

Microscopic aspects of scorpion mud turtle (*Kinosternon scorpioides*) testis

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Scorpion Mud Turtle is a semi-aquatic turtle that has approximately 15 cm of carapace length and weights between 400-500 g. In Brazil, this species is mostly found in the North and Northeast Regions and, as other chelonians, scorpion mud turtles are illegally commercialized to satisfy the market of exotic meats. The objective of the present study was to provide some aspects related to histological characteristics of scorpion mud turtle testis. Testis of five adult animals were collected, fixed in Bouin solution, dehydrated with increasing ethanol solutions, and included in paraffin. Sections of 5 µm thickness were obtained and hematoxylin-eosin stained and observed by light microscopy Axioscop 40, Zeiss. Scorpion mud turtle specimens were kept in captivity for approximately four years in the Nucleus of Wild Animals Research and Preservation – NEPAS, under IBAMA/MA permission (Grant 1899339/2008). All analyzed testis presented active spermatogenesis. Seminiferous tubules filled with germ cells were found at several developmental stages, i.e. spermatogonia, spermatocytes, spermatids and spermatozoa. Spermatogonias A and B, and spermatocytes were placed in the tubule basal lamina, with spermatids being found closer to the central part of the tubules, whereas spermatozoa were observed in the lumen. Sertoli cells were irregularly shaped into seminiferous tubules with clear nucleus, to which the spermatogonias become attached. In testis interstitial parenchyma we observed the predominance of Leydig cells, connective tissue and blood vessels. Leydig cells were rounded shape, located beneath the tunica albuginea, in the septal walls. These results suggest that these animals were at reproductive season, and that the structure of scorpion mud turtle testis is similar to that of other chelonians.

Keywords: Microscopic; testis; scorpion mud turtle.

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