**Histological, Ultrastructural and Immunohistochemical Studies on the Skin of Catfish**

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**Abstract**

This study was done on the skin of head, trunk and tail of 10 mature catfish collected from local markets to investigate the histological, ultrastructural and immunohistochemical structure of the skin. The epidermis was consisted of stratified squamous epithelium containing Malpighian, mucous cells and club cells (alarm cells). The Malpighian cells were the most numerous cells of the epidermis of the skin. The mucous cells varied from rounded to goblet shape with basal basophilic nucleus and acidophilic cytoplasm. The club cells had different shapes; rounded, oval and elongated with spherical central basophilic nucleus. The dermis contained stratum spongiosum or adiposum depending upon the body region beside stratum compactum. Hypodermis comprised of loose connective tissue containing adipose cells. TEM investigation showed mucous cells contained mucous globules of different electron staining filling apical part of the cell with numerous mitochondria and abundant RER. Club cells had one or two nuclei with prominent nucleolus. The epidermal and club cells showed positive immnuostaining with BAX, while the mucous cells showed a negative reaction.

**Keywords:** Catfish; Skin; Histology; BAX and TEM.