

## **Light and Electron Microscopic Study of the Abomasal Mucosa of the Egyptian Water buffalo (*BOS Bubalus*)**

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This work was carried out to investigate the histological structure of the buffalo's abomasum. Samples from 9 abomasums were examined by light and transmission electron microscopes. The abomasum consisted of three parts: transitional gland zone, fundic gland zone and pyloric gland zone. (1) Transitional gland zone: In this region the epithelium changed abruptly from stratified squamous keratinized epithelium to simple columnar epithelium. These glands were distributed in a narrow zone of abomasum continuous to the omasum. Each gland could be divided into neck and body regions. (2) Fundic gland region: The fundic gland was about 2/3 of the abomasum, it was marked by thick mucosal fold. The fundic glands were long straight branched tubular gland, occupying the majority of the mucosal thickness. The fundic gland region was divided into isthmus, neck and body. (3) Pyloric gland region: This region occupied 1/3 of the abomasum. The mucosa of the pyloric gland region showed no mucosal fold, it had thick low ridges studded with deep invaginations. Their gastric pit extended into the mucosa to about one half or more of its thickness. The pyloric gland region had thick lamina muscularis mucosae separating them from underlying submucosae. The pyloric gland could be divided into isthmus, neck and body.

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