



Light and Scanning Electron Microscopic Studies on the Intestine of Grass Carp (*Ctenopharyngodon idella*): I-Anterior Intestine

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Abstract:

The present work was carried out on 20 specimens of grass carp in order to observe the morphological features of intestine. The present study showed that the intestine was long, which may help in retention of food for a longer period of time to ensure proper digestion. Also, the percent of relative gut length (RGL) of grass carp was 1.92%. This RGL with a large intestinal diameter of this species allowing increase the storage capacity of food. The intestine of grass carp were divided into anterior, posterior intestine and rectum. There were no intestinal villi or multicellular intestinal glands in any regions of intestine. The most important features of anterior intestine were a wide diameter of the lumen and a great number and height of mucosal folds. The anterior intestine was lined by simple columnar epithelium, intercalated with goblet cells, wandering lymphocytes and enteroendocrine cells. Scanning electron microscopy, revealed presence of long wavy mucosal folds that formed of enterocytes covered with numerous microvilli, intermingled with numerous openings for goblet cells.

Published In:

Aquaculture Research & Development , 6 (11) , NULL