

**PHYSICO-CHEMICAL EVALUATION OF WATER IN SPORT FISHING IN NORTHEASTERN
SÃO PAULO STATE**

*(AVALIAÇÃO FÍSICO-QUÍMICA DA ÁGUA EM PESQUE-PAGUES NA REGIÃO NORDESTE DO ESTADO
DE SÃO PAULO)*

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Sport fishing is an important leisure activity that can cause environmental impact. An important tool for monitoring the water quality of these areas is the analysis of its physico-chemical parameters, which may interfere with the dynamics of aquatic populations (MATSUZAKI et al., 2004). This study aims to evaluate the physico-chemical parameters and determine the water quality of tanks used for raising fish in sport fishing farms (PPs) in northeastern São Paulo state. Water samples were collected from all tanks in five PPs during dry (June to August, 2008) and rain (November to March 2009) seasons. The following water parameters were determined: pH, temperature, dissolved oxygen (DO) (using a pHmeter, thermometer and a handset oximeter, respectively) and turbidity (HACH, 1991). Water temperature ranged from 16.7 to 27.9°C in the dry season and between 23.4 and 32.6°C in the rain season, during the summer in Brazil. DO concentration ranged from 1.8 mg.L⁻¹ to 9.3 mg.L⁻¹ (rain) and 2.5 mg.L⁻¹ to 9.6 mg.L⁻¹ (dry). From the 5 PPs tested, PP1, PP3 and PP4 DO levels were not within the limit established by CONAMA Resolution 357/05 (minimum 5.0 mg.L⁻¹, for class 2 water) in either season. The pH should be between 6.0 and 9.0 (BRAZIL, 2005), and ranged from 6.1 to 7.9 (dry) and from 6.0 to 7.9 (rain) for all tested PPs; therefore, within the limits suitable for fish farming. The turbidity values ranged from 0.42 to 93.3 NTU (dry) and 0.28 to 67.2 NTU (rain) and were within the range established by CONAMA Resolution 357/05 (BRAZIL, 2005) (acceptable up to 100 NTU for class 2 waters). We conclude that, except for the DO, all other water variables were in accordance with the current legislation for dry and rainy seasons; nonetheless, periodic monitoring of the water should be performed in order to preserve its quality.

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