tinggi pinggul, Lebar pinggul

ABSTRACT

ESTIMATION OF BODY WEIGHT OF SABURAI GOATS THROUGH BODY MEASUREMENTS USING LINEAR EQUATIONS IN MAKMUR II FARMING GROUP, GISTING DISTRICT, TANGGAMUS REGENCY

By

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This study aimed to determine the relationship between body measurements and body weight of female Saburai goats and to estimate body weight using body measurements with linear equations. This research was conducted in January 2023, in the Makmur II Livestock Group, Gisting District, Tanggamus Regency, Lampung Province. This study used a survey method using purposive sampling with goat criteria such as not pregnant and aged 1--3 years. The observed variables were chest girth (CG), body length (BL), shoulder height (SH), hip height (HH), hip width (HW) and body weight (BW). Correlation and regression analysis between body measurements and body weight of Saburai goats was done with help of the R program. The results showed that chest girth (CG) had a very strong correlation, while hip height (HH) and body length (BL) had a strong correlation and shoulder height (SH) and hip width (HW) had a moderate correlation to goat body weight (BW) with a correlation value were 0.80, 0.74, 0.74, 0.58 and 0.52, respectively. While the regression equation between chest girth (CG), body length (BL), shoulder height (SH), hip height (HH) and hip width (HW) on body weight (BW) were $BW = -49.9974 + 1.1903CG$; $BW = -24.8560 + 0.8687BL$; $BW = -11.2769 + 0.7036SH$; $BW = -27.9433 + 0.9273HH$; and $BW = -0.0109 + 2.1129HW$ respectively, with the coefficient of determination (R^2) of 0.6424, 0.5512, 0.3399, 0.5012, and 0.2789 respectively.

Keyword : Saburai goat, Body weight, Chest grith, Body length, Shoulder height, Hip height, Hip width.