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## Testis Morpho-biometrical studies of the adult Ram and Buck in AL-Najaf AL-Ashraf Province

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## Abstract This study designed to

assess the testis morphological features and biometrical parameters of the adult local rams and bucks. The samples were collected from a ten healthy adult rams and bucks that slaughtered in the AL-Najaf AL-Ashraf province abattoir. The testis position, shape, structures, dimensions and its relation with other parts of the region were recorded for each animal. The

testis lies in the inguinal region between the cranial surfaces of the thighs. The long testis axis almost matches that of the trunk. The testis outer shape in both ram and buck revealed the oval shape. The means of the weight, length, circumference, diameter, volume, and density for the left testicular of the ram and buck were (150.2  $\pm$  33.8 gm and  $140.9 \pm 88.4$  gm),  $(10.7 \pm 1.90$  cm and  $9.8 \pm 2.5$  cm), (15.07 $\pm 1.22$  cm and  $9.05 \pm 0.78$  cm),  $(1.9 \pm 0.4$  cm and  $1.9 \pm 0.18$  cm),  $(133.1 \pm 15.9 \text{ ml} \text{ and } 125.9 \pm 20.4 \text{ ml}) \text{ and } (1.13 \pm 0.05 \text{ g/cm}3)$ and  $1.12 \pm 12.3$  g/cm<sup>3</sup>) respectively. While the means of the weight, length, circumference, diameter, volume, and density for the right testicular of the ram and buck were (154.1  $\pm$  3.2 gm and 145.3  $\pm$ 14.3 gm),  $(10.13 \pm 0.90 \text{ cm})$  and  $8.3 \pm 1.9 \text{ cm}$ ,  $(16.09 \pm 2.8 \text{ cm})$ and  $8.09 \pm 1.5$  cm), ( $2.2 \pm 0.33$  cm and  $1.5 \pm 1.22$  cm), ( $121.89 \pm 1.22$  cm) 11.65 ml and 116.9  $\pm$  16.37 ml) and (121.89  $\pm$  11.65 ml and 116.9 ± 16.37 ml) respectively. Significant differences (p≤0.05) between the two species were observed in the means of weight, length circumference, diameter, volume, and density of testicles. However, no significant difference was seen in the biometric measurements of the left and right testicle of the ram. Meanwhile, testis volume and density were revealed a significant differences (P ≤0.05). The Tunica vaginalis (a serous membrane) was covered the most testis beneath a strong capsule that called the tunica albuginea. These layers were soft and grayish red in ram, but were darker in buck. The mediastinum layer of the testis revealed jellylike in both animals. In conclusion, the results of this study approved some differences and similarities in the testis morphological and biometrical measurements of the local adult rams and bucks.

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