

Intestinal Epithelium of Juvenile Dourado (*Salminus brasiliensis*) Fed with Bovine Colostrum

Authors : Thaline Maira P. Cruz, Debora B. Moretti, Wiolene M. Nordi, José Eurico P. Cyrino, Raul Machado-Neto

Abstract : The aim of this study was to evaluate the effect of lyophilized bovine colostrum (LBC) used as partial source of dietary protein on the histological characteristics of the intestinal epithelium of juvenile dourado (*Salminus brasiliensis*). Juveniles were fed with diets containing 0, 10 or 20% of lyophilized bovine colostrum (LBC) inclusion for either 30 or 60 days. For the histological study, the intestine was divided into three segments, S1, S2 and posterior intestine. In the S1 segment, interaction between treatment and period was observed in the number of goblet cells containing sialomucin, effect of treatment in the total number of goblet cells and effect of period in the number of goblet cells containing sulphomucins ($P < 0.05$). In the S2 segment, effect of period was observed in the number of goblet cells containing acid, neutral and total mucins, sialomucins and Vv ($P < 0.05$). In the posterior intestine, effect of period was observed in the thickness of muscle layer and number of goblet cells containing sialomucins and sulphomucins ($P < 0.05$). Considering the aspects studied, the presence of lyophilized bovine colostrum in the diet did not significantly influence the enteric histological characteristics of juvenile dourado during the period of the study.

Keywords : carnivorous fish, goblet cells, mucins, teleost

Conference Title : ICVBS 2014 : International Conference on Veterinary and Biomedical Sciences

Conference Location : Istanbul, Turkey

Conference Dates : June 19-20, 2014