Growth performance of the zebra pleco (*Hypancistrus zebra*) with different food sources.

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The zebra pleco (*Hypancistrus zebra)* is a Loricariid specie, endemic from the Upper Xingu region of PA - Altamira, Brazil. This specie is endangered, and the use of specific technologies for fish farming and feeding management becomes fundamental to the promotion of its captive breeding. Therefore, the objective of this study was to evaluate the performance of *H. zebra* with different foods. The research was realized in the *Norte Energia* Ornamental Fish Laboratory, located in the Center of Environmental Studies, Vitória do Xingu - PA. The fish were collected in natural environment (according to IBAMA license No. 38215-2), acclimated in tanks of 200 liters and measured. The initial weight was 0.373 ± 0.112 g and length of 34.84 ± 3.36 mm. The fishes (n=60) were divided equally into twelve aquariums of 60 liters containing biological filter, constantly artificial oxygenation, and daily partial water exchange. A completely randomized experiment with four treatments and three replications: T1 = fish *(Cynoscion* spp.), T2 = shrimp *(Litopenaeus vannamei)*, T3 = brine shrimp (*Artemia salina L.*), T4 = mix (fish, shrimp and brine shrimp) was used. The feeding was twice a day (08:00 AM and 06:00 PM). After 15 days the fish were measured and the growth indices as weight gain (WG), feed conversion (FC), biomass (B), specific growth rate (SGR), beyond the parameters of uniformity (U) and condition factor (K) were calculated. The data were submitted to the analysis of variance (ANOVA) and Tukey test (5 %). The water quality parameters were similar to natural environment (DO= 6.9 ± 0.14 mg / L, pH= 6.21 ± 0.26, temperature= 27.5 ± 0.80 ° C, and conductivity= 11.75 ± 1.46 mS / cm). The fish fed with T4 and T3 ($0.4269b \pm 1387$ g and $0.4709b \pm 0.0738$ g) presented higher final weight than T1 and T2 ($0.3738a \pm 0.1090$ g, $0.3437a \pm 0.0881$ g, p<0.05). The fish fed with brine shrimp (T3) presented higher values of weight gain (WG) and specific growth rate (SGR) ($0.1697a \pm 0.079$g and $0.5968a \pm 0.103$%, respectively) (p<0.05) compared to T1 ($0.0816b \pm 0.088$g and $0.3202ab \pm 0.101$%), T2 ($0.0477b \pm 0.032$g and $0.236ab \pm 0.89$) and T4 ($0.096ab \pm 0.032$ and $0.2874b \pm 0.112$%). The other parameters showed no difference between the treatments. Therefore, the best food to zebra pleco was the brine shrimp.

Keywords: nutrition, ornamental fish, preservation.