

TITLE: BACTERIAL ISOLATES OF TILAPIAS PRODUCED IN TANKS OF THE WEST REGION OF PARANÁ

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ABSTRACT:

Nile tilapia (*Oreochromis niloticus*), introduced in Brazil in 1971, is the second most freshwater fish species in the world and the most produced in Brazil, with Paraná being its largest representative. These animals present favorable zootechnical characteristics and meat quality for commercial cultivation. However, one of the main difficulties for the expansion of tilapicultura in Brazil is the occurrence of infections by etiological agents, among them, bacterioses represent one of the main economic losses in the production of tilapia due to the intensive production system. Therefore, the present study aimed to isolate and identify bacteria present in Nile Tilapia of production tanks located in the west of Paraná, aiming futures immunoprophylactic formulations against these diseases. A total of 20 dead fish samples, with lesions on the scales, exophthalmos and opacity of the cornea, were collected from tanks of the west region of Paraná and taken to the Federal University of Latin American Integration for analysis and necropsy. Samples of kidney, liver, spleen and brain were cultured in blood agar and incubated at 29°C for 7 days. Bacteria were identified by conventional biochemical tests and the automated VITEK® 2 system. The results indicated four bacteria: *Klebsiella pneumoniae*, *Aeromonas sobria*, *Streptococcus agalactiae* and *Plesiomonas shigelloides*. The automated identification obtained 99%, 99%, 98% and 85% of correct identifications, respectively. No other reports of the identification of *K. pneumoniae* in Tilapias produced in Brazil were found. However, the importance of its identification must be emphasized, since it is resistant to antibiotics and has become a public health problem and concern in all areas of health. The consumption and the handling of these fish can represent a risk of contamination for the consuming population in these properties since they are causing gastrointestinal infections, besides bringing economic consequences to the producers.

Keywords: *Streptococcus agalactiae*, *Aeromonas sobria*; *Klebsiella pneumoniae*, *Plesiomonas shigelloides*, Isolation bacterial

Agency: Universidade Federal da Integração Latino-Americana (UNILA)