MEAT QUALITY TRAITS OF TAMBAQUI, PACU, AND PATINGA

Ruy Alberto Caetano CORRÊA FILHO¹, Yasmin Avila FERREIRA¹, Guilherme do Nascimento SERAPHIM¹, Rebeca Marcos¹, Rayssa Piton Rijo COSTA¹, Thainá Arruda de CARVALHO¹, Lucas Farias RODRIGUES¹, Jayme Aparecido POVH¹

*corresponding author: correafufms@gmail.com
¹Universidade Federal de Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brasil

The fish tambaqui (Colossoma macropomum) and pacu (Piaractus mesopotamicus) and the patinga hybrid (Piaractus mesopotamicus × Piaractus brachypomus) are species of great importance in Brazilian aquaculture production. However, little information exists on meat characteristics for these fish. The aim of this study was to evaluate meat traits of tambaqui, pacu, and the patinga hybrid produced in ponds in a semi-intensive system. Filets with respective average weights of 1,270.00 ± 0.28, 670.00 ± 0.10, and 750.00 ± 0.06 g were examined to determine cooking loss (CL), shear force (SF), color (L* = lightness, a* = red intensity, b* = yellow intensity), and pH. In the statistical analysis, a model was adopted including the effects of genetic group as the source of variation and slaughter weight as a covariable, except for the variables CL (%) and b* color intensity, for which slaughter weight was not used as a covariable. Data were subjected to analysis of variance followed by Student’s T test (P<0.05) for a comparison of means. Only the variables CL and SF did not show significant differences (P>0.05). Genetic group tambaqui showed higher pH (6.02), a* color intensity (3.40), and b* color intensity (6.78) than pacu (pH: 5.92; a*: 0.22; b*: 3.69) and patinga (pH: 5.88; a*: 0.73; b*: 3.25). Lightness was higher (P<0.05) for pacu (56.14) than patinga (52.59) and tambaqui (50.06). Similar traits were found across the genetic groups, but the meat of pacu and patinga is lighter in color than that of tambaqui.

Keywords: fish meat quality, Colossoma macropomum, Piaractus mesopotamicus, Piaractus brachypomus

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