

## Various Body Measurements of Hair, Boer x Hair F1 Crossbred Kids and Effects of Some Environmental Factors on These Traits

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**Abstract :** The aim of the study was to determine various body measurements from the birth to the 30-day age of Boer x Hair goats F1 crossbred kids and pure Hair goat kids raised in Van in Eastern Anatolia region, and reveal factors such as the effects of year, dame body weight, genotype, dame age, birth type and sex on this parameter. 49 kids born in 2012 and 76 kids born in 2014 were utilized in the study. In the statistical analysis of various body measurements data was performed using the General Linear Model procedure in SPSS software. Duncan's multiple range test was used for multiple comparisons. Boer x Hair goats F1 crossbred kids and pure Hair goat kids from various body measurements cidago height, body length, chest length, chest depth, chest circumference, circumference of leg, cannon bone circumference, chest width were determined in general respectively 29.90 and 27.88 cm; 29.49 and 27.93 cm; 17.28 and 16.68 cm; 13.34 and 12.82 cm; 31.74 and 29.85 cm; 28.43 and 23.95 cm; 5.41 and 5.15 cm; 8.71 and 7.63 cm at birth, respectively; 35.01 and 32.98 cm; 35.20 and 33.30 cm; 18.82 and 18.17 cm; 15.64 and 14.83 cm; 39.08 and 37.30 cm; 34.29 and 29.25 cm; 5.80 and 5.42 cm; 9.87 and 8.85 cm at 30 days age, respectively. Among factors affecting cidago height in this study, the effect of dame body weight and sex were not significant, but genotype, dame age and birth type were significant ( $P < 0,05$  and  $P < 0,01$ ) at birth; dame body weight effect of the cidago height was not significant, but the effect of genotype, birth type, of dame age and sex were significant ( $P < 0.05$ ,  $P < 0.05$  and  $P < 0.001$ ) at 30-day age. The effect of genotype and sex of body length were not significant, but dam age, dame body weight and birth type were significant ( $P < 0.05$ ,  $P < 0.05$  and  $P < 0.001$ , respectively) at birth; the effect of sex to body length was not significant, but genotype, dame age, dame body weight and birth type were significant ( $P < 0.01$ ,  $P < 0.05$ ,  $P < 0.05$  and  $P < 0.001$ , respectively) at 30-day age. While circumference of leg was insignificant the effect of dame age and sex, genotype, dame body weight and type of the birth were significant ( $P < 0.001$ ,  $P < 0.05$  and  $P < 0.001$ ) at birth; the circumstance of leg at 30-day age was found to be important the effect of examined other factors except for sex ( $P < 0.05$  and  $P < 0.001$ ). The obtained results, when considered in terms of a variety of body sizes, from birth to 30-day age growth period, showed that the kids of Boer x Hair Goat F1 hybrids have higher values than the kids of Hair Goats.

**Keywords :** Boer x hair goat F1 crossbred, hair goat, body measurements, cidago height

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