

Histochemistry of Intestinal Enzymes of Juvenile Dourado *Salminus brasiliensis* Fed Bovine Colostrum

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Abstract : Enzyme activity was evaluated in the intestine of juvenile dourado (*Salminus brasiliensis*) fed with diets containing 0, 10 or 20% of lyophilized bovine colostrum (LBC) inclusion for either 30 or 60 days. The intestinal enzymes acid and alkaline phosphatase (ACP and ALP, respectively), non-specific esterase (NSE), lipase (LIP), dipeptidyl aminopeptidase IV (DAP IV) and leucine aminopeptidase (LAP) were studied using histochemistry in four intestinal segments (S1, S2, S3 and posterior intestine). Weak proteolytic activity was observed in all intestinal segments for DAP IV and LAP. The activity of NSE and LIP was also weak in all intestines, except for the moderate activity of NSE in the S2 of 20% LBC group after 30 days and in the S1 of 0% LBC group after 60 days. The ACP was detected only in the S2 and S3 of the 10% LBC group after 30 days. Moderate and strong staining was observed in the first three intestinal segments for ALP and weak activity in the posterior intestine. The activity of DAP IV, LAP and ALP were also present in the cytoplasm of the enterocytes. In the present results, bovine colostrum feeding did not cause alterations in activity of intestinal enzymes.

Keywords : carnivorous fish, enterocyte, intestinal epithelium, teleost

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