

COMPARATIVE STUDY OF MICROBIOLOGICAL CONDITIONS OF OYSTERS (*Crassostrea gasar*) CULTIVATED IN THE COAST OF THE STATE OF PARÁ: PRELIMINARY RESULTS

CAMPOS, K. D¹; SILVA, O. L. L²; IGUCHI, Y. B²; PINTO, A. S. O¹; PEIXOTO JOELE, M. R. S.¹, TIBURÇO, X¹, TRINDADE, P. S. C¹, SOUSA, J. S¹, CORDEIRO, C. A. M. C.²; NUNES, E. S. C. L².

¹FEDERAL INSTITUTE OF EDUCATION SCIENCE AND TECHNOLOGY OF PARÁ, ²FEDERAL UNIVERSITY OF PARÁ (RODOVIA BR, 316, S / N, TITALANDIA, CASTANHAL, PARÁ).

Oyster farming in the state of Pará has intensified in recent years, mainly due to the support of some public institutions. *Crassostrea gasar* is the most cultivated species in the state. This mollusk is already part of the local cuisine and is widely consumed uncooked on the beaches and restaurants of the Amazon region. However, when obtaining their food by filtration, the oysters are very susceptible to the contamination of different natures by the aquatic means, which represents a risk to the health of the consumer. In this sense, the present work had as objective to evaluate the microbiological conditions of oysters in the two main producing municipalities of the state of Pará: Curuçá and Augusto Corrêa. In January 2017, six oyster producers (three in each municipality) were selected, with a dozen oysters from each producer. After collection, the oysters were stored in plastic bags suitable for food and packed in isothermal containers and transported to the Laboratory of Microbiology of the Federal Institute of Pará, Campus Castanhal. Under aseptic conditions, each dozen was washed, peeled and mixed, thus obtaining an analytical sample by the oyster producer. The following microbiological analyzes were performed: the most probable number (MPN) of thermotolerant coliforms (TC) and *Escherichia coli* (EC), through the miniaturized fluorogenic technique; For *Staphylococcus Coagulase Positive* (SCP) and fungi counts, the official analytical methods established by the Ministry of Agriculture, Livestock and Supply were used. The results obtained were compared with the microbiological standards for cooled or frozen bivalve molluscs, provided for in the Resolution of the Collegiate Council of the National Sanitary Surveillance Agency. Up to the current stage of the research, it was possible to verify that 83.33% (5/6) of the samples are within the expected official microbiological standard, except for a Curuçá sample that presented 240 NMP / g above the official Standard 50 NMP/ g For (TC). (EC) was not detected in any sample. However, in a sample of Augusto Correa it was possible to confirm the presence of (SCP). However, fungi were not detected in any sample of the studied municipalities. Thus, contamination by (TC) and (SCP) was observed, indicating the non-consumption of raw oysters due to the possibility of transmission of the disease by these bacteria. It is therefore suggested that oysters be subjected to a suitable heat treatment before consumption.

Keywords: *Escherichia coli*, Fungi, Mollusks, *Staphylococcus*.