

ABSTRACT

MORPHOLOGICAL AND MORPHOMETRICAL STUDY OF THE CRASSUM INTESTINE OF THE COMMON PLAM CIVET (*PARADOXURUS HERMAPHRODITUS*)

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The common palm civet (*Paradoxurus hermaphroditus*) is a small carnivore occurring in a broad array of habitats, including logged and unlogged forest, cultivated land, and the outskirts of villages and towns. The crassum intestine is made up of numerous layers such as the peritoneum, mucosa, submucosa, muscular layer, and mucosa. Hematoxylin is used to illustrate nuclear detail in cells. Depth of coloration is not only related to the amount of DNA in the nuclei but also to the length of time the sample spends in hematoxylin. A study using the combination of Haematoxylin Eosin staining is used to explore morphology and morphometry of the crassum intestine of the common palm civet. A total of three civets were used in this study. The samples were processed into paraffin blocks, then cut with a thickness of 5 μm to be used as slides. The slides were stained with Haematoxylin Eosin. Analysis of the results was carried out with a light microscope and photographed using Optilab Viewer. Analysis of the results descriptively qualitatively to explain the visible formation. The results obtained showed that the tunica mucosa of the crassum intestine of the civet (*Paradoxurus hermaphroditus*) is lined by epithelium columnar simplex containing goblet cells. Lamina muscularis mucosa contains a thin layer of musculus. Tunica submucosa consists of connective tissues and blood vessels. Tunica muscularis contains a thick layer of musculus that is divided into two which are lamina muscularis circularis internal and lamina muscularis longitudinal external. The tunica serosa is observed as a thin layer. The morphometry shows that the rectum has the thickest wall with a thickness of 78.17 ± 16.9 mm, followed by the colon with a thickness of 70.9 ± 13.06 mm and the cecum has the thinnest wall of 69.8 ± 13.73 mm. The wall of crassum intestine consist of tunica mucosa 29.39%, tunica submucosa 34.86%, tunica muscularis 28.60% and tunica serosa 7.14%.

Key words: Civets, crassum intestine, Haematoxylin Eosin staining, morphology, morphometry