Stereomicroscopic analyses of early embrionary development of *Brycon gouldingi* (Teleostei, Characidae)

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Brycon gouldingi is an endemic species from Tocantins-Araguaia basin. Early embrionary development description and its chronology bring important and unpublished information about developmental biology of this new species, still unknown and lack of data in the literature. The aim of this study was to analyze the early embrionary development of *Brycon gouldingi* by stereomicroscopy. Breeding of *Brycon gouldingi* from Rio das Mortes/MT were submitted to induced reproduction in the fish farm Buriti, Nova Mutum/MT. Samples were collected in extrusion, fertilization (time zero), at 10, 20 and 30 seconds, 1 minute, 1 minute and 30 seconds, every minute until complete 10 minutes, at each 5 minutes until to reach 30 minutes, at 45 minutes, every hour until larvae hatching and analyzed about external morphology. The diameter of 30 oocytes and the total length of 10 larvae were obtained in millimeters by stereomicroscope attached to the program IM50-LEICA. In extrusion oocytes presented slightly egg shape (larger and smaller diameters). The average of larger diameters was 1.20 ± 0.03 mm and the average of smaller diameters was 1.05 ± 0.01 mm. Eggs were classified as telolecite due to distribution and quantity of yolk and meroblastic or partial cleavage occurring only in animal pole. The formation of the animal pole began with 15 minutes after fertilization (maf) and was completed in 30 maf. Cleavages with two and 32 blastomeres occurred between 45 and 60 maf. Morula and blastula phases occurred at 120 and 180 maf, respectively. Epiboly movement, characteristic of gastrula phase started at 240 maf and finished at 420 maf with formation of vitelline buffer. The formation of embrionary axis and the presence of cephalic groove were observed at 480 maf and viewing of optic vesicle and the first somites at 540 maf. Otic and Kupffer vesicles were noted at 600 maf. The detachment of caudal region and central nervous system development occurred at 720 maf. At 840 maf occurred larvae hatching that showed total length between 3.17 and 4.09, average of 3.10 ± 0.31 mm, presenting themselves transparent, stretched posture, deprived of pigmentation, mouth, eyesight and swimming capacity, noting the region where heart will be located. The early embrionary development of B. gouldingi is fast, occurring 840 minutes after fertilization (14 hours). The larva not born prepared to face adverse conditions of environment, for not having eyesight and swimming ability.

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