Microscopic morphology of the partridge Rhynchotus rufescens phallus

Artoni, SMB., Orsi, AM., Oliveira, D., Negrão, KG., Franzo, VS. and Veras, NMC.

Faculdade de Ciências Agrárias e Veterinárias, Universidade Estadual Paulista

Although some authors have previously described the galliforms reproductive system, there is little information concerning phallus descriptions of zootechnical wild birds such as the partridge Rhynchotus rufescens. In this work, ten adult male partridges were euthanized with ethyl ether for microscopic analysis of the male genital system. The partridges were positioned in dorsal decubitus and a sagittal median ventral incision was made from the rectum to the cranial part of the sewer, for pelvic structure visualization. Subsequently, the phallus samples were immersed in Bouin's fixer solution for 24 hours. After the dehydration by crescent alcohol concentration series and benzol treatment, the samples were included in paraplast and sectioned by microtome. In each histological slide, five 5mm thickness semi-serial sections were positioned. Between two sections in the slide 12 proceeded sections were previously discarded. The preparations were then stained with Harris' Hematoxiline. After careful analysis using a light microscope, the slides were selected and photographed with an Olympus photomicroscope, using colored film Fijicolor (ISO-ASA 100). The phallus tubular portion was made up of two parts; the reversible and fixed portions. Both portions were located inside the proctodeum phallic bag. The phallic furrow can be identified at the reversible portion. It continues as ejaculatory furrow and is disposed along the entire phallus. The ejaculatory furrow lateral surface is sustained by the fibrous body, which is surrounded by smooth muscular layers and lymphatic vases. The partridge phallus contains a regularly folded mucosa and is revested by unkeratinised stratified squamous epithelium. A molded conjunctive tissue composes the phallus lamina propria. This lamina contains longitudinal collagen fibers and transversal elastic fibers. The light microscopic analysis reveals that the partridge phallus is similar to the anseriformes ones.