

HUBUNGAN UKURAN VITAL STATISTIK DOMBA BATUR DENGAN BERAT BADAN PADA BERBAGAI FASE

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INTISARI

statistik dengan berat badan domba Batur di Kecamatan Batur Kabupaten Banjarnegara. Penelitian dilaksanakan pada bulan April – Mei 2021. Materi penelitian ini adalah domba Batur berbagai fase dan peternak yang memiliki minimal 10 ekor domba. Penelitian dilakukan dengan metode *survei*. Jumlah total sampel sebanyak 100 ekor. Variabel penelitian ini adalah identitas responden, lingkaran dada, panjang badan, tinggi badan dan berat badan domba Batur. Data dianalisis menggunakan analisis *regresi linier sederhana*. Hasil dari penelitian ini menunjukkan bahwa rata-rata umur peternak 55,67 tahun, tingkat pendidikan peternak lulusan SMP sebanyak 66,67% dan SMA 33,33%, pengalaman peternak 35 tahun, jumlah kepemilikan ternak 2,44 UT. Hubungan lingkaran dada dengan berat badan umur 1-3 bulan, >3-6 bulan, >6-12 bulan, >1 tahun dan semua umur (1 bulan - > 12 bulan) memiliki nilai R^2 berturut-turut, 0,891; 0,899; 0,818; 0,836 dan 0,948. Hubungan panjang badan dengan berat badan umur 1-3 bulan, >3-6 bulan, >6-12 bulan, >1 tahun dan semua umur (1 bulan - > 12 bulan) memiliki nilai R^2 berturut-turut, 0,852; 0,873; 0,798; 0,834 dan 0,943. Hubungan tinggi badan dengan berat badan domba Batur umur 1-3 bulan, >3-6 bulan, >6-12 bulan, >1 tahun dan semua umur (1 bulan - > 12 bulan) memiliki nilai R^2 berturut-turut, 0,724; 0,841; 0,818; 0,213 dan 0,726. Penyimpangan pendugaan berat badan menggunakan persamaan *regresi linier berganda* sebesar 0,03% dan rumus Arjodarmoko yaitu 8,23%. Disimpulkan bahwa semakin besar ukuran vital statistik maka semakin tinggi berat badan domba Batur. Nilai R^2 lingkaran dada, panjang badan dan tinggi badan terhadap berat badan masing-masing yaitu 0,948, 0,943 dan 0,726. Ukuran vital statistik lingkaran dada memiliki hubungan dengan berat badan yang paling kuat. Rumus persamaan untuk menghitung berat badan dapat menggunakan rumus $Y = -71,734 + 0,720 LD + 0,969 PB - 0,115 TB$ karena memiliki persentase penyimpangan paling kecil yaitu -0,03%.

Kata kunci : Domba Batur, Ukuran Vital Statistik, Berat badan, Banjarnegara

THE RELATIONSHIP OF THE STATISTICS OF THE VITAL SIZE OF THE BATUR SHEEP WITH BODY WEIGHT AT VARIOUS PHASES

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ABSTRACT

This study aimed to determine the relationship between statistical vital measures and body weight of Batur sheep in Batur District, Banjarnegara Regency. The research was carried out in April – May 2021. The material of this research was Batur sheep of various phases and breeders who had at least 10 sheep. The research was conducted by survey method. The total number of sample was 100 individuals. The variable of this study were the identity of the respondents, chest circumference, body length, height and body weight of Batur sheep. Data were analyzed using simple linear regression analysis. The results of this study indicated that the average age of the breeder was 55.67 years, the education level of the farmer graduate was 66.67% and high school graduate was 33.33%, the experience of the farmer was 35 years, the number of livestock ownership was 2.44 AU. The relationship between chest circumference and body weight at aged of 1-3 months, >3-6 months, >6-12 months, >1 year and all ages (1 month -> 12 months) had R² values, respectively, 0.891; 0.899; 0.818; 0.836 and 0.948. The relationship between body length and body weight at aged of 1-3 months, >3-6 months, >6-12 months, >1 year and all ages (1 month -> 12 months) had R² values, respectively, 0.852; 0.873; 0.798; 0.834 and 0.943. The relationship between height and body weight of Batur sheep at aged of 1-3 months, >3-6 months, >6-12 months, >1 year and all ages (1 month -> 12 months) had R² values, respectively, 0.724; 0.841; 0.818; 0.213 and 0.726. The deviation of body weight estimation using multiple linear regression equation is 0.03% and Arjodarmoko's formula was 8.23%. It was concluded that the larger of the vital statistic, the higher of the body weight of the Batur sheep. The R² values of chest circumference, body length and height to body weight were 0.948, 0.943 and 0.726, respectively. Vital measures of chest circumference statistics have the strongest relationship with body weight. The equation formula for calculating body weight can use the formula $Y = -71.734 + 0.720 LD + 0.969 PB - 0.115 TB$ because it has the smallest deviation percentage, which was 0.03%.

Keywords: Batur Sheep, Vital Statistics Size, Body Weight, Banjarnegara

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