

**TITLE:** DETECTING BACTERIAL PATHOGENS AND INTESTINAL PROTOZOANS IN OYSTERS FROM FARMS OF NORTHEAST PARAENSE.

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**ABSTRACT:**

Bacterial and protozoan pathogens are leading causes of water and food-borne illness around the world. Unlike other hosts, shellfish do not usually harbor these organisms, but they acquire them by filtering water through their systems and concentrating in their meat. In the state of Pará, the production and commercialization of oysters has increased in the last five years. However, a monitoring system on the sanitary quality of this product has not yet been implemented. Thus, in this study, oysters grown in farms in the northeast of the Pará state were tested for the presence of *Salmonella*, *Escherichia coli*, *Cryptosporidium parvum* and *Giardia intestinalis*. The samples were obtained in two dry and rainy periods of the year 2017 in four different farms. Fifteen oysters were purchased directly from the producers. For the analyzes a soft *pool* was made. The identification of enterobacteria was performed from 25 g of the total macerated oyster meat using culture media (Rappaport-Vassiliadis, EC broth and cystine selenite, MacConkey agar, Salmonella-Shigella agar and Triple Sugar Iron) and biochemical identification for the definition of bacterial genera (glucose, lactose, sucrose, mannitol, maltose, indole, MV, H<sub>2</sub>S, citrate, motility, lysine and phenylalanine). For protozoal screening, 5 g of the macerate was homogenized in PBS pH 7.2 and filtered through folded gauze. An aliquot of the sediment was used for immunological research of *G. intestinalis* and *C. parvum* using commercial kit (RIDA®QUICK *Crypto/Giardia* Combi), following the manufacturer's protocol. During 2017, strains of *Salmonella* and *E. coli* were isolated. However, no sample was positive for the protozoa surveyed. Therefore, there is necessary to establish norms and parameters for the cultivation of these molluscs, such as the implementation of a sanitary control program in Pará state, in order to guarantee minimum standards of quality.

**Keywords:** oyster, enterobacterias, enteroparasites

**Development Agency:** Instituto Evandro Chagas/Ministério da Saúde