

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

**PERFORMANCES OF DIFFERENT FAMILIES OF JUVENILE TAMBAQUIS (*C. MACROPOMUM*) OF THIRD GENERATION GENETIC SELECTED INDIVIDUALS KEPT AT LOW TEMPERATURE (23°C)**

Bruna Rosa BATISTA \*<sup>1</sup>, Caio Marcos Castaldeli Alves de BARROS<sup>1</sup>, Narcia Carolina Santos da SILVA<sup>1</sup>, Isadora Carolina Ferreira FERRES <sup>1</sup>, Rodrigo Coelho RAMOS<sup>1</sup>, Marcio Aquio HOSHIBA<sup>1</sup>, Janessa Sampaio abreu RIBEIRO<sup>1</sup>, Luis Carlos Oña MAGALHÃES <sup>1</sup>.

\*Corresponding author: brunna.brb@gmail.com<sup>1</sup>Universidade Federal de Mato Grosso, Cuiabá, Mato Grosso, Brasil

Among the native species cultivated in Brazil, the production of "round" fish (species and hybrids of the genus *Colossoma* and *Piaractus*) accounts for 84% of the total, and tambaqui is responsible for a great amount of this production. However, genetic selection studies are still incipient in these species. Hence, the objective of this study was to evaluate the weight gain of tambaquis from the third generation of genetic selection during their juvenile phase within the genetic improvement program of aquaculture species which were kept under laboratory conditions. The experiment was carried out at "Bom Futuro Genetica de Peixes", Cuiabá, Mato Grosso, Brazil. Four families (A, B, C and D) were studied, each family had four repetitions of 12 animals, totting up 48 animals per treatment and presenting initial weight of  $7.17\text{g} \pm 1.07\text{g}$ . They were randomly distributed in sixteen 1000L boxes. The physical and chemical parameters of water, pH, salinity, dissolved oxygen, ammonium and nitrite were followed by weekly colorimetric analysis and tests. The experimental temperature was 23° C. The results were subjected to Tukey test for the Variance analysis and mean comparisons at 5% probability level and analysed by the statistics software SAS (1999). Fifty-five days later it was observed the final biomass of  $35.63 \pm 0.23$  g, biomass gain of  $9.19 \pm 0.17$  g and apparent feed conversion of 1.64. The differences between the final biomass (BF) values (BF: A:  $9.28 \pm 0.19$ , B:  $8.69 \pm 0.23$ , C  $8.57 \pm 0.19$  and C  $9.08 \pm 0.23$  g) were significantly higher in family A, when compared to family C. Even though these families were all genetically selected for weight gain, there was a difference among them regarding their performance, being family A the one with the highest final weight at the initial stage of cultivation with mean temperature of 23° C under laboratory conditions, demonstrating the genetic potential difference among the families that were evaluated.

Keywords: *Colosoma*, growth, genetic improvement, fish farming.

Promoção e Realização:



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