

**HUBUNGAN BERAT BADAN DAN UKURAN TUBUH  
PADA KAMBING PERANAKAN ETTAWA  
PESERTA KONTES TERNAK 2018  
DI KABUPATEN KULON PROGO**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui hubungan antara berat badan dengan ukuran tubuh pada kambing Peranakan Ettawa peserta kontes ternak 2018 di Kabupaten Kulon Progo. Penelitian dilaksanakan pada 10 September sampai 15 Desember 2018. Penelitian ini menggunakan 69 ekor kambing Peranakan Ettawa yang meliputi 17 ekor kambing pejantan, 15 ekor kambing induk, 17 ekor calon pejantan dan 20 ekor calon induk. Variabel yang diamati meliputi berat badan (kg), panjang badan (cm), lingkar dada (cm) dan tinggi gumba (cm) serta data populasi kambing PE di Kabupaten Kulon Progo sebagai data sekunder. Data yang diperoleh dianalisis dengan analisis korelasi dan data dianalisis dengan analisis regresi menggunakan metode *stepwise*. Koefisien korelasi dan koefisien determinasi tertinggi kategori pejantan pada variabel berat badan dengan lingkar dada ( $r = 0,73$ ;  $R^2 = 0,54$ ). Koefisien korelasi dan koefisien determinasi tertinggi kategori induk untuk variabel berat badan dengan lingkar dada ( $r = 0,95$ ;  $R^2 = 0,91$ ). Koefisien korelasi dan koefisien determinasi tertinggi kategori calon pejantan pada variabel berat badan dengan lingkar dada ( $r = 0,82$ ;  $R^2 = 0,83$ ), sedangkan koefisien korelasi dan koefisien determinasi tertinggi kategori calon induk untuk variabel berat badan dengan tinggi gumba ( $r = 0,90$ ;  $R^2 = 0,82$ ). Terdapat hubungan yang positif antara ukuran tubuh yang meliputi lingkar dada, panjang badan, dan tinggi gumba dengan berat badan kambing PE kategori pejantan, induk, calon pejantan dan calon induk pada kontes ternak 2018 di Kabupaten Kulon Progo dengan menggunakan analisis korelasi dan regresi. Variabel lingkar dada pada kategori induk merupakan variabel ukuran tubuh yang memiliki hubungan paling erat (91%) dengan berat badan diantara kategori yang lain.

(Kata kunci: Berat badan, Kambing Peranakan Ettawa, Korelasi, Regresi, Ukuran tubuh).

**THE RELATIONSHIP BETWEEN BODY WEIGHT AND BODY  
MEASUREMENT ON THE ETTAWA CROSSBREED (PE) GOAT IN  
LIVESTOCK CONTEST PARTICIPANTS 2018  
AT KULON PROGO DISTRICT**

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**ABSTRACT**

The objectives of the study is to determine the relationship between body weight and the size of Ettawa Crossbreed (PE) goat in livestock contest 2018 at Kulon Progo district. The research was conducted on September 10<sup>th</sup> until Desember 15<sup>th</sup>, 2018. This study used 69 Ettawa Crossbreed (PE) goat consisted of 17 bucks, 15 does, 17 bucks candidate and 20 does candidate. The variables observed were body weight (kg), body length (cm), heart girth (cm) and wither height (cm), measured during goat contest. The Ettawa Crossbreed (PE) goat population data in Kulon Progo Regency was collected as secondary data. Data were analyzed with correlation analysis and data were analyzed with regression analysis using stepwise method. The highest coefficient correlation and coefficient determination for buck is between the body weight with heart girth ( $r = 0,73$ ;  $R^2 = 0,54$ ). The highest coefficient correlation and coefficient determination for doe is between the body weight with heart girth ( $r = 0,95$ ;  $R^2 = 0,91$ ). The highest coefficient correlation and coefficient determination for buck candidates is between the body weight with heart girth ( $r = 0,82$ ;  $R^2 = 0,83$ ). The highest coefficient correlation and coefficient determination for doe candidates is between the body weight with heart girth ( $r = 0,90$ ;  $R^2 = 0,82$ ). There is a positive relationship between body size which includes body length (cm), heart girth (cm) and wither height (cm) with the weight of Ettawa Crossbreed (PE) goat in the bucks, Does, bucks, candidate, does candidate in livestock contest 2018 at Kulon Progo district using correlation and regression analysis. The variable of heart girth on doe category is variable in body measurement has the closest relationship (91%) with body weight among other categories.

(Keywords: Weight, Ettawa Crossbreed (PE) goat, Correlation, Regression, Body measurement)