





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

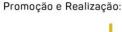
## CRUDE PROTEIN REQUIREMENT FOR HYBRID JUNDIARA DIET (Pseudoplatystoma fasciatum X Leiarius marmoratus)

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The development of commercial diets with high nutritional value and high digestibility represents an important step for the evolution of the national fish culture. The objective was to determine the crude protein requirement for jundiara, a hybrid of *Pseudoplatystoma* fasciatum and Leiarius marmoratus. The experiment was performed in the months from January to May 2017 in the Feeding and Nutrition Fish Lab, in Ilhéus, Bahia. Jundiara fingerlings (n = 225), with average weight initial between 8.4 g  $\pm$  1.41 g were distributed at 15 fiberglass tank (170 L) a completely randomized design with five treatments and three replicates. The treatments consisted of diets with 32, 34, 36, 38 and 40% crude protein (CP). The parameters of zootechnical performance were evaluated. The increase of contents crud protein (CP) in the diet resulted significant changes for average weight gain (WG) and specific growth rates (SGR) of fishes (p≤0,05). These variables increased linearly as they raised the CP level in the diets. As the animal's growth occurs when its protein synthesis (anabolism) is greater than its cellular degradation (catabolism). Therefore, the result suggests that the increase of CP in the diet up to 40%, gave the hybrid an increase in the protein synthesis, which increased the relation between the anabolic and catabolic processes of the amino acid metabolism of the diet, resulting in increased growth, and consequently, in weight gain and the specific growth rate (SGR) of the jundiara. The results obtained for the zootechnical performance of jundiara, showed that diet up to 40% of CP, results in the increase of weight gain and growth rate in hybrids of Pseudoplatystoma fasciatum X Leiarius marmoratus.

**Keywords:** carnivores, nutritional requirements, jundiara, pintado the amazon

















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