Anatomical aspects of digestory tract of gray armored catfish (*Pterygoplichthys anisitsi*)

Makino, LC.[1], Makino, LC.[2], Nakaghi, LSO.[2], Paes, MCF.[2], Takahashi, ELH.[2] and Faustino, F.[2]

[1]Centro de Aqüicultura, Uiversidade Estadual Paulista
[2]Universidade Estadual Paulista

Gray armored catfish, loricariidae with feeding habit detritivorous-iliophagus, come from the basins of middle and high Parana, Paraguay and Uruguay rivers is a fish of great size, with total length and body mass meeting approximately 50 cm and 900 g, respectively. It is interesting to emphasize the bimodal respiratory nature of this species: the stomach fills with air and performs the respiratory function under hypoxic conditions. The aim of this work was to describe the main anatomical aspects of Pterygoplichthys anisitsi digestory tube. Ten adult specimens of gray armored catfish belonging to Aquaculture Center of UNESP (CAUNESP) were placed in tanks with 500 L of capacity, water recycling system and continuous air supply and submitted to 3 days of fasting food. Laboratorial analyses were carried out at the Department of Morphology and Animal Physiology of *Universidade Estadual Paulista* - UNESP of Jaboticabal-SP, Brazil. After capture, they were anaesthetized by immersion in Benzocaine 0.1% for incision of abdominal cavity and later removal of digestory tract from the oesophagum. Before of organs excision, it was made a previous fixation in situ with formol 10%. Organs were fixed entirely in formalin 20% to a complete fixation during 24 hours. After that, they were rinsed in water and stored in alcohol 70%. Mouth is in ventral position, internally covered by a membrane, with developed lips, garnished by punctiforms structures throughout its length and presence of bristles in upper and lower lips with teeth and tongue absent. Oesophagum showed as a short and muscular tube that opened in a large stomach, with thin and translucent wall, highly vascularized and in situ expanded with air, occupying almost all the celomatic cavity. Continually the stomach was found a long, thin and delicate gut ventrally located to the same one and disposed in spirally shape. Liver was located next to oesophagum e with a portion between the intestinal handles. Under the ventral skin, a developed abdominal muscle layer can be seen, composed by 4 muscle bellies in each antimere of animal body, sustaining the abdominal organs. As the *P. anisitsi* is a fish with feeding habit detritivorous-iliophagus, macroscopic analysis of its digestory tract is peculiar in relation to organs distribution in celomatic cavity and their respective subdivisions.

Financial support: CNPq process nº. 142956/2006-6 and CAUNESP.