

**TITLE:** MICROBIOLOGICAL QUALITY OF FISH FROM THE ESTUARINE COMPLEX MUNDAÚ- MANGUABA LAGOON

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## **ABSTRACT**

Fishing is one of the oldest means of food in the history of mankind. In Brazil the estuaries represent regions of high fishing development. In the State of Alagoas, the CELMM (Estuarine Complex of the Mundaú-Manguaba Lagoon) depicts an ecosystem of great regional socioeconomic relevance. This currently complex is, attacked by high population density at its banks, due to the disposal of organic materials, the fish collected in this region can be marketed, transforming them into transmitters of foodborne diseases. This study aimed to trace a microbiological profile of the newly captured fishes, both native and transient on CELMM, located in the state of Alagoas. 18 samples of newly both fishes were collected from different locations from September-2016 to April-2017. Data collection locations were recorded using cartographic and meteorological data. After collection, the samples were submitted to Coliforms analysis, *Salmonella* sp. and *Staphylococcus aureus*. During the collection it could be observed an average occurrence of 30.4 ° C (86,72 °F) as well as low tide and absence of precipitation. For the studies, it was chosen samples of fishbagre guriaçu (*Genidens* sp.), Salema (*Sarpa* sp.), Tainha (*Mugil* sp.), Vermelha-Cioba (*Lutjanus* sp.) e Xerelete (*Caranx* sp.). All the fish come from coming brackish and marine environments. Regarding the microorganisms studied, all samples demonstrated absence of Coliforms, *Salmonella* sp. and *Staphylococcus aureus*, therefore, considered appropriate for consumption, according to RDC n° 12/2001 of ANVISA/BRAZIL. This result can be justified by the seasonality of the fish, between the brackish and saline environment, which hinders the development of the microorganisms researched. The high salinity level of the estuary can also be a factor that hinders the development of these microorganisms in the analyzed fish, so there is a need for confirmation concerning the salinity and absence of these microorganisms in the fish. Hence, it is necessary to carry out further studies on the influence of population density and the dynamics of the ecosystem on CELMM fish contamination.

**Keywords:** CELLM, estuarine, fish, Mundaú, coliforms