ABSTRAK

PENDUGAAN BOBOT TUBUH SAPI SIMPO MENGGUNAKAN PENGUKURAN VOLUME TUBUH DI KELOMPOK TERNAK KECAMATAN TANJUNG SARI KABUPATEN LAMPUNG SELATAN

Oleh

Galang Ramadhan

Penelitian ini bertujuan untuk mengetahui korelasi dan regresi antara bobot tubuh dengan volume tubuh dan ukuran-ukuran tubuh (panjang badan dan lingkar dada) pada sapi Simpo di Kelompok Ternak Kecamatan Tanjung Sari Kabupaten Lampung Selatan. Penelitian ini dilaksanakan pada Februari 2022 di Kelompok Ternak Kecamatan Tanjung Sari Kabupaten Lampung Selatan. Penelitian ini menggunakan metode *survey* dengan teknik pengambilan sampel yaitu *purposive sampling* dengan kriteria umur sapi 2--5, tidak bunting, dan tidak agresif. Peubah yang diamati meliputi panjang badan, lingkar dada, volume tubuh, dan bobot tubuh. Data yang diperoleh ditabulasi menggunakan program excel kemudian data panjang badan, lingkar dada, dan volume tubuh dianalisis korelasi dan regresinya dengan bobot tubuh sapi Simpo. Analisis korelasi dan regresi antara variabel independen dan variabel dependen menggunakan program R. Hasil penelitian menunjukkan bahwa panjang badan, lingkar dada, dan volume tubuh berkorelasi nyata ($P<0,01$) dan berpengaruh nyata terhadap perubahan bobot tubuh. Disimpulkan bahwa nilai korelasi antara panjang badan, lingkar dada, dan volume tubuh terhadap bobot tubuh sapi Simpo masing-masing yaitu 0,972, 0,965, dan 0,966, hal ini berarti ketiga variabel independen mempunyai korelasi atau hubungan yang sangat kuat dengan variabel dependen. Persamaan regresi antara panjang badan (PB), lingkar dada (LD), dan volume tubuh (VT) terhadap bobot tubuh (BT) masing-masing yaitu BT = -769,5217 + 8,6324PB, BT = -370,1964 + 4,2129LD, dan BT = 102,5411 + 0,0008185689VT, dan memiliki koefisien determinasi masing-masing yaitu 0,945, 0,931, dan 0,933.

Kata kunci : Bobot tubuh, Lingkar dada, Panjang badan, Sapi Simpo, Volume tubuh

ABSTRACT

**ESTIMATION OF BODY WEIGHT OF SIMPO CATTLE USING BODY
VOLUME MEASUREMENT IN LIVESTOCK GROUP
TANJUNG SARI DISTRICT LAMPUNG
SELATAN REGENCY**

By

Galang Ramadhan

This research aimed to determine the correlation and regression between body weight with body volume and body measurement (body length and chest girth) in Simpo cattle in the Livestock Group Tanjung Sari District South Lampung Regency. This research was carried out in February 2022 in the Livestock Group Tanjung Sari District South Lampung Regency. This research used a survey method with a sampling technique that is purposive sampling with the criteria for cattle being 2--5 years old, non-pregnant, and not aggressive. The observed variables included body length, chest girth, body volume, and body weight. The data obtained were tabulated using the excel program then data on body length, chest girth, and body volume were analyzed for correlation and regression with body weight of Simpo cattle. Correlation and regression analysis between the independent variable and the dependent variable used the R program. The results showed that body length, chest girth, and body volume were significantly correlated ($P<0.01$) and had a significant effect on changes in body weight. It was concluded that the correlation value between body length, chest girth, and body volume to body weight of Simpo cattle were 0.972, 0.965, and 0.966, respectively, this means that the three independent variables have very strong correlation or relationship with dependent variable. Regression equation between body length (PB), chest girth (LD), and body volume (VT) to body weight (BT) are BT = -769.5217 + 8.6324PB, BT = -370.1964 + 4.2129LD; and BT = 102.5411 + 0.0008185689VT, respectively, and have coefficient of determination of 0.945, 0.931, and 0.933, respectively.

Keyword : Body weight, Chest girth, Body length, Simpo cattle, Body volume