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# Histology, Histochemistry and Surface Architecture of the Rectum of Grass Carp (*Ctenopharyngodon idella*)

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## Abstract:

The rectum of grass carp was characterized by presence of mucosal wavy folds and a large diameter of its lumen, which may act as temporary storage part for excretory materials. Also, the muscularis layer showed a thick-walled as compared with the anterior and posterior portions of the intestine, which would contribute to the expulsion of faecal materials to the anus. Semithin sections of rectal epithelium revealed presence of small vesicles in the enterocytes that indicated its absorptive role, which was confirmed by presence of microvilli and increase in height of the epithelium. On the other hand, the rectum was characterized by an increase in number of goblet cells that reacted intensely with PAS, alcian blue and toluidine blue that may respond to an increased need of lubrication required for expulsion of faeces and protection of mucosa.

## Keywords:

Rectum, Absorptive Epithelium, Goblet Cells, SEM.

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