

## BIOMETRICAL STUDY ON THE TESTES OF MARWARI GOATS IN THE SEMI-ARID REGION

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### SUMMARY

Biometrical studies such as length, width (at two different areas W1 and W2) and weight of testes as well as body weight of 25 adult Marwari goats were recorded. Average length, width and weight of left testes were 10.59±0.26 cm, 5.72±0.17 cm at W1 area and 5.75±0.16 cm at W2 area and 97.94±1.59 gm, respectively and of right testes were 10.16±0.24 cm, 5.30±0.17 cm at W1 area and 5.35±0.13 cm at W2 area and 96.94±1.61 gm, respectively. Average body weight of these goats was 28.76±0.63 kg. The average parameters of left testes were non-significantly higher than the right ones. The weight of testes and body weight had slight positive non-significant correlation.

**Key words:** Biometry, testes, Marwari goat

Goats occupy a strategic position in the socio-economic life of people of semi-arid region of Rajasthan. The knowledge of the biometry of testes is essential for understanding the normal physiology, surgical anatomy and breeding aspects.

The present study was therefore, done on testes of 25 adult Marwari goats collected from municipal abattoir. Biometry of testes was done using Vernier's caliper whereas weight was taken on a digital electronic balance. Both right and left testes were measured for their length, width at two areas W1 and W2 (Fig. 1) and weight. The data obtained was statistically analysed to draw the inferences (Snedecor and Cochran, 1980).

Average length, width and weight of left testes were 10.59±0.26 cm, 5.72±0.17 cm at W1 area, 5.75±0.16 cm at W2 area and 97.94±1.59 gm, respectively whereas the same parameters for right testes were 10.16±0.24 cm, 5.30±0.17 cm at W1 area, 5.35±0.13 cm at W2 area and 96.94±1.61gm, respectively. However, Miller *et al.* (1965) reported that the average length, width, thickness and weight of testis in 25 pound dog were 2.8 to 3.1 cm, 2 to 2.2 cm, 1.8 to 2.0 cm and 7.8 to 8.2 gm, respectively. Raghavan (1964) reported that the testis of an adult bull is about 12.5 cm. long, 6 to 7.5 cm. wide, 6 cm. thick with weight of about 280 to 336 gm. The values of all parameters of left testis in this study were non-significantly higher than the right testis. These findings are in accordance with the reports of Raghavan (1964) in ox and Choudhary *et al.* (2008) in musk deer.

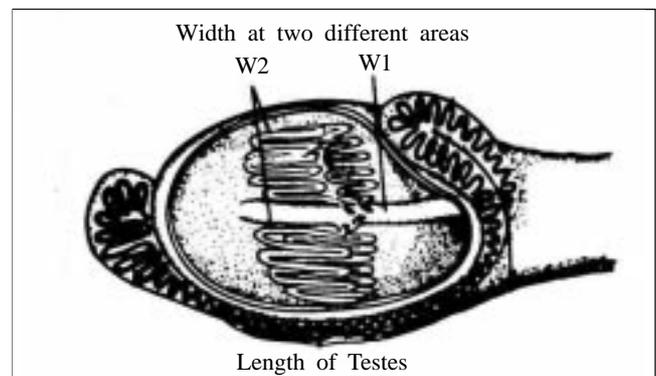


Fig 1. Line diagram showing section of testis of goat.

However, Bansal *et al.* (2003) reported that there were no significant differences between left and right testes in donkeys. The weight of testes and body weight in the present study had slight positive non-significant correlation.

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